UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington D.C. 20549

Form 6-K

REPORT OF FOREIGN PRIVATE ISSUER

PURSUANT TO RULE 13a-16 OR 15d-16

UNDER THE SECURITIES EXCHANGE ACT OF 1934

For the month of March 2025

Commission File Number: 1-32575

Shell plc

(Exact name of registrant as specified in its charter)

England and Wales

(Jurisdiction of incorporation or organization)

Shell Centre

London, SE1 7NA

United Kingdom

(Address of principal executive office)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.

Form 20-F ☑ Form 40-F ☐

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Shell plc

(Registrant)

By: /s/ Sean Ashley

Name: Sean Ashley
Title: Company Secretary

Date: March 25, 2025

Shell plc
Annual Report and Accounts
For the year ended December 31, 2024

In anticipation of the Netherlands' transposition of the EU Corporate Sustainability Reporting Directive (CSRD) into national law, Shell has for the first time in this report included a Sustainability Statements section (pages 341-440), prepared on a voluntary basis in accordance with the CSRD and European Sustainability Reporting Standards (ESRS).

The Sustainability Statements section forms an integral part of the management report. [A]

The CSRD requires certain European and non-European companies (including Shell plc due to its listing on Euronext Amsterdam) to make disclosures on environmental, social and governance topics in accordance with the ESRS. We have applied the structure proposed in the ESRS, adopted "incorporation by reference" and sought to integrate the disclosures in other sections of this report where appropriate and permitted. Section headers in the Sustainability Statements follow the structure of the ESRS. Terms and definitions used in the text are defined by Shell unless explicitly stated otherwise.

[A] The consolidated management report, as referenced in the CSRD, includes the strategic report and governance sections of the Annual Report and Accounts.

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Terms and abbreviations

Currencies

$	US dollar
€	euro
£	sterling

Units of measurement

acre	approximately 0.004 square kilometres
b(/d)	barrels (per day)
bbl	barrel
boe(/d)	barrels of oil equivalent (per day); natural gas volumes are converted into oil equivalent using a factor of 5,800 scf per barrel
GJ	gigajoule
GW	gigawatt
kboe(/d)	thousand barrels of oil equivalent (per day); natural gas volumes are converted into oil equivalent using a factor of 5,800 scf per barrel
kWh	kilowatt-hours
mb/d	million barrels per day
megajoule	a unit of energy equal to one million joules
MMBtu	million British thermal units
mtpa	million tonnes per annum
MW	megawatt
MWh	megawatt-hours
Nm3	normal cubic metre
per day	volumes are converted into a daily basis using a calendar year
scf(/d)	standard cubic feet (per day)
TWh	terawatt-hours

Products

GTL	gas-to-liquids
LNG	liquefied natural gas
LPG	liquefied petroleum gas
NGL	natural gas liquids

Miscellaneous

Act	UK Companies Act 2006
ADS	American Depositary Share
AGM	Annual General Meeting
API	American Petroleum Institute
APM	Alternative performance measure
ARC	Audit and Risk Committee
CCS	carbon capture and storage
CCS earnings	earnings on a current cost of supplies basis
CFFO	cash flow from operating activities
CISO	Chief Information Security Officer
CMD	Capital Markets Day
CMF	carbon management framework
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CRC	Carbon Reporting Committee
CRT	Commercial Road Transport
CSRD	Corporate Sustainability Reporting Directive
DE&I	Diversity, equity, and inclusion
EC	Executive Committee
EMTN	Euro medium-term note
EPS	earnings per share
EPSA	exploration and production sharing agreement
EPTB	Environmental Products Trading Business
ESRS	European Sustainability Reporting Standards
ETS24	Energy Transition Strategy 2024
EV	Electric vehicle
FCF	free cash flow
FID	final investment decision
GAAP	generally accepted accounting principles
GHG	greenhouse gas
HSSE	health, safety, security and environment
IAS	International Accounting Standards
IEA	International Energy Agency
IFRS	International Financial Reporting Standard(s)
IOGP	International Association of Oil & Gas Producers
IPCC	Intergovernmental Panel on Climate Change
Ipieca	International Petroleum Industry Environmental Conservation Association
IRM	Information Risk Management
ISO	International Organisation for Standardisation
ISSB	International Sustainability Standards Board
KPI	Key performance indicator
LGBT+	Lesbian, gay, bisexual and transgender
LTIP	Long-term Incentive Plan
NBS	Nature-Based Solutions
NCI	net carbon intensity
NGO	Non-governmental organisation
NOMCO	Nomination and Succession Committee
NZE	Net zero emissions
OECD	Organisation for Economic Co-operation and Development
OFCF	organic free cash flow
OGCI	Oil and Gas Climate Initiative
OML	oil mining lease
OPEC	Organization of the Petroleum Exporting Countries
OPEC+	12 members of the OPEC and 11 other non-OPEC members
OPL	oil prospecting licence
PSC	production-sharing contract
PSP	Performance Share Plan
QRA	Quarterly Results Announcement
R&D	Research and development
REMCO	Remuneration Committee
RNG	Renewable natural gas
RT	real terms
SEAM	Safety, Environment and Asset Management
SEC	US Securities and Exchange Commission
SGBP	Shell General Business Principles
SIAI	Shell Internal Audit and Investigations
SP	social performance
SUSCO	Sustainability Committee
TCFD	Task Force on Climate-related Financial Disclosures
TSR	total shareholder return
WACC	weighted average cost of capital
WTI	West Texas Intermediate
T	Indicates information that supports TCFD disclosure

Strategic Report

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Chair's message

In 2024, we continued to do what Shell does best, connecting energy and people.

In total, we served around 33 million customers at Shell-branded retail sites every day, and around 1 million business customers across more than 70 countries. We used the power of our people, brand, technology and trading network to provide our customers with the oil and gas they need today. At the same time, we increasingly helped them to make low-carbon choices, from biofuels to charging for electric vehicles.

In this second year under our Chief Executive Officer, Wael Sawan, Shell went from strength to strength. We improved Shell's operational performance, and made good progress against the financial and climate targets and ambition we set out at our Capital Markets Day in 2023 and in our Energy Transition Strategy 2024.

We demonstrated that our strategy to deliver more value with less emissions is producing strong results, and compelling shareholder returns. By the beginning of 2025, we had announced $3 billion or more in buybacks for 13 consecutive quarters.

New projects

Shell has pioneered ways to provide energy for more than a century. As the energy system and energy mix keep evolving, we will continue to provide the energy people need through the complex transition to low-carbon energy.

We will help to keep the world moving with oil and gas, while developing the low-carbon alternatives our customers need to decarbonise. To that end, we have built on our leadership positions in liquefied natural gas (LNG) and deep-water oil and gas production with some important new projects. We announced a final investment decision for Manatee, an undeveloped gas field in Trinidad and Tobago, which will have a key role in providing gas to the country's Atlantic LNG facility.

Our deep-water Whale platform in the Gulf of America started production in January 2025. At its peak, we expect that Whale will produce around 100,000 barrels of oil equivalent a day, enough to fuel the daily journeys of 2.7 million cars in the USA. It will operate with 30% lower carbon intensity over its life cycle than Vito, another US deep-water platform. In February 2025, our next-generation Penguins facility started production in the North Sea. It will produce mostly oil but also enough gas to heat around 700,000 UK homes a year, with around 30% lower operational emissions than its predecessor, Brent Charlie [A].

Less emissions

We kept our focus on reducing emissions as we worked to become a net-zero emissions energy business by 2050. In 2024, we achieved our short-term target to reduce the net carbon intensity of the products we sell, compared with 2016. We achieved this mainly by reducing sales of oil products and growing power sales.

By the end of 2024, we had achieved 60% of our target to halve Scope 1 and 2 emissions from our operations by 2030, compared with 2016 levels.

We continued to transform our business. In January 2024, we announced the decision to stop processing crude oil into petrol, jet fuel and diesel at the Wesseling site of our Energy and Chemicals Park Rheinland, Germany, and to produce premium oils instead. In April 2024, we opened our bioLNG liquefaction plant in Germany, which can produce enough bioLNG to fuel around 5,000 LNG trucks a year.

Technology and innovation

Innovation remains vital for a successful transition to low-carbon energy. In 2024, we spent around $500 million on projects that contributed to decarbonisation, almost half of our total spending on research and development. In December, I saw some of that work for myself when I visited the Energy Transition Campus Amsterdam in the Netherlands. I was especially excited to see how our research is building on Shell's leadership in gas-to-liquids (GTL) technology, something we pioneered almost half a century ago.

Today, the Pearl GTL gas-to-liquids plant in Qatar uses natural gas to produce an alternative fuel to conventional diesel for transport, as well as oils and lubricants. We have also used GTL technology to develop immersion cooling fluids for data centres. These fluids reduce costs, energy consumption and emissions compared with conventional cooling. This will be increasingly important as the growth in artificial intelligence leads to greater use of energy-intensive data centres.

Now our scientists in Amsterdam are researching how to use that same GTL technology to produce sustainable aviation fuel made from renewable power and captured carbon on a commercial scale. In another exciting development for the energy transition, they are also

[A] Based on a five-year average 2016–2020 for Brent Charlie emissions, and the highest expected emissions for Penguins.

looking at how to produce synthetic methane, made from renewable hydrogen and captured carbon, to decarbonise the production of LNG.

We are creating the business case for other pioneering solutions, such as carbon capture and storage, which will be critical for the energy transition. In 2024, we took a final investment decision for two projects in Canada that will capture and store carbon from our Shell Energy and Chemicals Park Scotford in Alberta. These build on the success of our Quest CCS project in Canada which has captured more than 9 million tonnes of CO_2 since 2015.

The Northern Lights joint venture with Equinor and TotalEnergies in Norway is developing the world's first project to offer commercial carbon transport and storage as a service. The first CO_2 shipments are expected in 2025.

Unique capabilities

Our strengths go way beyond production. Through our integrated portfolio, we can buy and blend energy products to meet our customers' needs. We can use our unique capabilities, including trading, to connect energy to our customers through the energy transition.

For example, we became one of the world's largest traders and suppliers of sustainable aviation fuel in 2024. We achieved this because of our long-term agreements with producers, the strength of our customer relationships, and strategic investments in logistics around key terminals and airports.

In 2024, we continued to build an organisation with an outstanding brand, as well as outstanding people, and trading, technology and innovation capabilities. Today, we sell nearly three times the energy products that we produce, meeting our customers' demand for oil and gas and low-carbon products through our integrated model.

Working together

We believe that the energy transition will be achieved by governments, companies like Shell, and customers all working together. Governments need to put in place effective policies to progress the energy transition, and energy producers need to help develop the solutions of the future. The transition also requires demand from customers who are willing to pay for low-carbon energy. We are playing our part. I am confident that Shell can continue to bring its deep experience to help advance the energy transition.

In 2024, we demonstrated that you can still be sure of Shell. As a customer, you can be sure that Shell will provide you with the right products and solutions today and through the energy transition. And as an investor you can be sure that this is the right management team with the right strategy, setting Shell up for success in the years to come.

Sir Andrew Mackenzie
Chair

1. The Whale deep-water platform started production in January 2025.

2. The Northern Lights joint venture in Norway is developing the world's first project to deliver commercial carbon transport and storage as a service.

3. The Penguins facility in the North Sea will produce enough gas to heat around 700,000 UK homes a year.

Chief Executive Officer's review

2024 at a glance

1.5 ■
Serious injury, illness and fatality frequency (SIF-F) in Shell-operated ventures
(2023: 2.6)

90.0 ■
Tier 1 and Tier 2 process safety incidents
(2023: 63.0)

$16.5 billion
Income for the period
(2023: $19.6)

$23.7 billion
Adjusted Earnings*
(2023: $28.3)

$54.7 billion ■
Cash flow from operating activities (2023: $54.2)

$39.5 billion
Free cash flow*
(2023: $36.5)

$19.6 billion
Capital expenditure
(2023: $23.0)

$21.1 billion
Cash capital expenditure*
(2023: $24.4)

$13.9 billion ●
Share buyback programme
(2023: $14.6)

$8.7 billion ●
Dividends paid
(2023: $8.4)

58 million tonnes ●
Scope 1 and 2 emissions CO_2e
(2023: 57)

71 gCO_2e/MJ ●
Net carbon intensity (NCI)
(2023: 72)

● Performance against our longer-term targets (see pages 14-15).
■ Key performance indicators (see pages 18-19).
* Non-GAAP measure (see page 445).

In 2024, the world experienced continued geopolitical volatility. The Russia-Ukraine war entered its third year and conflict escalated in the Middle East, bringing personal tragedy to many. It was a time of political change, with elections in more than 60 countries.

Energy security and affordability rose higher on political agendas, even as the share of renewable energy grew. This came into sharp focus during Europe's winter of 2024. Wind and solar power reached record levels in the region, while liquefied natural gas (LNG) played a critical role in keeping homes and businesses running when there was not enough wind or sunlight.

With global demand for energy increasing, coupled with the challenge of climate change, Shell continues to focus on its strategy to deliver more value with less emissions. We believe the world needs to maintain secure and affordable energy supplies while moving to low-carbon energy.

In 2024, my second year as Chief Executive Officer, I am proud of the progress we have made in putting our strategy into action. I want to thank everyone at Shell for their contribution. We are growing shareholder returns, while working to reduce emissions from our operations and products. We are positioning Shell to win through the energy transition on our journey to become a net-zero emissions energy business by 2050.

Integrated energy company

Our strategy aims to grow our world-leading LNG business, which provides flexibility alongside renewable energy, and a lower-carbon alternative to coal. We expect that supplying LNG will be the biggest contribution we will make to the energy transition over the next decade, as we help to build the energy system of the future.

Building on our deep knowledge and strong partnerships, we are also responsibly producing the oil that will be needed for decades to come, with a focus on cost and carbon competitiveness. We intend to be the most customer-focused energy marketer and trader in the world, providing people with the energy they need to power their lives and businesses. We are developing commercial models for low-carbon solutions, such as biofuels. My vision is for Shell to become the world's leading integrated energy company, delivering impact at scale, connecting energy and people, matching supply to demand.

We have set out to transform Shell into a more focused and more competitive energy business, and I am pleased to say that in 2024, we moved forward at pace in that direction. Following our principles of performance, discipline and simplification, we have made good progress against the targets and ambition we presented at our Capital Markets Day in 2023 and in our Energy Transition Strategy 2024.

More value

In 2024, we achieved our target to reduce structural costs* by $2-3 billion by the end of 2025, against 2022, one year ahead of time. We continued to make disciplined investments, and difficult choices, such as pausing construction of our biofuels plant in Rotterdam, the Netherlands, to assess the most commercial way forward.

We are building a strong track record of performance. Shell reported the second-highest cash flow from operations in our history in 2024, outperforming our target for free cash flow growth. By the end of the year, we had delivered at the top end of our target to distribute 30-40% of cash flow from operations to our shareholders*, mainly through buybacks.

Our Prelude floating LNG facility off the coast of Australia had record production in 2024, as did our QGC natural gas business in Queensland, Australia, boosting our operational performance. We added major new projects. We took a final investment decision on Bonga North, off the coast of Nigeria, which is expected to start up by the end of the decade and reach peak production of 110,000 barrels of oil equivalent a day. Our US deep-water platform Whale started production in January 2025, with estimated peak production of 100,000 barrels of oil equivalent a day.

Our agreement to acquire Pavilion Energy in Singapore further strengthened our LNG portfolio with more sales and flexibility. I also signed an agreement in Abu Dhabi to invest in the Ruwais LNG project [A], which is designed to operate with lower carbon intensity than traditional LNG plants. LNG Canada is expected to start producing in the middle of 2025, the largest private-sector energy investment in Canada's history.

Another example of our transformation is the sale of Shell Pakistan, which is helping us to achieve our aim to divest around 500 retail sites every year until 2025.

Less emissions

In 2024, we worked hard towards our climate goals. We abated more than 1 million tonnes of CO_2 from our operations through projects such as reduced flaring and the use of renewable electricity. This allowed us to keep our Scope 1 and 2 emissions roughly flat compared with 2023, despite increased oil and gas production and asset utilisation. By the end of 2024, we had achieved 60% of the reduction required to meet our 2030 Scope 1 and 2 target.

Shell remains a leader in reducing emissions of methane, a potent greenhouse gas that can be released during oil, gas and LNG production. By the end of 2024, we had reduced total methane emissions from assets under our operational control by 76% compared with 2016. Total routine flaring from our upstream oil and gas assets remained stable in 2024, and, as of January 1, 2025, we no longer routinely flare from these assets.

When it comes to our sales, we achieved our short-term target to reduce the net carbon intensity of the energy products we sell with a 9% reduction compared with 2016, moving us closer to our target of a 15-20% reduction by 2030 compared with 2016 levels.

By the end of 2024, we had installed more than 70,000 public charge points for electric vehicles, a year ahead of schedule. I am encouraged by the progress we are making in carbon capture and storage, with plans for two linked projects in Canada. In Norway, our Northern Lights joint venture is ready to offer commercial carbon transport and storage as a service. I saw for myself another exciting initiative, our first megawatt charger for electric trucks and ships in Amsterdam.

Beyond our operations, 2024 was an important year because the Court of Appeal of The Hague dismissed Milieudefensie's claim against Shell. I believe the decision was the right one for the energy transition and our company. On February 11, 2025, Milieudefensie announced that it was taking its case to the Netherlands' Supreme Court. I am confident in the strength of our position.

Shell people

The safety of everyone at Shell remains our top priority. I am deeply saddened by the deaths of four people working for Shell in 2024 and early 2025. These tragic incidents took place in India, Malaysia, the Netherlands and Nigeria. My heart goes out to the families and friends of these four people. We must continue to protect everyone working for Shell, and we will learn from these and other incidents.

Shell's success depends on our people. I experienced the dynamism and diversity of our teams when I visited our operations in Brazil, China, India, Kuwait, Oman, Poland, Qatar, and the USA. I was impressed by how they are embracing the principles of performance, discipline and simplification in their everyday work.

I also spent Safety Day with our team at the Shell Polymers Monaca chemical plant in the USA. Once again, I had the opportunity to witness first-hand how far we have advanced our safety culture and processes in recent years.

Investment case and partner of choice

I am convinced that we are the best positioned energy company to navigate the energy transition because of our people, our connections to customers, and our portfolio of world-class assets. We are building on these strengths by transforming Shell. We are becoming a more focused and competitive business, so that we are the investment case and partner of choice through the energy transition. We had another strong year in 2024, and we have more to do. I am confident that our strategy, executed with conviction and determination, is working. We are on the path to becoming the world's leading integrated energy company.

Wael Sawan
Chief Executive Officer

[A] Subject to completion.
* Non-GAAP measure (see page 445).

This is Shell

Shell is a global group of energy and petrochemical companies, employing around 96,000 people [A] across more than 70 countries. We have activities ranging from oil and gas exploration and production to the marketing of fuels and lubricants, and research and development. We are increasingly offering our customers low-carbon energy solutions.

For more than a century, Shell has connected people and energy. We provide the energy people need to fuel their homes, hospitals, schools, vehicles, machinery and factories. Our purpose is to power progress together, by working with each other, our customers and our partners. Our vision [B] is to be the world's leading integrated energy company – delivering impact at scale, connecting energy and people, matching supply to demand.

Shell's strategy is to deliver more value with less emissions as we work to become a net-zero emissions business by 2050. As we navigate the energy transition through the next decade, we will leverage our global footprint, the trust in our brand, and our innovation and technology capabilities to be the energy company that customers and countries choose to be their partner.

Our people and values
Whether they work on our platforms and pipelines, or in our offices and research labs, people are key to our success. They collectively determine our culture and we expect them to behave according to our values: honesty, integrity and respect for people.

We expect everyone at Shell to also comply with relevant laws and regulations to help us conduct business in an ethical and transparent manner. We firmly believe in the fundamental importance of trust, openness, teamwork and professionalism. The Board assesses and monitors our culture and how it is embedded in our attitudes and behaviours, including in our activities and stakeholder relationships.

To realise our vision, we are transforming Shell to become a more focused and competitive business. Our extraordinary community of talent will approach the next decade of the energy transition with courage and determination. We expect Shell's people to care about each other, our work, and about doing business the right way with a focus on safety, people and sustainability.

The Shell General Business Principles set out our responsibilities to all our stakeholders. As part of these principles, we commit to contribute to sustainable development, and we have embedded this commitment into our strategy, our processes and decision-making. This requires balancing short- and long-term interests, integrating economic, environmental and social considerations into business decision-making. As we implement our strategy, we will also maintain our relentless focus on achieving our Goal Zero ambition: to do no harm to people and to have no leaks across operations. The Shell Code of Conduct explains how employees, contractors and anyone else acting on behalf of Shell must behave.

Strong relationships
We seek to build strong, trusted relationships with all our stakeholders, including our approximately 1 million commercial and industrial customers, and the around 33 million people we serve daily at our Shell-branded retail stations. Our stakeholders include: our employees, contractors and pensioners; the investor community; customers; our suppliers and strategic partners; regulators and governments; non-governmental organisations, civil society, academia and think tanks; and the communities where we work.

[A] At December 31, 2024, and including portfolio companies.
[B] A vision statement defines the desired future state of a company rather than a series of firm, binding commitments.

Our core values

Honesty
We encourage our employees and business partners to speak up and celebrate those who do the right thing.

Integrity
We empower our employees and business partners to make the right decisions.

Respect for people
We embrace diversity, equality and inclusivity.

Our guiding principles

Performance
We maintain a relentless focus on improving operational and financial performance.

Discipline
We allocate shareholders' capital with discipline and make clear choices about where we can create value.

Simplification
We streamline the way we do things, removing complexity, and manage the portfolio to support disciplined capital allocation.

Our Goal Zero ambition
We aim to do no harm to people and to have no leaks across our operations. We call this our Goal Zero ambition. Everyone working for Shell strives to achieve Goal Zero each day.

Our business directorates in 2024	Reporting segments
Integrated Gas and Upstream	**Integrated Gas** explores for and extracts natural gas which we then process to produce liquefied natural gas (LNG) or convert into gas-to-liquids (GTL) products. Our activities include the operation of the upstream and midstream infrastructure that is needed to deliver gas and gas products to the market. We earn revenues from the trading and optimisation, marketing and distribution of LNG, GTL and natural gas. See pages 31-37 for a review of our performance.
	Upstream explores for and extracts crude oil, natural gas and natural gas liquids. Shell has activities in deep water and conventional oil and gas. The business also operates the infrastructure necessary to transport the oil and gas to the market or to process it in our integrated energy and chemicals parks. See pages 38-46 for a review of our performance.
Downstream, Renewables and Energy Solutions	**Marketing** supplies fuels and lubricants, for transport, manufacturing, mining, power generation, agriculture and construction. Shell is also a major blender and trader of biofuels. Shell Mobility operates our retail network, including electric vehicle charging and convenience retail. See pages 55-59 for a review of our performance.
	Chemicals and Products includes manufacturing plants and refineries which we are repurposing into energy and chemicals parks. We turn crude oil and other feedstocks into products for households, industry and transport. The segment also includes the pipeline business, trading and optimisation of crude oil, oil products and petrochemicals, and oil sands activities. See pages 60-67 for a review of our performance.
	Renewables and Energy Solutions generates, markets and trades power from wind, solar and pipeline gas. The business also includes hydrogen production and marketing, commercial carbon capture and storage (CCS) hubs, carbon credits and nature-based solutions to avoid or reduce carbon emissions. See pages 68-71 for a review of our performance.

What sets us apart

Deep-water expertise	We have almost five decades of deep-water expertise and continue to develop innovative designs for oil and gas assets, replicating successful projects to deliver more value with less emissions. Our deep-water business has a track record of sustained cash flow.
Integrated gas and LNG capability	We have a world-leading LNG business with a sizeable portfolio, a global network of customers, extensive shipping and storage assets, and access to regasification plants. Our diversified and global portfolio of plants and terminals enhances our resilience to market shocks and allows us to capitalise on price volatility.
Technology and innovation	Shell has a long history in technology and innovation. We have a global network of R&D centres and work closely with our customers, suppliers and partners. We also collaborate with some of the world's leading technology companies to deploy digital solutions at scale across our business.
Integrated business model – trading and optimisation	Shell produces energy and is also one of the world's largest and most experienced energy traders and suppliers. We can identify and meet a customer's needs quickly. Our value chains are enhanced by purchases from third parties, and we have a leading global position in energy markets.

How we create value

We aim to meet the world's growing need for more and sustainable energy solutions in ways that are economically, environmentally and socially responsible. Through our business activities we create value for our shareholders, customers and wider society. This is a non-exhaustive illustration of Shell's key business activities that deliver the energy needed for today.

Our inputs [A]

Financial capital

Equity attributable to Shell plc shareholders ($ billion) [B]:
178 2023: 187

Total debt ($ billion) [B]:
77 2023: 82

Net debt* ($ billion) [B]:
39 2023: 44

Average capital employed* ($ billion) [B] [E]:
225 2023: 234

Cash capital expenditure* ($ billion):
21 2023: 24

Operations

Refinery and chemical plant availability: ■
92% 2023: 91%

Oil & gas production available for sale (kboe/d):
2,836 2023: 2,791

LNG liquefaction volumes (million tonnes): ■
29 2023: 28

Our People

Number of employees (thousands) [B]:
96 2023: 103

Number of training days (thousands):
264 2023: 295

Relationships

Ranking in the Global 500 list of most valuable oil and gas companies [C]:
1 2023: 1

Customers, joint arrangements, government relations, suppliers. Number of operating countries [B]:
>70 2023: >70

Intellectual capital

Research and development expenses ($ million):
1,099 2023: 1,287

Number of patents [B][D]:
8,677 2023: 8,829

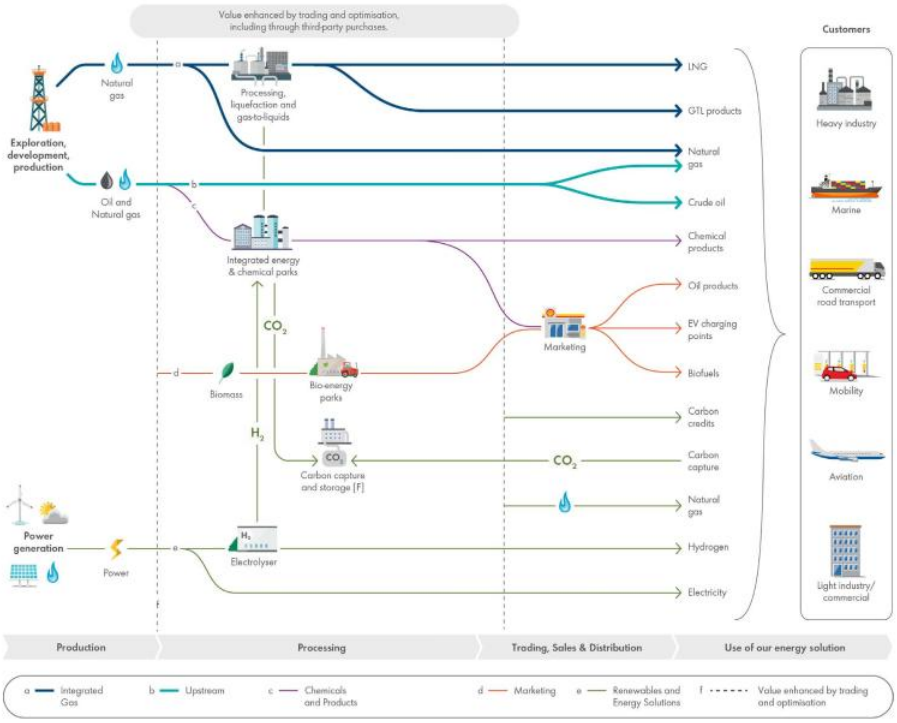
Natural resources

Proved oil and gas reserves (million boe) [B]:
9,620 2023: 9,787

Energy consumed (million MWh):
212 2023: 205

* Non-GAAP measure (see page 445).
[A] In 2024 unless stated otherwise.
[B] At December 31, 2024.
[C] Source: Brand Finance Global 500.
[D] Includes patents granted and pending patent applications.
[E] Reporting methodology has been changed, see Non-GAAP measures (page 445).

Business activities



■ Key performance indicators see page 18-19.

● Performance against our longer-term targets see page 14-15.

[F] Carbon capture and storage (CCS) hubs developed to offer CCS-as-a-service to our customers is reported in the Renewables and Energy Solutions segment. Where existing or future CCS projects help to decarbonise our own assets, they will be reported in the segment where the asset sits.

Outcomes and impacts for ou [A]

Generating Shareholder Value

Cash flow from ($ billion): ■
55 2023: 54

Free cash flow* ($ billion):
40 2023: 36

Shareholder dis ($ billion): ●
23 2023: 23

Adjusted Earnin
24 2023: 28

Achieving Net-Zero Emissions

Absolute emissi million tonnes o
58 2023: 57

Net carbon inte CO_2 equivalent
71 2023: 72

Methane emissi
0.04% 2023

Customer emissi oil products [D] equivalent)
491 2023: 517

Powering Lives

Women employ leadership posit
33% 2023: 3

Total spend on g ($ billion):
42 2023: 49

Respecting Nature

Total waste disp
1.9 2023: 2.3

Operational spi kilograms (thou
1.23 2023: 0.

* Non-GAAP measure (see page 445).
[A] In 2024 unless stated otherwise.
[B] Total shareholder distributions* were $23 billion cash dividends and $14 billion in share buybacks
[C] In 2024, we revised NCI from 79gCO$_2$e/MJ (g 74g to 72g for 2023. See page 98 for details.
[D] Scope 3, Category 11.
[E] At December 31, 2024.

Our strategy

Our strategy is to deliver more value with less emissions.

Our vision [A] is to be the world's leading integrated energy company and our strategy is to deliver more value with less emissions. We are positioning Shell to become the investment case and partner of choice through the energy transition.

More value

We are committed to enhancing value for our investors through disciplined investments, enhanced shareholder distributions and maintaining a strong balance sheet. Our focus remains on providing secure and reliable products, both now and throughout the energy transition, to meet the evolving needs of our customers. At Capital Markets Day 2023 (CMD23), we outlined our specific targets, and the progress we have made against these targets is presented on page 14.

Less emissions

We are committed to becoming a net-zero emissions energy business by 2050. We have set climate targets and an ambition, outlined in our Energy Transition Strategy 2024 (ETS24), to help us reach net zero. ETS24 was approved by 78% of shareholders who voted at our Annual General Meeting (AGM) in May. Progress against our climate targets and ambition is presented on page 93.

Shell aims to lead in the energy transition where we have competitive strengths, see strong customer demand, and identify clear regulatory support from governments. We will continue to provide our customers with the energy and other products they need, and we will provide this affordably and reliably, while also increasingly offering them low-carbon energy solutions to help them decarbonise their activities.

Moving forward

In 2024, we delivered our strategy against the four themes of generating shareholder value, achieving net-zero emissions, respecting nature and powering lives. These themes are presented on pages 12-13.

Like all businesses, we will continue to adapt how we implement our strategy as the world evolves. This adaptability is crucial for navigating the dynamic energy landscape enabling long-term success.

Capital Markets Day on March 25, 2025, presents an update to our financial targets for investors. See pages 16-17.

[A] A vision statement defines the desired future state of a company rather than a series of firm, binding commitments.

Photo: Staff at Shell QGC's training centre in Chinchilla, Queensland, Australia.

We will deliver more value with less emissions by:
- Growing our integrated gas and LNG business.
- Sustaining liquids production.
- Focusing Downstream, Renewables and Energy Solutions.

Growing our integrated gas and LNG business

We are investing in our gas production and growing our LNG business to deliver the secure energy the world needs. LNG is a critical fuel for the energy transition because it is a lower-carbon alternative to coal in power generation and can be easily transported to where it is needed.

Sustaining liquids production

We aim to sustain liquids production of at least 1.4 million barrels a day through to 2030 with increasingly lower carbon intensity. We are focusing our exploration activities in locations where hydrocarbons have already been discovered.

Focusing Downstream, Renewables and Energy Solutions

We are expanding our premium marketing businesses while streamlining our portfolio with a focus on value over volume. We will build on the options we have invested in for low-carbon growth through the energy transition. Our global customer reach and our supply and trading capabilities position us well to deliver the low-carbon solutions people and businesses need.

We are seeking to change the mix of energy products we sell to our customers as their needs for energy change. We believe we can make the greatest contribution to the energy transition by helping to enable our customers to switch to low-carbon energy products and services.

This is reflected in Shell's strategy to build a portfolio that seeks to:

- develop low- and zero-carbon alternatives to traditional fuel, including biofuels, and other low- and zero-carbon gases;
- provide more renewable power solutions to customers in select markets;
- work with customers across different sectors to help them decarbonise their use of energy, for example by substituting the use of coal with LNG; and
- address any remaining emissions from conventional fuels with solutions such as CCS and high-quality carbon credits.

As we implement our strategy, we will continue to focus on performance, discipline and simplification. This applies not only to our financial and operational outcomes, but also to safety and sustainability. Our Goal Zero ambition is fundamental to the success of our company.

See "Safety" on page 122.

We believe that no business can succeed without an unwavering commitment to respecting the environment and the communities within which it works. At Shell, we seek to protect the environment, increase our reuse and recycling, make a positive contribution to biodiversity and use water and other resources efficiently. We also work to make a positive impact on people around the world, and power lives through our products and activities, and by supporting an inclusive society.

See "Respecting nature" on page 109, and "Powering lives" on page 114.

More value with less emissions

Growing our integrated gas and LNG business
Grow liquefied natural gas (LNG) sales 4-5% per year through to 2030

Sustaining liquids production
Grow Integrated Gas and Upstream total production by 1% per year to 2030

Sustain liquids production of at least 1.4 million barrels per day through to 2030

Focusing Downstream, Renewables and Energy Solutions
Disciplined capital allocation to drive cash flow resilience and higher returns

With a focus on safety, people and sustainability

Generating shareholder value

We aim to generate more value for shareholders through disciplined capital allocation, strong financial performance and by maintaining a strong balance sheet.

We seek to provide enhanced shareholder distributions through our progressive dividend policy and share buyback programmes.

2024 performance

- Total shareholder distributions* were $23 billion, comprising $9 billion in cash dividends and $14 billion in share buybacks.
- Total shareholder distributions* were 41% of cash flow from operating activities.
- Cash flow from operating activities was $55 billion.
- Cash capital expenditure* was $21 billion.
- Total debt was reduced to $77 billion and net debt* was $39 billion as of December 31, 2024. Net debt excluding leases* was $10 billion.
- Structural cost reductions* were $3.1 billion from a 2022 baseline and against a $2-3 billion target by the end of 2025.
- The annual dividend was $1.390 per share, and the quarterly dividend increased to $0.358 per share for the fourth quarter.

Information on our progress against our longer-term targets included at Capital Markets Day 2023 can be found on page 14.

As we implement our strategy, we will work to:

- Enhance shareholder distributions from 30-40% to 40-50% of cash flow from operating activities* through the cycle.
- Increase the structural cost reduction* target from $2-3 billion by the end of 2025 to a cumulative $5-7 billion by end of 2028, compared to 2022.
- Invest for growth while maintaining capital discipline,with spend of cash capital expenditure lowered to $20-22 billion* per year from 2025-2028.
- Grow normalised free cash flow per share* on average by more than 10% per year through to 2030.

* Non-GAAP measure (see page 445).

Achieving net-zero emissions

We have a target to become a net-zero emissions energy business by 2050 and will work with customers to help them decarbonise.

We are transforming our business, including selling more low-carbon products and services. We are working with our customers and others to help accelerate the energy transition. We advocate policies, legislation and regulation that will generate demand for investment in a low-carbon energy system.

2024 performance

- Scope 1 and 2 emissions were down by 30% compared with the 2016 reference year [A].
- Methane emissions intensity of 0.04% continued to be below our 0.2% target.
- Net carbon intensity (NCI) decreased by 9.0% compared with the 2016 reference year and was within the 2024 target range.
- Routine flaring from upstream operations remained stable at 0.1 million tonnes and, with effect from January 1, 2025, Shell no longer carries out any routine flaring at its upstream operations.
- Customer emissions from the use of our oil products (Scope 3, Category 11) were reduced by 5% in 2024 to a total of 14% compared with 2021 [B].

As we implement our strategy, we will work to:

- Achieve net-zero emissions by 2050 (Scope 1, 2 and 3).
- Reduce by 50% Scope 1 and 2 absolute emissions from activities under operational control by 2030, compared with 2016 levels on a net basis.
- Achieve near-zero methane emissions intensity by 2030.
- Reduce net carbon intensity by 15-20% by 2030, compared with the 2016 reference year.
- Reduce customer emissions from the use of our oil products by 15-20% by 2030, Scope 3, Category 11 [B], compared with the 2021 reference year.

Progress against our longer-term emissions targets can be found on page 14 and in "Our journey to net zero" on page 93.

[A] Reduced from 83 million tonnes of CO_2e in 2016 to 58 million tonnes of CO_2e in 2024.
[B] Customer emissions from the use of our oil products (Scope 3, Category 11) were 517 million tonnes CO_2e in 2023 and 569 million tonnes CO_2e in 2021.

Powering lives

We power lives through our products and activities, and by supporting an inclusive society.

We provide vital energy for homes, businesses and transport. We also aim to create a desirable workplace that is accepting and inclusive and representative of the communities we are a part of. Additionally, our activities generate revenues for governments through the taxes and royalties we pay, and the taxes we collect on their behalf.

2024 performance

- In 2024, we spent around $42 billion on goods and services* from suppliers around the world.
- In 2024, taxes paid* were $18 billion.
- In 2024, representation of women in Senior Leadership [A] grew to 33%.
- As of December 31, 2024, 15% of Shell's Senior Management [B] identifies as being from an ethnic minority group.
- Our 2024 Shell People Survey showed a result of 81 points out of 100 for all questions relating to diversity, equity and inclusion (DE&I).

As we implement our strategy, we will work to:

- Collaborate with suppliers that behave in an economically, environmentally and socially responsible manner.
- Be a good neighbour through strong community engagement, managing negative impacts from our activities and seeking to enhance positive impacts [C].
- Respect human rights as set out in the UN Universal Declaration of Human Rights.
- Continue to achieve 15% ethnic minority group representation in Senior Management [B] by 2027.
- Have at least one Board member from an ethnic minority background.
- Increase representation of women in senior leadership positions to 40% by 2030.
- Achieve gender balance on the Board, with at least one senior Board position held by a woman.

[A] Senior Leadership is a Shell measure based on compensation grade levels. This measure is distinct from "senior manager" as per statutory disclosure requirements. See "Our people" on page 117.
[B] As per the latest Parker Review recommendations, Senior Management refers to Senior Leadership based in the UK and is a Shell measure based on compensation grade levels.
[C] See Powering Lives for examples of how we seek to be a good neighbour.
* Non-GAAP measure (see page 445).

Respecting nature

We seek to protect the environment, increase our reuse and recycling, make a positive contribution to biodiversity and use water and other resources efficiently.

Our businesses use natural resources such as land and water for their operations. Our activities can impact nature through discharges and emissions to the environment, and through changes to the use of land and water. We assess and manage the impact of our operations on local ecosystems and communities.

2024 performance

- We continued to embed respect for nature into our activities, standards and business processes, including by ensuring that these are reflected in our Safety, Environment and Asset Management (SEAM) Standards.
- In partnership with Monash University, we are executing an ecological restoration programme on Browse Island, Australia, to eradicate invasive alien species, improve reef health and promote the return of breeding seabirds.
- At the Pearl GTL gas-to-liquids facility in Qatar, we diverted waste to local cement kilns for use as clinker in cement production, thereby reducing use of raw materials and the amount of waste sent to landfill.

As we implement our strategy, we will work to:

- Achieve net-zero deforestation from new activities by replanting forests, while maintaining biodiversity and conservation value.
- Achieve a net positive impact on biodiversity, based on reference year 2021, for new projects in critical habitats.
- Better understand the types of waste we generate and identify options to increase circular approaches.
- Implement water stewardship principles across our businesses, including the sustainable management of fresh-water resources, particularly in water-stressed areas.

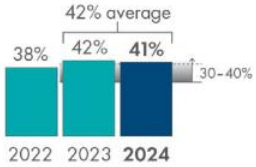
Progress against our longer-term targets

In 2024, we continued to make good progress in delivering on the longer-term targets as set out at our Capital Markets Day in June 2023 and in our Energy Transition Strategy 2024. We are ahead of schedule across the majority of our key targets, delivering more value with less emissions.

More value

Targets included at Capital Markets Day 2023 [A]

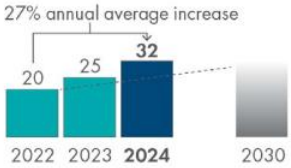
Shareholder distributions 30-40% of CFFO* through the cycle [B]
(%)
◇



Shareholder distributions as % of CFFO is used to demonstrate Shell plc's progress on increasing returns to shareholders through the cycle.

Total shareholder distributions* in 2024 of $23 billion comprised of $9 billion in dividends and $14 billion in share buybacks, representing 41% of CFFO. Average shareholder distributions since the end of 2022 of 42% of CFFO, at the top of our target range of 30–40%.

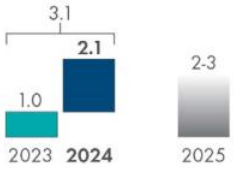
Price-normalised FCF growth* > 6% per year through 2030 [C]
($ billion)
◇



Price-normalised FCF growth demonstrates the growth in underlying business performance and removes the impact of macroeconomic price movements for a more comparable figure.

Average annual growth in price-normalised FCF of 27% since 2022 continued to outperform our targeted growth of more than 6% per year. This reflects our improved operational performance, discipline in cash capital expenditure and structural cost reduction.

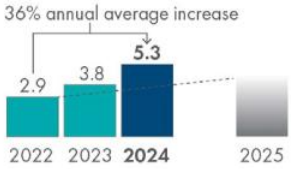
Structural cost reduction* of $2-3 billion by end of 2025 [D]
($ billion)



Structural cost reduction is used to demonstrate how management drives cost discipline across the entire organisation by simplifying our processes and portfolio, and streamlining the way we work.

Structural cost reduction* of $3.1 billion delivered since the end of 2022, one year ahead of our target date of end of 2025 and above the range of $2-3 billion set in 2023. Of the cost reduction delivered, $1.2 billion relates to portfolio changes and $1.9 billion relates to operational efficiencies across our businesses, a leaner corporate centre, and faster decision-making in project development.

Price-normalised FCF growth/share* > 10% per year through 2025 [C]
($/share)
◇



The price-normalised FCF growth per share demonstrates the increase in cash distribution to shareholders and removes the impact of macroeconomic price movements for a more comparable figure.

Average annual growth in price-normalised FCF per share of 36% since 2022 continued to outperform our targeted growth of more than 10% per year. This reflects our price-normalised FCF growth as well as a lower number of shares in issue as a result of our ongoing share buyback programme.

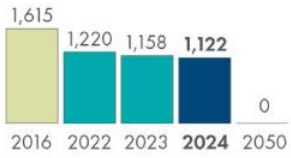
* Non-GAAP measure (see page 445).
[A] Targets announced at our Capital Markets Day 2025 are included in Outlook (See page 16)
[B] CFFO: cash flow from operating activities.
[C] FCF: free cash flow.
[D] 2025 target reflects annualised savings achieved by end-2025.

◇ FCF and shareholder distributions (taken into account as part of Total shareholder return) are used when calculating Executive Directors' remuneration.

Less emissions

Targets included in our Energy Transition Strategy 2024

Net-zero emissions by 2050 (Scope 1, 2 and 3) [D], [E]
(million tonnes of CO_2e)

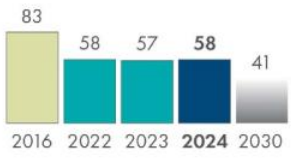


Net-zero emissions demonstrate our progress towards achieving our target to become a net-zero emissions energy business by 2050.

Net absolute emissions continued to decrease in 2024, principally driven by a reduction in our sales of oil products.

Halving Scope 1 and 2 emissions by 2030 under operational control (2016 baseline) [D]
(million tonnes of CO_2e)

◆



We have set a target to halve the emissions from our operations (Scope 1) and the energy we buy to run them (Scope 2) by 2030 compared with 2016 levels, on a net basis.

Combined Scope 1 and 2 emissions in 2024 reflect a 30% reduction compared with the 2016 baseline. The slightly higher emissions compared to 2023 were due to higher utilisation and production, offset by reductions from abatement projects.

Reduce the net carbon intensity (NCI) of the products we sell by 15-20% by 2030 [D], [F]
(gCO_2e/MJ)

◆

The NCI metric is used to track progress in reducing the overall carbon intensity of the energy products we sell, compared with a 2016 baseline. NCI is the average intensity, weighted by sales volume of the energy products we sell. With a reduction of 9.0% compared with the 2016 baseline, our interim target to reduce our NCI by 9-12% in 2024 is met.

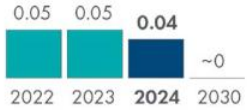
The decrease in NCI compared with 2023 is mainly driven by a reduction in our sales of oil products, continued growth in our power sales and a reduction in average oil product intensity.

Eliminate routing flaring from upstream operations by 2025 [D], [G] and achieve near-zero methane emissions by 2030 [D], [H]

◆

Routine flaring
(million tonnes)

Methane emissions intensity
(%) [I]



In 2024, total routine flaring from our upstream oil and gas assets remained stable compared with 2023. From January 1, 2025, our target of ending routine flaring from upstream operations has been met (independent of the March 13, 2025 completion of the sales of SPDC). We continued to deliver methane emissions intensities well below our 0.2% target.

In addition to these targets we have an ambition to reduce the customer emissions from the use of our oil products by 15-20% by 2030, compared with 2021 (Scope 3, Category 11). See "Our journey to net zero" on page 102.

◆ This target is used to determine Executive Directors' remuneration.

[D] See "Our journey to net zero" on pages 76-108.
[E] Estimated total GHG emissions included in NCI (net) were revised from 1,645 to 1,615 million tonnes of CO_2e for 2016, from 1,240 to 1,220 million tonnes of CO_2e for 2022 and from 1,185 to 1,158 million tonnes of CO_2e for 2023. See page 98 for details.
[F] Grams of carbon dioxide equivalent per megajoule. In 2024, we revised NCI from 79gCO_2e/MJ (g) to 78g for the 2016 base year, from 76g to 75g for 2022 and from 74g to 72g for 2023. See page 98 for details.
[G] Subject to completion of the sale of SPDC.
[H] On an intensity basis.
[I] Methane emissions intensity of Shell-operated oil and gas assets with marketed gas.

Outlook

Capital Markets Day on March 25, 2025, presents an update to our financial targets for investors.

Our vision [A] is to be the world's leading integrated energy company.

Shell is transforming to become simpler, more resilient and competitive. We want to become the world's leading integrated gas and LNG business and the most customer-focused energy marketer and trader, while sustaining a material level of liquids production.

We are building on the significant progress we have made in executing our strategy to deliver more value with less emissions. As we do this, we will maintain our focus on performance, discipline and simplification. We aim to grow returns for shareholders, while reducing our emissions and helping our customers reduce theirs.

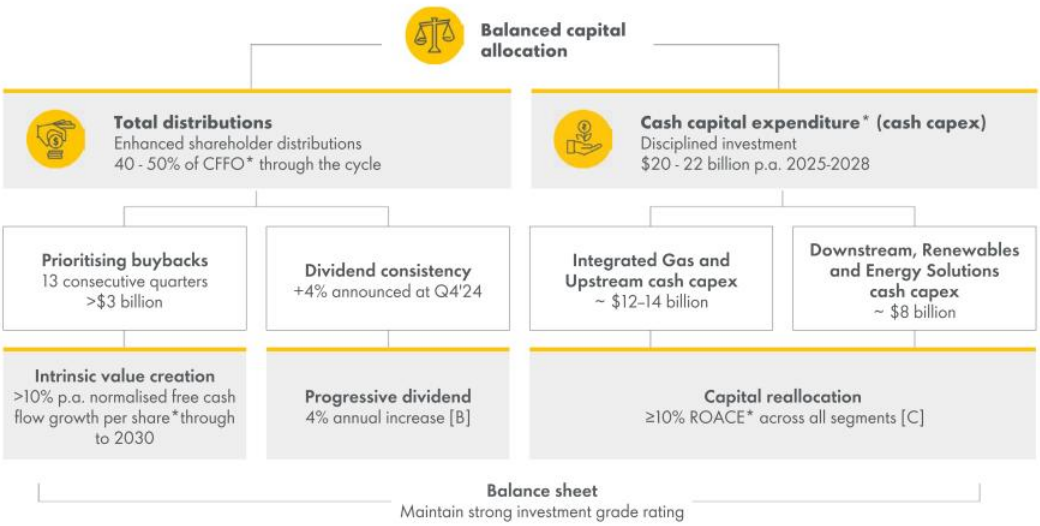
To successfully implement our strategy, we will take a value-led approach through a financial framework which enhances shareholder distributions, and maintains discipline in capital allocation and a balance sheet with a strong investment grade rating.

Financial discipline and strategic focus
We will maintain our focus on performance, cost and capital discipline, investing in areas of competitive strength to maximise returns.

Updates to our financial targets:
- Enhance shareholder distributions from 30–40% to 40–50% of cash flow from operations* through the cycle, continuing to prioritise share buybacks while maintaining the 4% a year progressive dividend policy [B].
- Increase the structural cost reduction* target from $2–3 billion by the end of 2025 to a cumulative $5–7 billion by the end of 2028, compared with 2022.
- Invest for growth while maintaining capital discipline with cash capital expenditure* lowered to $20–22 billion a year for 2025–2028 compared with $21 billion in 2024.
- Grow normalised free cash flow per share* on average by more than 10% a year through to 2030.

[A] A vision statement defines the desired future state of a company rather than a series of firm, binding commitments.

Shell financial framework: Capital Markets Day 2025



[B] Subject to Board approval as well as shareholder approval at the 2025 Annual General Meeting.
[C] Price normalised ROACE on an Adjusted Earnings plus non-controlling interest basis.

* Non-GAAP measure (see page 445).

The Board intends to enhance shareholder distributions through a combination of dividends and share buybacks, maintaining a 4% progressive dividend policy.

When the Board sets the level of shareholder distributions, it looks at a range of factors including the macro environment, underlying business earnings and Group cash flows, the current balance sheet, future investment, acquisition and divestment plans, and existing commitments.

Growth and resilience through the energy transition

Shell believes the world is facing a complex, multi-decade energy transition in which there will be growing demand for secure, affordable and, increasingly, low-carbon energy.

In liquefied natural gas (LNG), we will reinforce our leadership position by growing sales 4–5% a year through to 2030.

We will also grow production across our combined Upstream and Integrated Gas business by 1% a year to 2030, sustaining our 1.4 million barrels a day of liquids production with increasingly lower carbon intensity.

And, we will drive cash flow resilience and higher returns in Downstream, Renewables and Energy Solutions by:

- Pursuing focused growth in our high-return Mobility and Lubricants businesses.
- Leveraging competitive strengths to drive profitable and scalable businesses across our lower-carbon platforms [A] where we expect to have up to 10% of capital employed by 2030.
- Unlocking more value from our strong portfolio of Chemicals assets. This will be done by exploring strategic and partnership opportunities in the USA and through high-grading and selective closures in Europe. We believe this will enable the business to prosper while improving returns and reducing capital employed by 2030.

[A] Shell's lower-carbon platforms include low-carbon fuels, carbon capture and storage, and hydrogen, as well as power which includes renewable generation and gas fired power.

Shell will continue to deliver more value with less emissions, growing in areas where we have competitive strengths. We believe we are providing a compelling investment case for our shareholders, now, and into the future.

Performance culture and commitment

We will continue to embed a performance culture, empowering our people with greater ownership and faster decision-making, helping to ensure safe and responsible operations.

Shell is committed to delivering on our promises, transforming to become more resilient and competitive, and driving growth and value creation through disciplined execution of our strategy. We are confident in our ability to navigate the energy transition and deliver enhanced returns for our shareholders.

Photo: Shell employees and contractors on the Vito deep-water platform in Ingleside, Texas, USA.

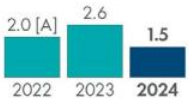
Performance in the year

Performance indicators

These indicators enable management to evaluate Shell's performance against our annual Operating Plan. They are also used as part of determining Executive Directors' remuneration. See "Directors' Remuneration Report" on pages 188-190.

Safety

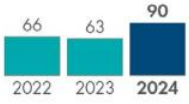
Personal safety
(SIF-F cases per 100 million working hours)



Serious injury, illness and fatality (SIF) is defined as a serious work-related injury or illness that resulted in a fatality or permanent impairment. For SIF Frequency (SIF-F), the number of SIF employee and contractor incidents is divided by 100 million working hours.

2024 performance
Despite improvement, the result reflects two fatalities and five serious injuries reported in 2024, which is too many. We will continue to strengthen the safety culture among our employees and contract staff.

Process safety
(number of Tier 1 and Tier 2 events)



Operational process safety events are defined as the unplanned or uncontrolled release of any material from a process with the greatest actual consequence resulting in harm to employees, contract staff, a neighbouring community, or damage to equipment, or exceeding a threshold quantity.

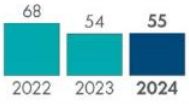
2024 performance
The increase in process safety tiered events was driven by our Downstream and Renewables businesses. We are actively addressing these challenges by refining our operational strategies, renewing our focus on fundamentals and leveraging new technologies to return to the downward trend of previous years.

For details on our safety performance see "Safety" on pages 122-124

[A] 2022 adjustment on SIF-F from 1.7 to 2.0 is due to a change in classification for one injury after publication of the 2023 Annual Report and Accounts.

Financial delivery

Cash flow from operating activities
($ billion)



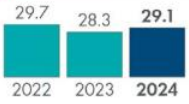
Total cash receipts and payments associated with oil, gas, chemicals and other product sales. This reflects our ability to generate cash to service and reduce debt, invest and make shareholder distributions.

2024 performance
Driven mainly by a strong operational performance.

See "Liquidity and capital resources" on pages 24-27.

Shell's journey in the energy transition

LNG volumes
(million tonnes)

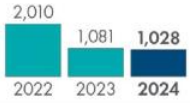


Shell's share of sales of equity LNG volumes from liquefaction plants owned by Shell subsidiaries, Shell joint ventures and associates, and Shell's share of LNG produced from liquefaction plants which operate under tolling arrangements with Shell.

2024 performance
LNG liquefaction volumes increased mainly due to lower maintenance in Australia.

See "Integrated Gas" on page 31.

Reducing operational emissions
(Scope 1 and 2; thousand tonnes CO_2)

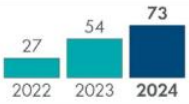


Operational emission reductions achieved from GHG abatement projects (e.g. reduced flaring, increased energy efficiency, and use of renewable electricity), site closures and decommissioning or transformations, resulting in sustained GHG reductions.

2024 performance
This was mainly due to catalyst improvements at Pearl GTL in Qatar, routine flaring reduction (Forcados Yokri Gas Project) in Nigeria and optimisation of the liquefaction control system at QGC in Australia.

See "Our journey to net zero" on pages 76-108.

Electric vehicle (EV) charge points
(thousand)



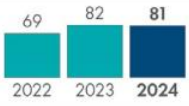
Number of public electric vehicle charge points owned, controlled, or Shell branded. The definition has been revised to exclude operated only charge points. Prior year figures have been restated.

2024 performance
Performance was largely due to growth in top adoption markets, and we achieved our goal of installing 70,000 public charge points a year ahead of schedule.

See "Marketing" on pages 55-59.

Operational excellence

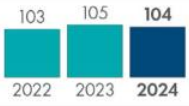
Project delivery on schedule
(%)



Our capability to complete major projects on time, measured as the percentage of projects delivered on schedule.

2024 performance
Highlights for this year include the successful start-up of 10 projects, half of which came on-stream ahead of schedule.

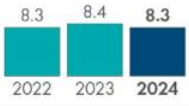
Project delivery on budget
(%)



Aggregate cost against the aggregate baseline for those projects, where a figure greater than 100% means over budget.

2024 performance
The result was impacted by the decision to pause on-site construction at our biofuels plant in Rotterdam.

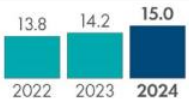
Customer satisfaction
(index)



This quantitative measurement of customer experience performance is calculated as a simple average of customer satisfaction scores from the global business-to-business transactional survey programme.

2024 performance
The result reflects focus on prioritisation, continuous improvement of e-commerce platforms, and the resilience of our teams.

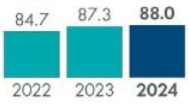
Brand Share Preference
(%)



The percentage of customers answering "Shell" when asked: "Assuming that all the fuel station companies that you would consider are conveniently located, which one company do you prefer most?" The responses are taken from survey respondents in more than 60 countries covering both fuel and non-fuel retail consumers.

2024 performance
Our Brand Share Preference continued to rise, performing ahead of expectations in all regions.

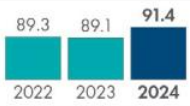
Upstream controllable availability
(%)



Reflects our ability to optimally run our Upstream assets and includes all Shell-operated assets and selected assets not operated by Shell but for which Shell has strategic influence. It excludes the impact of extreme unexpected events that are outside our control, such as government restrictions and hurricanes. Reliability issues, turnarounds and maintenance at own-operated or third-party facilities impact controllable availability.

2024 performance
Performance improved, particularly in Kazakhstan, Nigeria, Norway, Oman and the USA, partially offset by lower performance in the UK.

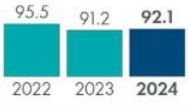
Midstream availability
(%)



The extent to which LNG assets are ready to process product as a comparison with capacity, considering the impact of planned and unplanned maintenance.

2024 performance
Improved performance, especially in Australia, Qatar and Oman.

Refinery and chemical plant availability
(%)



Weighted average of plants' actual uptime, as a percentage of their maximum possible uptime, is a measure of the operational excellence of our refinery and chemical plant facilities. The weighting is based on the capital employed, adjusted for cash and non-current liabilities.

2024 performance
Improvements this year were mainly in Shell Polymers Monaca in the USA and Bukom Refinery in Singapore.

See "Chemicals and Products" on page 60.

Generating shareholder value

We are committed to enhancing shareholder distributions with a focus on performance, discipline and simplification.

Group results

Key metrics

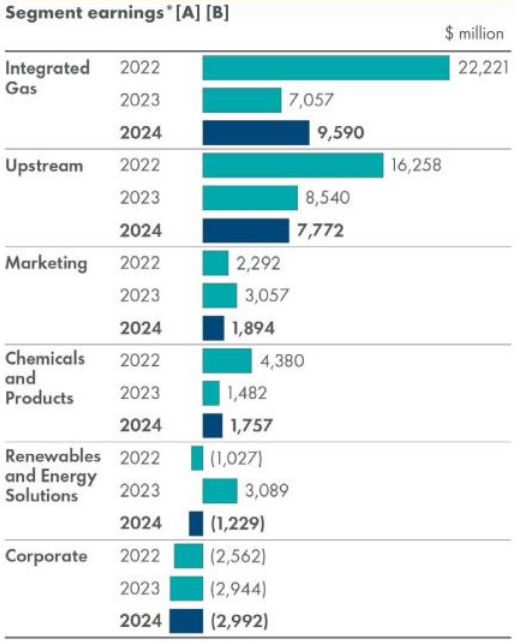
	$ million, except where indicated		
	2024	2023	2022
Income attributable to Shell plc shareholders	16,094	19,359	42,309
Income for the period	16,521	19,636	42,874
Total segment earnings*[A] [B]	16,792	20,281	41,562
Adjusted Earnings*[A] [C]	23,716	28,250	39,870
Adjusted EBITDA*[A]	65,803	68,538	84,289
Cash flow from operating activities	54,687	54,191	68,414
Cash flow from investing activities	(15,155)	(17,734)	(22,448)
Free cash flow*	39,533	36,457	45,965
Cash capital expenditure*	21,085	24,392	24,833
Operating expenses*[D]	36,917	39,960	39,476
Underlying operating expenses*[D]	35,707	39,201	39,456
ROACE on an Adjusted Earnings plus Non-controlling interest basis* [E]	11.3%	12.8%	18.0%
Total debt at December 31 [F]	77,078	81,541	83,795
Net debt* at December 31 [F]	38,809	43,542	44,837
Gearing* at December 31	17.7%	18.8%	18.9%
Oil and gas production available for sale (thousand boe/d)	2,836	2,791	2,864
Proved oil and gas reserves at December 31 (million boe)	9,620	9,787	9,578
Basic earnings per share ($)	2.55	2.88	5.76
Adjusted Earnings per share* ($)	3.76	4.20	5.43
Dividend per share ($)	1.3900	1.2935	1.0375

[A] Segment earnings, Adjusted Earnings and Adjusted EBITDA are presented on a current cost of supplies basis.
[B] See Note 7 to the "Consolidated Financial Statements" which includes an explanation of the reporting segment changes applicable from 2024.
[C] Adjusted Earnings exclude the non-controlling interest component.
[D] The most comparable GAAP financial measure is Production and manufacturing expenses (2024: $23 billion; 2023: $25 billion).
[E] Effective first quarter 2024, the definition has been amended and comparative information has been revised. Refer to Non-GAAP measures section for details.
[F] See Note 21 to the "Consolidated Financial Statements".
* Non-GAAP measure (see page 445).

"2024 was another year of strong performance across Shell, with significant progress against all our financial targets."

Sinead Gorman
Chief Financial Officer

Segment earnings*[A] [B]



Segment Adjusted Earnings*[A] [B]

We made significant progress towards the financial targets that we set at Capital Markets Day 2023. Our focus on performance, discipline and simplification has been key to achieving these results, enabling us to deliver more value with less emissions. In 2024, we reported the second-highest cash flow from operations in our history. Our operational performance has also improved. We have brought a number of projects online and we have taken disciplined final investment decisions that will help strengthen Shell further.

Earnings 2024-2023

Income attributable to Shell plc shareholders in 2024 was $16,094 million, compared with $19,359 million in 2023. With non-controlling interest included, income for the period in 2024 was $16,521 million, compared with $19,636 million in 2023. After current cost of supplies adjustment, total segment earnings* in 2024 were $16,792 million, compared with $20,281 million in 2023.

Adjusted Earnings* in 2024 were $23,716 million, compared with $28,250 million in 2023. The decrease was mainly driven by lower LNG trading and optimisation margins, lower realised prices, lower refining margins as well as lower trading and optimisation margins of power and pipeline gas in Renewables and Energy Solutions, partly offset by lower operating expenses and higher realised Chemicals margins.

2024 income attributable to Shell plc shareholders also included net impairment charges and reversals of $4,371 million, reclassifications from equity to profit and loss of cumulative currency translation differences related to funding structures, unfavourable movements relating to an accounting mismatch due to fair value accounting of commodity derivatives, and charges related to redundancy and restructuring. These charges, reclassifications and movements are included in identified items amounting to a net loss of $7,365 million.

Integrated Gas

Integrated Gas segment earnings* in 2024 were $9,590 million, compared with $7,057 million in 2023. The increase was mainly driven by lower unfavourable movements relating to an accounting mismatch due to fair value accounting of commodity derivatives, lower net impairment charges and reversals, higher volumes, lower operating expenses, and favourable deferred tax movements, partly offset by the combined effect of lower contributions from trading and optimisation and lower realised prices.

See "Integrated Gas" on page 31.

Upstream

Upstream segment earnings* in 2024 were $7,772 million, compared with $8,540 million in 2023. The decrease was mainly driven by unfavourable tax movements, lower realised prices and higher exploration well write-offs, partly offset by the comparative favourable impact relating to gas storage effects.

See "Upstream" on page 38.

* Non-GAAP measure (see page 445).

Marketing

Marketing segment earnings* in 2024 were $1,894 million, compared with $3,057 million in 2023. The decrease was mainly driven by higher net impairment charges and reversals, net losses related to sale of assets, unfavourable tax movements and higher depreciation charges. These were partly offset by higher Marketing margins including higher unit margins in Lubricants and Mobility, partly compensated by lower Sectors and Decarbonisation margins. Segment earnings also reflected lower operating expenses.

See "Marketing" on page 55.

Chemicals and Products

Chemicals and Products segment earnings* in 2024 were $1,757 million, compared with $1,482 million in 2023. The increase was mainly driven by lower net impairment charges and reversals, lower operating expenses and higher Chemicals margins. These were partly offset by lower Products margins, largely due to lower refining margins, unfavourable movements relating to an accounting mismatch due to fair value accounting of commodity derivatives and unfavourable tax movements.

See "Chemicals and Products" on page 60.

Renewables and Energy Solutions

Renewables and Energy Solutions segment earnings* in 2024 were an expense of $1,229 million, compared with a gain of $3,089 million in 2023. The decrease was mainly driven by lower favourable movements relating to an accounting mismatch due to fair value accounting of commodity derivatives, lower margins, largely from trading and optimisation primarily in Europe due to lower volatility and higher net impairment charges and reversals, partly offset by lower operating expenses.

See "Renewables and Energy Solutions" on page 68.

Corporate

Corporate segment earnings* in 2024 were an expense of $2,992 million, compared with an expense of $2,944 million in 2023. The increase was mainly driven by reclassifications from equity to profit and loss of cumulative currency translation differences related to funding structures, partly offset by favourable tax movements, favourable net interest movements and favourable currency exchange rate effects.

See "Corporate" on page 72.

Prior year earnings summary
Our earnings summary for the financial year ended December 31, 2023, compared with the financial year ended December 31, 2022, can be found in the Annual Report and Accounts (page 32) and Form 20-F (page 30) for the year ended December 31, 2023, as filed with the Registrar of Companies for England and Wales and the US Securities and Exchange Commission, respectively.

Cash flow from operating activities
Cash flow from operating activities was $54,687 million in 2024, compared with $54,191 million in 2023. Cash flow from operating activities in 2024 was primarily driven by Adjusted EBITDA, and working capital inflow of $2,062 million, partly offset by tax payments of $12,002 million.

Cash capital expenditure
Cash capital expenditure* was $21,085 million in 2024, compared with $24,392 million in 2023.

See "Our journey to net zero" on page 87.

Operating expenses and Underlying operating expenses
Operating expenses* were $36,917 million in 2024, compared with $39,960 million in 2023. Underlying operating expenses* were $35,707 million, compared with $39,201 million in 2023. The decrease in both Operating expenses and Underlying operating expenses was mainly driven by structural cost reductions delivered through operational efficiencies across our businesses, a leaner corporate centre, faster decision-making in project development, and portfolio changes.

Return on average capital employed on an Adjusted Earnings plus Non-controlling interest (NCI) basis
Our ROACE on an Adjusted Earnings plus Non-controlling interest basis* decreased to 11.3%, compared with 12.8% in 2023, mainly driven by lower earnings.

Significant accounting estimates and judgements
See Note 2 to the "Consolidated Financial Statements" on pages 245-255.

Legal proceedings
See Note 32 to the "Consolidated Financial Statements" on pages 308-310.

* Non-GAAP measure (see page 445).

Production available for sale
Oil and gas production available for sale in 2024 was 2,836 thousand boe/d, compared with 2,791 thousand boe/d in 2023. This increase was mainly driven by growth from new fields and partly offset by divestments.

Oil and gas production available for sale [A][B]

Thousand boe/d

	2024	2023	2022
Crude oil and natural gas liquids	1,452	1,454	1,460
Synthetic crude oil	51	52	46
Natural gas [C]	1,333	1,285	1,357
Total	2,836	2,791	2,864
Of which:			
Integrated Gas	954	939	921
Upstream	1,831	1,800	1,897
Oil sands (part of Chemicals and Products)	51	52	46

[A] See "Oil and gas information".
[B] Reflects 100% of production of subsidiaries except in respect of PSCs, where the figures shown represent the entitlement of the subsidiaries concerned under those contracts.
[C] Natural gas volumes are converted into oil equivalent using a factor of 5,800 scf per barrel.

Proved reserves
The proved oil and gas reserves of Shell subsidiaries and the Shell share of the proved oil and gas reserves of joint ventures and associates are summarised in "Oil and gas information" on pages 47-54 and set out in more detail in "Supplementary information – oil and gas (unaudited)" on pages 313-332.

Before taking production into account, our proved reserves increased by 917 million boe in 2024. Total oil and gas production was 1,084 million boe. Accordingly, after taking production into account, our proved reserves decreased by 167 million boe in 2024, to 9,620 million boe at December 31, 2024.

Liquidity and capital resources

Liquidity and capital resources

Shell generated free cash flow* of $39.5 billion in 2024, aided by disciplined capital management, portfolio simplification and operational performance improvements. Net debt* decreased to $38.8 billion at December 31, 2024 (December 31, 2023: $43.5 billion). Total debt decreased to $77.1 billion at December 31, 2024 (December 31, 2023: $81.5 billion). Gearing* decreased to 17.7% at December 31, 2024, compared with 18.8% at December 31, 2023.

See Note 21 to the "Consolidated Financial Statements" on pages 284-285.

Liquidity

Shell satisfies its funding, liquidity and working capital requirements by using cash generated from our operations, taking on debt and through divestments. In 2024, access to the international debt capital markets remained strong, with Shell's debt principally financed from these markets through central debt programmes consisting of:

- a $10 billion global commercial paper (CP) programme, with maturities between 183 days and 364 days;
- a $10 billion US CP programme, with maturities not exceeding 397 days;
- an unlimited Euro medium-term note (EMTN) programme (also referred to as the Multi-Currency Debt Securities Programme). This programme lapsed in November 2024, and will be renewed in the first half of 2025 or as required to issue debt; and
- an unlimited US universal shelf (US shelf) registration.

The debt issued under the CP, EMTN and US shelf has been issued by Shell International Finance B.V., the issuance company for Shell, with its debt being guaranteed by Shell plc. In 2023, Shell incorporated a new US subsidiary, Shell Finance US Inc., and in 2024 a portion of the debt issued by Shell International Finance B.V. was moved into this entity through an exchange offer. This debt remains guaranteed by Shell plc, as will any new debt issued by Shell Finance US Inc. under the US shelf.

We also maintain an $8 billion committed credit facility maturing in 2026. This remained fully undrawn at December 31, 2024. This facility was reduced from $10 billion in the third quarter of 2024 due to the strong liquidity position of the Group. This reduced core facility and cash on balance sheet provide back-up coverage for our CP programmes. Other than certain borrowings by subsidiaries in their local jurisdictions, we do not have any other committed credit facilities.

Our total debt decreased by $4.5 billion to $77.1 billion at December 31, 2024. The total debt excluding lease liabilities matures as follows: 14% in 2025; 8% in 2026; 5% in 2027 and 73% in 2028 and beyond. The portion of debt maturing in 2025 is expected to be repaid from some combination of cash balances, cash generated from operations, divestments and the issuance of new debt. In 2024, we did not issue any debt under our US shelf registration, EMTN programme or CP programmes. The Group had no CP outstanding at December 31, 2024.

While our subsidiaries are subject to restrictions, such as foreign withholding taxes on the transfer of funds in the form of cash dividends, loans or advances, such restrictions are not expected to have a material impact on our ability to meet our cash obligations.

* Non-GAAP measure (see page 445).

Market risk, credit risk and pension commitments

Financial risks

We use various financial instruments for managing exposure to foreign exchange and interest rate movements. Our treasury operations are highly centralised and seek to manage credit exposures associated with our substantial cash, foreign exchange and interest rate positions.

Our portfolio of cash investments is diversified to avoid concentrating risk in any one instrument, country or counterparty. Other than in exceptional cases, the use of external derivative instruments is confined to specialist trading and central treasury organisations that have the appropriate skills, experience, supervision, control and reporting systems.

We operate with procedures and policies designed to ensure that trading risks are managed within a prescribed control framework. The framework sets out authorised limits and requirements that trading should only be performed by employees with the appropriate skills and experience. Senior management regularly reviews these authorised trading limits. In addition, a department that is independent from our traders monitors our market risk exposures daily, using techniques such as value-at-risk alongside other risk metrics.

We have counterparty credit risk policies in place which seek to ensure that products are sold to customers with appropriate creditworthiness. These policies include detailed credit analysis and monitoring of customers against counterparty credit limits. Where appropriate, netting arrangements, credit insurance, prepayments and collateral are used to manage credit risk.

Management believes it has access to sufficient debt funding sources (capital markets) and to undrawn committed borrowing facilities to meet foreseeable requirements.

A pensions forum chaired by the CFO oversees Shell's input to pension strategy, policy and operation. A risk committee supports the forum in reviewing the results of assurance processes with respect to pension risk. Local trustees manage the funded defined benefit pension plans and set the strategic asset allocation for the plans, including the extent to which currency, interest rate and inflation risks are hedged, and the contributions paid are based on independent actuarial valuations that align with applicable local regulations. Pension fund liquidity is managed by holding appropriate liquid assets and maintaining credit facilities. Where appropriate, transactions to transfer pension liabilities to third parties are also considered. Our total employer contributions were $0.4 billion in 2024 and are estimated to be $0.9 billion in 2025.

See "Risk factors" on page 139, Note 24 and Note 26 to the "Consolidated Financial Statements" on pages 290-296 and 298-304.

Capitalisation table

$ million

	December 31, 2024	December 31, 2023
Equity attributable to Shell plc shareholders	178,307	186,607
Current debt	11,630	9,931
Non-current debt	65,448	71,610
Total debt [A]	77,078	81,541
Total capitalisation	255,385	268,148

[A] Of total debt of $77.1 billion (2023: $81.5 billion), $48.1 billion (2023: $53.4 billion) was unsecured and $29.0 billion (2023: $28.2 billion) was secured; $46.0 billion is fully and unconditionally guaranteed by Shell plc (December 31, 2023: $51.3 billion), with the following amounts issued by Shell Group subsidiaries: $31.8 billion by Shell International Finance B.V., a wholly owned finance subsidiary of Shell plc (December 31, 2023: $48.4 billion); $11.4 billion by Shell Finance US Inc., a wholly owned finance subsidiary of Shell plc (December 31, 2023: $nil billion); and $2.8 billion by BG Energy Capital plc (December 31, 2023: $2.9 billion).

See Note 21 to the "Consolidated Financial Statements" for further disclosure on total debt and net debt.

Guarantees and other off-balance sheet arrangements

There were no guarantees or other off-balance sheet arrangements at December 31, 2024, or December 31, 2023, that were reasonably likely to have a material impact on Shell.

See Note 32 to the "Consolidated Financial Statements" on page 308 for further details on guarantees where the potential obligations related to issuance are assessed to be remote.

Consolidated Statement of Cash Flows

Cash flow from operating activities in 2024 was $54.7 billion, compared with $54.2 billion in 2023. The cash flow from operating activities in 2024 was primarily driven by Adjusted EBITDA and working capital inflow of $2.1 billion (compared with working capital inflow of $7.1 billion in 2023), partly offset by tax payments of $12.0 billion (compared with tax payments of $13.7 billion in 2023). The cash flow from operating activities in 2024 also included favourable commodity-related derivative financial instrument movement of $2.5 billion (compared with unfavourable movement of $5.7 billion in 2023).

Cash flow from investing activities in 2024 was an outflow of $15.2 billion, compared with an outflow of $17.7 billion in 2023. The cash flow from investing activities in 2024 included cash capital expenditure* of $21.1 billion (compared with cash capital expenditure of $24.4 billion in 2023), partly offset by divestment proceeds* of $2.8 billion (compared with divestment proceeds* of $3.1 billion in 2023) and interest received of $2.4 billion (compared with interest received of $2.1 billion in 2023).

Cash flow from financing activities in 2024 was an outflow of $38.4 billion, compared with outflows of $38.2 billion in 2023, mainly due to lower repurchases of shares of $13.9 billion (2023: $14.6 billion) and unfavourable debt-related derivative financial instrument movements of $0.6 billion (2023: $0.7 billion favourable movement) and lower net repayment of debt of $9.6 billion (2023: $9.8 billion net repayment).

Cash and cash equivalents were $39.1 billion at December 31, 2024 (December 31, 2023: $38.8 billion).

* Non-GAAP measure (see page 445).

Prior year Consolidated Statement of Cash Flows

Our Consolidated Statement of Cash Flows for the financial year ended December 31, 2023, compared with the financial year ended December 31, 2022, can be found in the Annual Report and Accounts (page 35) and Form 20-F (page 33) for the year ended December 31, 2023, as filed with the Registrar of Companies for England and Wales and the US Securities and Exchange Commission, respectively.

See "Consolidated Statement of Cash Flows" on page 244.

Cash flow from operating activities

The most significant factors affecting Shell's cash flow from operating activities are earnings, which are mainly impacted by: realised prices for crude oil, natural gas and LNG; production levels of crude oil, natural gas and LNG; chemicals, refining and marketing margins; and movements in working capital and derivative financial instruments.

The impact on earnings from changes in market prices depends on: the extent to which contractual arrangements are tied to market prices; the dynamics of production-sharing contracts; the existence of agreements with governments or state-owned oil and gas companies that have limited sensitivity to crude oil and natural gas prices; tax impacts; and the extent to which changes in commodity prices flow through into operating expenses. Changes in benchmark prices of crude oil and natural gas in any particular period provide only a broad indicator of changes in our Integrated Gas and Upstream earnings in that period. Changes in any factors, from within the industry or the broader economic environment, can influence refining and marketing margins. The precise impact of any changes depends on how the oil markets respond to them. The market response is affected by factors such as: whether the change affects all crude oil types or only a specific grade; regional and global crude oil and refined products inventories; and the collective speed of response of refiners and product marketers in adjusting their operations. As a result, margins fluctuate from region to region and from period to period.

Divestment and cash capital expenditure

The levels of divestment proceeds and cash capital expenditure in 2024 and 2023 reflect our discipline and focus as we implement our strategy. Proceeds from sale of property, plant and equipment and businesses were $1.6 billion for 2024, compared with $2.6 billion in 2023. Divestment proceeds* for 2024 were $2.8 billion, compared with $3.1 billion in 2023. Cash capital expenditure split by segment is presented in the table below:

Cash capital expenditure* [A]

$ million

	2024	2023	2022
Integrated Gas	4,767	4,196	4,265
Upstream	7,890	8,343	8,143
Marketing [B]	2,445	5,790	4,978
Chemicals and Products	3,290	3,014	3,691
Renewables and Energy Solutions [C]	2,549	2,681	3,469
Corporate	144	368	287
Total cash capital expenditure	21,085	24,392	24,833

[A] See Note 7 to the "Consolidated Financial Statements" which includes an explanation of the reporting segment changes applicable from 2024.
[B] Includes acquisition of Nature Energy in 2023.
[C] Includes acquisition of Sprng in 2022.

Contractual obligations

The table below summarises Shell's principal contractual obligations at December 31, 2024, by expected settlement period. The amounts presented have not been offset by any committed third-party revenue in relation to these obligations.

Contractual obligations

$ billion

	Less than 1 year	Between 1 and 3 years	Between 3 and 5 years	5 years and later	Total
Debt [A]	6.9	6.4	7.9	27.6	48.8
Leases	6.4	9.5	6.3	19.8	42.0
Purchase obligations [B]	28.8	22.1	13.5	55.2	119.6
Other long-term contractual liabilities [C]	0.1	1.0	0.2	0.7	2.1
Total	42.2	39.0	27.9	103.4	212.4

[A] See Note 21 to the "Consolidated Financial Statements". Debt contractual obligations exclude interest, which is estimated to be $1.4 billion payable in less than one year, $2.4 billion between one and three years, $2.2 billion between three and five years, and $12.2 billion in five years and later. For this purpose, we assume that interest rates with respect to variable interest rate debt remain constant at the rates in effect at December 31, 2024, and that there is no change in the aggregate principal amount of debt other than repayment at scheduled maturity as reflected in the table. Lease contractual obligations include interest.

[B] Purchase obligations disclosed in the above table exclude commodity purchase obligations that are not fixed or determinable and are principally intended to be resold in a short period of time through sale agreements with third parties. Examples include long-term non-cancellable LNG and natural gas purchase commitments and commitments to purchase refined products or crude oil at market prices. Inclusion of such commitments would not be meaningful in measuring liquidity and cash flow, as the cash outflows generated by these purchases will generally be offset in the same periods by cash received from the related sales transactions.

[C] Includes obligations included in "Trade and other payables" and provisions related to onerous contracts included in "Decommissioning and other provisions" in "Non-current liabilities" in the "Consolidated Balance Sheet" that are contractually fixed as to timing and amount. In addition to these amounts, Shell has certain obligations that are not contractually fixed as to timing and amount, including contributions to defined benefit pension plans (see Note 24 to the "Consolidated Financial Statements") and obligations associated with decommissioning and restoration (see Note 25 to the "Consolidated Financial Statements").

Shareholder distributions

We returned $8.7 billion to our shareholders through dividends and $13.9 billion through share buybacks in 2024. Total shareholder distributions represented 41% of cash flow from operating activities*.

The fourth quarter 2024 dividend of $0.358 per share was paid on March 24, 2025, to shareholders on the register at February 14, 2025, and represents an increase of 4% compared with the third quarter of 2024.

See Note 30 to the "Consolidated Financial Statements" on page 308.

Purchases of securities

The intent to purchase shares was announced alongside the quarterly results during 2024, and covered the period up until the next quarterly announcement. In 2024, share buybacks of $3.5 billion were announced on February 1, $3.5 billion on May 2, $3.5 billion on August 1 and $3.5 billion on October 31 (finalised in the first quarter of 2025). In addition, on January 30, 2025, a further buyback of $3.5 billion was announced along with the fourth quarter 2024 results; it is intended that this will be completed by the announcement date of the first quarter 2025 results.

During 2024, 409.1 million ordinary shares were purchased and cancelled. Overall, a total nominal share value of €29 million ($34 million), 6.3% of the Company's total issued share capital at December 31, 2023, was purchased and cancelled during 2024 for a total cost of $13.9 billion, including expenses, at an average price of $34.36 per share.

The buybacks completed in the first half of 2024 were in accordance with the authorities granted by shareholders at the 2023 Annual General Meeting (AGM). The buybacks completed in the second half of 2024 were in accordance with the authorities granted by shareholders at the 2024 AGM. At the 2024 AGM, authority was granted for the Company to repurchase up to a maximum of 10% of its issued ordinary shares, excluding treasury shares, (644.2 million ordinary shares), both on and off market, allowing purchases on the Amsterdam as well as London exchanges. As at December 31, 2024, 468 million ordinary shares could still be repurchased under the current AGM authorities. The purpose of the share repurchases in 2024 was to reduce the issued share capital of the Company.

New resolutions will be proposed at the 2025 AGM to renew the authority for the Company to purchase its own share capital, up to specified limits, for a further year. These proposals will be described in more detail in the 2025 Notice of Annual General Meeting.

Shares are also purchased by the employee share ownership trusts and trust-like entities (see Note 28 to the "Consolidated Financial Statements" on page 305) to meet delivery commitments under employee share plans. All share purchases are made in open market transactions.

The table on the next page provides information on purchases of shares in 2024 and January 2025 by the Company and affiliated purchasers. Purchases in euros and sterling are converted into dollars using the exchange rate on each transaction date.

* Non-GAAP measure (see page 445).

Purchases of equity securities by issuer and affiliated purchasers in 2024 [A]

	Euro Shares			GBP Shares			ADSs [B]	
Purchase period	Number purchased for employee share plans	Number purchased for cancellation [C]	Weighted average price ($)[D]	Number purchased for employee share plans	Number purchased for cancellation [C]	Weighted average price ($)[D]	Number purchased for employee share plans	Weighted average price ($)[D]
January	3,187,890	2,992,417	32.32	1,189,886	20,282,994	31.54	650,966	66.03
February	–	20,209,031	31.72	–	20,594,628	31.35	–	–
March	–	11,550,631	32.41	–	11,495,330	32.05	67,764	67.37
April	–	13,500,349	35.93	–	27,822,393	35.43	–	–
May	–	18,389,736	36.02	–	17,661,025	35.86	–	–
June	–	14,235,749	35.05	–	16,234,749	34.93	34,819	71.43
July	–	9,320,167	36.30	–	22,056,649	36.27	–	–
August	–	17,386,007	35.89	–	16,989,085	35.59	–	–
September	–	18,341,974	33.96	–	19,439,076	25.70	36,136	69.48
October	–	15,538,143	33.74	–	15,598,083	33.40	–	–
November	3,161,027	15,370,794	33.00	773,600	23,427,791	32.71	–	–
December	5,290,944	15,272,833	31.53	1,261,616	23,175,726	31.28	514,913	61.24
Total 2024	11,639,861	172,107,831	33.91	3,225,102	234,777,529	33.66	1,304,597	64.45
January	5,446,429	13,269,767	32.91	1,271,425	19,923,745	32.68	2,047,363	64.83
Total 2025	5,446,429	13,269,767	32.91	1,271,425	19,923,745	32.68	2,047,363	64.83

[A] Reported as at transaction date.
[B] American Depositary Shares.
[C] Under the share buyback programme.
[D] Includes stamp duty and brokers' commission.

Financial information relating to the Royal Dutch Shell Dividend Access Trust

The results of the Royal Dutch Shell Dividend Access Trust (the Trust) are included in the consolidated results of operations and financial position of Shell. Certain condensed financial information in respect of the Trust is given below.

The Shell Transport and Trading Company Limited and BG Group Limited have each issued a dividend access share to Computershare Trustees (Jersey) Limited (the Trustee). For the years 2024, 2023 and 2022, the Trust recorded income before tax of £nil, £nil and £nil respectively. In each period, this reflected the amount of dividends payable on the dividend access shares. Dividends are also classified as unclaimed where amounts have not cleared recipient bank accounts.

At December 31, 2024, the Trust had total equity of £nil (December 31, 2023: £nil; December 31, 2022: £nil), reflecting assets of £3 million (December 31, 2023: £4 million; December 31, 2022: £6 million) and unclaimed dividends of £3 million (December 31, 2023: £4 million; December 31, 2022: £6 million). The Trust only records a liability for an unclaimed dividend to the extent that dividend cheque payments have not been presented within 12 months, have expired or have been returned unpresented. As these unclaimed dividends relate to dividends that were announced by the Company during the period the Company was still named Royal Dutch Shell plc, and it is expected that the Company will not announce any further dividends on the dividend access shares, the Trust continues to be named the Royal Dutch Shell Dividend Access Trust.

On January 29, 2022, one line of shares was established through assimilation of each A share and each B share into one ordinary share of the Company. This assimilation had no impact on voting rights or dividend entitlements. Dutch withholding tax, applied previously on dividends on A shares, no longer applies on dividends paid on the ordinary shares following the assimilation.

In relation to the assimilation of the Company's A and B shares, the Trust will continue in existence for the foreseeable future to facilitate the payment of unclaimed dividend liabilities for shareholders of the former B shares until these are either claimed or forfeited in line with the terms outlined. Dividends which are unclaimed after six years are forfeited and unconditionally revert to The Shell Transport and Trading Company Limited and BG Group Limited, as appropriate.

Market overview

Shell maintains a large and diversified business portfolio across an integrated value chain. We are exposed to fluctuating prices of crude oil, natural gas, oil products, chemicals and power. However, our diversified portfolio provides resilience when prices are volatile. Our annual planning cycle and periodic portfolio reviews aim to ensure that our levels of capital investment and operating expenses are appropriate in the context of a volatile price environment.

See "Risk factors" on page 135.

We prepare an annual financial plan that tests different scenarios, and their impact on prices, on our businesses and organisation as a whole. These scenarios help us determine which issues could affect our operating environment and have implications for our strategy. They also help us to identify potential interventions to preserve our cash levels.

We continually assess the external environment – the markets and the underlying economic, political, social and environmental drivers that shape them – to evaluate changes in competitive forces. We define multiple potential future scenarios and business environments by identifying drivers, uncertainties, enablers and constraints to our competitiveness.

We also continually screen for new opportunities globally through our opportunity identification process. We test the resilience of our opportunities against a range of prices and costs for crude oil, natural gas, oil products and chemicals. These tests are based on short-, medium- and long-term market drivers, such as the extent and pace of the energy transition. Our opportunities are then ranked, prioritised and tested for strategic fit and value return expectations before being included in our growth funnel.

Global economic growth

In 2024, the global economy has demonstrated resilience at a time of geopolitical tensions, inflation and rising interest rates. The World Economic Outlook, published by the International Monetary Fund in January 2025, estimated global economic growth in 2024 to be 3.2% compared with 3.3% in 2023.

Macroeconomic performance was unevenly distributed. For example, growth in China disappointed, as stronger exports only partly offset a slowdown in consumption amid delayed stabilisation in the property market. India and Indonesia saw relatively brisk growth, while growth in Europe was strained, largely reflecting weakness in manufacturing and goods exports. By contrast, momentum in the USA remained robust with the economy powered by strong consumption.

Inflation receded further toward target levels in most countries, bolstering real incomes. From June 2024, many major central banks began cutting interest rates. This has supported deal-making and economic activity. However, growth is likely to be limited because of protectionist trade policies and economic challenges, such as high energy prices in Europe and the property market slowdown in China.

Global prices, demand and supply

The following table provides an overview of the main crude oil and natural gas price markers to which Shell is exposed:

Oil and gas average industry prices [A]

	2024	2023	2022
Brent ($/b)	81	83	101
West Texas Intermediate ($/b)	76	78	95
Henry Hub ($/MMBtu)	2.2	2.5	6.4
EU TTF ($/MMBtu)	11	13	40
Japan Customs-cleared Crude ($/b) - 3 months	88	89	98

[A] The 2024 average price for Japan Customs-cleared Crude is based on available market information up to the end of the period. Brent, West Texas Intermediate and EU TTF yearly average prices are based on daily spot prices. Henry Hub and Japan Customs-cleared Crude yearly average prices are based on monthly average prices.

Crude oil and oil products

The global benchmark oil price Brent averaged $81 per barrel (bbl) in 2024, slightly lower than the average of $83/bbl in 2023. Prices continued to be volatile, with Brent daily spot ranging between $70/bbl and $93/bbl. This reflected a well-supplied market due to slower economic growth and fuel substitution, as well as continued conflict in the Middle East and Europe.

Global liquids demand growth was weaker in 2024, mainly due to significantly less demand growth from China. In 2023, demand from China increased by around 1.3 million barrels per day (mb/d) year-on-year because of growth after COVID-19 but in 2024 this slowed to around 0.2 mb/d, mainly due to the country's economic slowdown and partly due to the rapid uptake of electric vehicles. This has driven the slowdown of overall global demand growth, from more than 2 mb/d in 2023 to just 0.9 mb/d in 2024.

Global liquids supply growth came in slightly lower than demand growth at around 0.6 mb/d, which includes 0.2 mb/d of growth from global biofuel supplies and the rest from non-OPEC crude supplies. OPEC supply declined further, by around 0.2 mb/d year-on-year, as OPEC maintained a production cut to keep the market balanced. The timing for the unwinding of curtailed production of OPEC and its alliances has been a key factor for supply. The return of the voluntary cut, put in place in 2023, has been repeatedly delayed due to weak market conditions, and is now expected to happen in the second quarter of 2025 at the earliest.

Conflicts in the Middle East and Europe caused some spikes in oil prices throughout the year as the market perceived increased risks to oil infrastructure and key shipping routes, such as the Red Sea. But the spikes were short-lived as the market continued to focus on demand and supply fundamentals.

In 2025, the slowdown in China is expected to continue to influence demand. The International Energy Agency (IEA) expects continued below-trend growth from China and this could result in a similar rate of growth for global oil demand as in 2024. On the supply side, non-OPEC supply – excluding US Light Tight Oil – is expected to rise, strongly bolstered by conventional offshore projects. Meanwhile, the market will continue to watch the pace at which OPEC unwinds its curtailed production.

Natural gas

Gas market

Global gas prices weakened in 2024, leading to higher demand and hence a modest return to growth in global gas markets in 2024. But prices remained higher than the historical levels seen prior to the Russian invasion of Ukraine. The market remained volatile because of concerns about security of supply in Europe and limited new LNG supply. LNG supply increased by less than 3% in 2024, supporting relatively elevated pricing levels. The early part of 2024 saw spot LNG prices fall to their lowest level since early 2022, but prices recovered by mid-year due to delays in the development of new supply capacity.

Title Transfer Facility (TTF): In Europe, TTF spot prices averaged $10.95/MMBtu (17% lower year-on-year). Demand remained weak due to warmer than normal winter weather early in the year, continued lower demand from the industrial sector, and high levels of renewable power generation. As a result, European storage levels reached maximum fill levels by the end of October 2024 and entered the winter in a strong position. However, continued concerns over gas supply security because of geopolitical tensions resulted in a more volatile price environment in the fourth quarter of the year. Europe is expected to increase imports of LNG in 2025 to refill its gas storage.

Japan Korea Marker (JKM): Spot LNG prices in Asia closely tracked the market dynamics impacting the European market. JKM prices averaged $11.89 (14% lower year-on-year). Through the first three quarters of 2024, JKM prices traded at a premium to TTF as modest growth in Chinese and Indian demand drew cargoes east because of constrained LNG supply. With storage levels high in the fourth quarter, JKM prices fell below TTF as cargoes were pulled to Europe.

Henry Hub: The North American gas market was well supplied in 2024. Higher-than-expected power generation from wind and solar reduced the need for gas-fired power. Lower gas demand put downward pressure on Henry Hub spot prices to the extent that natural gas producers responded by curtailing production. Henry Hub spot hit a new all-time low of $1.24/MMBtu in March 2024 and then again in November at $1.22/MMBtu. Henry Hub spot averaged $2.2/MMBtu over 2024, with a wide range of $1.22/MMBtu to $13.20/MMBtu, with the high mark due to a short-lived January winter storm. In the summer, temperatures averaged 1.4 °C higher than the 10-year norm. While this was bullish for gas power generation, it was offset by the impact of strong renewable generation. As such, natural gas storage ended the summer at a five-year high. For 2025, continued growth in renewable capacity coupled with higher dry gas production is expected to put downward pressure on natural gas prices.

Global gas prices are expected to remain volatile in 2025. Project delays and legacy production declines are likely to constrain supply growth. However, demand has also been bolstered by economic growth in Asia, the end of Russian gas flowing to Europe via Ukraine, and Europe's need to replenish inventories. Increased government intervention as well as geopolitical unrest continue to affect global LNG trade flows and price variance.

Power

USA: In 2024, US power prices remained stable across most eastern markets compared with 2023. Henry Hub gas benchmark prices in North America were largely steady, staying below $3/MMBtu after a short-lived spike in January 2024. In the western USA, a cold start to the year drove Mid-Columbia prices to reach the $1,000/MWh soft cap multiple times in January, although the California Independent System Operator (CAISO) market was largely insulated from these fluctuations. The ERCOT (Texas) market set a new peak of 85.5 GW on August 20, 2024, but ERCOT successfully managed the high load with much lower prices compared with 2023. In the eastern USA, including PJM, MISO (Midcontinent), ISO-NE (New England) and NYISO, power prices remained stable relative to 2023. Solar and wind generation continued to grow and, depending on their market penetration levels, impacted the hourly price profiles. Continued growth in renewable energy demand is expected in 2025, driven by the expansion of data centres.

Europe: Across Europe, power prices continued to fall for the second year in a row from the height of the energy crisis in 2022. Germany, France, the United Kingdom and Spain saw a reduction of between EUR 20/MWh and 30/MWh in their annual average wholesale power prices in 2024, compared with 2023. This was partly due to depressed demand, more output from wind power generation in the winter months and record-setting solar power output in the summer. German power prices are still among the highest on the continent with an annual average of EUR 79/MWh. Germany is testing a new auction mechanism for excess power to be used by flexible loads as a means of managing the increasing number of negative price hours. More than 32 GW of wind capacity was awarded by European governments in auctions this year. Nearly 10 GW of Europe's oldest remaining coal-fired power stations were retired this year; the majority were retired in Germany, while the UK and Denmark closed their last coal plants. Power prices show an increasing dependence on solar and wind generation, reaching more than EUR 800/MWh during a period of very low solar and wind power generation in Germany in early November. In 2025, a policy shift towards economic competitiveness is likely, potentially paired with protectionist interventions in Europe. Issues such as operational flexibility and grid infrastructure are being addressed by, for example, increased battery investments and market changes, such as the transition to 15-minute trading intervals in all bidding zones of the European Single Day-Ahead Coupling market.

Australia: The volume-weighted average prices (VWAP) in the east coast National Electricity Market (NEM) averaged about A$130/MWh in 2024, increasing from around A$90/MWh in 2023. The west coast Wholesale Electricity Market (WEM) saw a more modest year-on-year VWAP increase from roughly A$90/MWh to around A$95/MWh. The VWAP of the east coast domestic gas markets (Brisbane, Sydney, Adelaide and the Declared Wholesale Gas Market (DWGM)) rose to around A$12.75/GJ in 2024 from around A$11.70/GJ in 2023. Meanwhile, in Western Australia the average gas price rose to around A$7.10/GJ in 2024 from about A$6.15/GJ in 2023. In addition to higher power prices, price volatility also increased compared with the previous year in both the NEM and WEM, largely due to increasing levels of rooftop solar generation which pushed network demand to record lows and led to prolonged periods of negative prices. In the NEM, cold weather, low wind and low hydroelectric generation in the second quarter and early third quarter put upward pressure on prices and led to greater reliance on gas-powered generation, increasing domestic gas demand. A key development to watch in 2025 is the outcome of the federal election, given the differing policies of the incumbent and opposition parties on the role of gas and power generation technologies.

Crude oil and natural gas price assumptions

Our ability to deliver competitive returns and pursue commercial opportunities depends on the accuracy of our price assumptions. We use a rigorous assessment of short-, medium- and long-term market uncertainties to determine which ranges of future crude oil and natural gas prices to use in project and portfolio evaluations. Market uncertainties include, for example, future economic conditions, geopolitics, actions by major resource holders, production costs, technological progress and the balance of supply and demand.

See "Risk factors" on page 135 and Note 12 to the "Consolidated Financial Statements" on pages 275-276.

Refining and chemical margins

Refining margins declined in 2024 from the high levels seen in 2022 and 2023. Despite conflicts in the Middle East and a continuing war in Ukraine, supply chains have adjusted to keep the Atlantic Basin well supplied, particularly with middle distillate to Europe. There were some shipping disruptions in the Red Sea at the start of 2024 which reduced the amount of oil products coming into Europe from East of Suez. This led to a spike in margins when combined with a heavy first-quarter refinery maintenance season in the Atlantic Basin. However, once the refineries came back online and supplies to Europe came in via the Cape of Good Hope, margins dropped to more normal levels. Moreover, demand growth has been limited with the Eurozone economy struggling, China's lower economic growth and muted growth in US gasoline demand.

The margin for 2025 is expected to be in line with 2024 levels. Oil product demand growth is likely to be weak and concentrated in Latin America, South-east Asia and India as economic growth is likely to remain sluggish in China and weak in Europe, and as electric vehicle penetration ramps up. New refinery capacity in India and China is still coming online and the major Atlantic Basin projects, Olemca (Mexico) and Dangote (Nigeria), will ramp up production in 2025 although neither site is expected to reach full capacity in 2025. Some support for refining margins will come from announced site closures in California, the US Gulf Coast and Europe. In addition, US gasoline stocks remain low and this could lead to a spike in margins if there is a supply disruption. Lower crude oil prices could also support more demand growth.

Chemical cracker margins remained pressured in 2024 because of global oversupply and weak demand. Asia and Europe saw slight relief with lower crude prices, but both regions remained under significant pressure. Cracker utilisation continued to drift lower with the start-up of new Asian capacity. Europe remained under strain with high energy costs as various producers, including LyondellBasell Industries (LB)I and Dow Inc., announced closures and portfolio reviews.

The outlook for petrochemical margins in 2025 and beyond depends on feedstock costs and the balance of supply and demand. Global oversupply is expected to persist through the year with a slow demand recovery. A recovery in demand is needed to absorb excess capacity. The supply of petrochemicals will depend on how new facilities come online and how plant closures will impact net capacity, with utilisation balancing the system. Product prices will reflect the cost of raw materials, which is closely linked to crude oil and natural gas prices. Increasing volatility driven by political and upstream price uncertainty will present short-term localised opportunities to bolster returns.

Refining margins

Global indicative refining margin [A]

$/bbl

	2024	2023	2022
Indicative refining margin	7.74	12.45	18.03

[A] The indicative refining margin (IRM) is an approximation of Shell's global gross refining unit margin, calculated using price markers from third-party databases. It is based on a simplified crude and product yield profile at a nominal level of refining performance. The actual margins realised by Shell may vary due to factors including specific local market effects, refinery maintenance, crude diet optimisation as the crudes in the IRM are indicative benchmark crudes, operating decisions and product demand. Gross refining unit margin is defined as the hydrocarbon margin net of purchased/sold utilities, additives and relevant freight costs, divided by crude and feedstock intake in barrels. It is only applicable to the impact of market pricing on refining business performance, excluding trading margin.

Petrochemical margins

Global indicative chemical margin [A]

$/tonne

	2024	2023	2022
Indicative chemical margin	151.72	132.63	48.04

[A] The indicative chemical margin (ICM) is an approximation of Shell's global chemical margin performance trend (including equity-accounted associates), calculated using price markers from third-party databases. It is based on a simplified feedstock and product yield profile at a nominal level of plant performance. The actual margins realised by Shell may vary due to factors including specific local market effects, chemical plants maintenance, optimisation, operating decisions and product demand. Chemical unit margin is defined as the hydrocarbon margin net of purchased/sold utilities, additives and relevant freight costs, divided by a nominal denominator expressed in metric tonnes. It is only applicable to the impact of market pricing on Chemicals business performance.

The statements in this "Market overview" section are forward-looking statements based on management's current expectations and certain material assumptions and, accordingly, involve risks and uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied herein.

See "About this Report" on pages v-vi and "Risk factors" on page 135.

Integrated Gas

Integrated Gas includes liquefied natural gas (LNG) and the conversion of natural gas into gas-to-liquids (GTL) fuels and other products. It includes natural gas and liquids exploration and extraction, and the operation of the upstream and midstream infrastructure necessary to deliver these to market. Integrated Gas also includes the marketing, trading and optimisation of LNG.

9.6
Segment earnings ($ billion)
(2023: 7.1)

11.4
Adjusted Earnings ($ billion)
(2023: 13.9)

16.9
Cash flow from operating activities ($ billion)
(2023: 17.5)

954
Production (thousand boe/d)
(2023: 939)

29
LNG liquefaction volumes (million tonnes)
(2023: 28)

66
LNG sales volumes (million tonnes)
(2023: 67)

Integrated Gas performed well as we increased LNG liquefaction volumes and our access to third-party volumes. We boosted our operational performance. In Australia, Prelude and QGC achieved record availability, resulting in their highest ever production. During the year, we extended partnerships in Oman and decided to invest in the ADNOC Ruwais LNG project in Abu Dhabi [A]. We also took final investment decisions on a number of key projects, including Manatee in Trinidad and Tobago, and agreed to acquire Pavilion Energy in Singapore [A]. See "Outlook" on pages 16-17 for our Capital Markets 2025 investor update.

Business conditions

For the business conditions relevant to Integrated Gas, see "Market overview" on pages 28-30.

Financial delivery

Earnings 2024-2023

Segment earnings increased by $2,533 million compared with 2023. This was a result of higher volumes (increase of $514 million), lower operating expenses (decrease of $478 million), and favourable deferred tax movements ($399 million) compared with 2023. Furthermore, this included the combined effect of lower contributions from trading and optimisation and lower realised prices (decrease of $3,819 million compared with 2023), partly offset by a comparative help relating to fair value accounting of commodity derivatives (unfavourable movement of $1,088 million in 2024 compared with an unfavourable movement of $4,407 million in 2023 which are part of identified items). Segment earnings in 2024 also included net impairment charges and reversals of $363 million (2023: $2,247 million), which are part of identified items.

As part of Shell's normal business, commodity derivative hedge contracts are entered into for mitigation of economic exposures on future purchases, sales and inventory.

Adjusted Earnings and Adjusted EBITDA were driven by the same factors as the segment earnings, and adjusted for identified items.

Prior year earnings summary

Segment earnings in 2023 were lower in comparison to 2022 and reflected the net effect of lower realised prices and higher contributions from trading and optimisation (a decrease of $1,143 million), lower volumes (a decrease of $466 million), and unfavourable deferred tax movements (a decrease of $728 million).

Segment earnings included identified items: mainly unfavourable movements of $4,407 million due to the fair value accounting of commodity derivatives and net impairment charges and reversals of $2,247 million. In 2022, identified items included favourable movements of $6,273 million due to the fair value accounting of commodity derivatives and net impairment reversals of $779 million. In 2022, these were partly offset by other impacts of $608 million, mainly loan write-downs, as well as charges of $387 million as provisions for onerous contracts.

Adjusted Earnings and Adjusted EBITDA were driven by the same factors as the segment earnings, and adjusted for identified items.

[A] Transaction subject to completion.
* Non-GAAP measure (see page 445).

Key metrics [B]

	$ million, except where indicated		
	2024	2023	2022
Segment earnings*[C]	9,590	7,057	22,221
Identified items	(1,800)	(6,861)	6,075
Adjusted Earnings* [C]	11,390	13,919	16,146
Adjusted EBITDA* [C]	20,978	23,773	26,581
Cash flow from operating activities	16,909	17,520	27,692
Cash capital expenditure*	4,767	4,196	4,265
Liquids production available for sale (thousand b/d)	132	128	128
Natural gas production available for sale (million scf/d)	4,769	4,700	4,600
Total production available for sale (thousand boe/d)	954	939	921
LNG liquefaction volumes (million tonnes)	29.1	28.3	29.7
LNG sales volumes (million tonnes)	65.8	67.1	66.0

[B] See Note 7 to the "Consolidated Financial Statements" which includes an explanation of the reporting segment changes applicable from 2024.
[C] Segment earnings, Adjusted Earnings, and Adjusted EBITDA are presented on a current cost of supplies basis.

Cash flow from operating activities

Cash flow from operating activities for 2024 was primarily driven by Adjusted EBITDA and working capital inflows of $467 million, partly offset by tax payments of $2,955 million and net cash outflows related to derivatives of $1,466 million.

Shell's policy is to settle the inter-segment use of tax attributes between business segments. This settlement is usually made in cash but in certain instances there is no cash settlement. In 2024, the Integrated Gas segment's deferred tax assets ($974 million) were mainly used by the Upstream ($759 million) and Chemicals and Products ($183 million) segments, for which no cash settlement was made.

Cash capital expenditure

Our cash capital expenditure in 2024 was higher than in 2023. The increase was mainly a result of maturation of projects in Trinidad and Tobago and Australia, as well as higher maintenance in Pearl GTL. Our cash capital expenditure* is expected to be around $6 billion in 2025 in Integrated Gas.

Operational performance

Production available for sale

Our natural gas production increased by 2% in 2024 compared with 2023, mainly due to the ramp-up of fields in Oman and Australia. In this period, natural gas and liquids made up 86% and 14% of total production, respectively.

LNG liquefaction and sales volumes

Our LNG liquefaction volumes increased by 3% compared with the previous year, mainly due to lower maintenance in Australia.

LNG sales volumes decreased primarily because of lower purchases from third parties, coupled with higher inventory at the end of the year.

Integrated Gas data table

LNG liquefaction volumes

Million tonnes

	2024	2023	2022
Australia	14.4	13.3	13.2
Brunei	1.2	1.1	1.2
Egypt	–	0.3	0.5
Nigeria	3.5	3.3	3.6
Oman	2.8	2.7	2.8
Peru	0.9	0.8	0.8
Qatar	2.3	2.4	2.4
Russia	–	–	0.9
Trinidad and Tobago	4.0	4.3	4.3
Total	29.1	28.3	29.7

Strategic progress

Portfolio and business developments

Significant portfolio and business developments:

- In June 2024, we agreed to acquire 100% of the shares in Singapore-based Pavilion Energy Pte. Ltd. from Carne Investments Pte. Ltd., a wholly owned subsidiary of Temasek. Pavilion Energy includes a global LNG trading business with about 6.5 mtpa of contracted supply volume [A].
- In July 2024, we took the final investment decision (FID) on the Manatee project, a gas field in the East Coast Marine Area (ECMA) in Trinidad and Tobago.
- In July 2024, we signed an agreement to invest in the Abu Dhabi National Oil Company's (ADNOC) Ruwais LNG project through a 10% participating interest [A]. The project will consist of two 4.8 mtpa LNG liquefaction trains with a total capacity of 9.6 mtpa. LNG deliveries are expected to start in 2028.
- In August 2024, Arrow Energy, an incorporated joint venture between Shell (50%) and PetroChina (50%), announced the sanction of Phase 2 of Arrow Energy's Surat Gas Project in Queensland, Australia.

During 2024, we continued to grow our world-leading LNG business. We invested in our existing assets, for example taking a final investment decision on the Manatee gas project in Trinidad and Tobago and by going ahead with projects to supply gas at our LNG facilities in Australia, such as Surat Gas Project North.

Manatee is expected to start production in 2027 and, once online, is expected to reach peak production of about 104,000 barrels of oil equivalent per day (boe/d) (604 MMscf/d). It will provide backfill for the country's Atlantic LNG facility and to the petrochemical sector. Increasing utilisation at existing LNG plants is an important lever to maximise potential from Shell's existing assets. We also undertook the Phase 1 of the commercial restructuring of Atlantic LNG in Trinidad and Tobago in 2024 in an effort to simplify the structure of the project. The remaining phases are expected to be completed by 2027.

[A] Transaction subject to completion.

Shell completes its largest ever turnaround at Pearl GTL

In 2024, more than 16,000 workers converged on the Pearl GTL gas-to-liquids facility in Qatar to carry out maintenance and repair work over 56 days on Pearl GTL's Train 2 production line. The turnaround was completed on schedule and at a competitive cost – a clear example of how Shell, the operator, is focusing on performance and discipline as we implement our strategy.

Turnaround events, like this one, are planned, periodic shutdowns of a manufacturing facility for maintenance and repair work that cannot be conducted while the facility is fully operational. These events are crucial for maintaining the integrity and reliability of the facility. Throughout the turnaround, Pearl GTL's Train 1 remained operational, ensuring continuous supply of GTL products used by global customers in sectors from industry to transport.

Planning for the event started more than three years prior, and during the execution phase teams worked around the clock, making it a 24/7 event. The effective execution included nearly 10,000 heavy lifts, more than 14,000 flanges opened, and 2,700 field welds completed, resulting in over 9 million exposure hours with no significant incidents.

In recent years, Pearl GTL has been operating with high safety, reliability and availability performance. In 2024, Pearl achieved its second-best year for reliability with unplanned downtime at 1.4%. In the same year, Pearl also achieved its lowest greenhouse gas (GHG) intensity since start-up and was the largest GHG abatement contributor to the Shell scorecard.

Learning from the previous turnaround in 2022, Pearl GTL reduced flaring by approximately 19% during this event. Overall, Pearl GTL has reduced total flaring by 75% since 2016.

Despite the challenge of a turnaround this size, we continued to place a strong emphasis on worker welfare. This was a critical success factor in ensuring we had a healthy and focused team when it mattered most – on the job, at the point of risk.

This turnaround was conducted in close partnership with Qatar's state energy company – QatarEnergy. Collaborating and consulting during every phase of the project ensured successful completion, supporting reliable and safe future operations.

Photo: Pearl GTL Plant, Qatar.

The Surat Gas Project Phase 2 is expected to contribute around 22,400 barrels of oil equivalent per day (or 130 million standard cubic feet per day) at peak production and first gas is expected in 2026. The gas from the project will flow to the Shell-operated Queensland Curtis LNG (QCLNG) facility on Curtis Island, near Gladstone, to meet long-term contracts and supply domestic customers.

We announced the investment in new projects such as Pavilion Energy in Singapore, which will add to our current sales and bring flexibility to our portfolio, as well as additional access to strategic gas markets in Asia and Europe. The 10-year LNG supply agreement that we signed with Boru Hatları ile Petrol Taşıma AŞ (BOTAS) of Turkey in 2024, will also increase the diversity and flexibility of our portfolio.

We also continued growing our portfolio through the construction of new lower-carbon intensity LNG plants, for example with the agreement to invest in the Ruwais LNG project that will use an electric-powered liquefaction system and has access to nuclear and solar power. The transaction is still subject to completion.

Finally, in 2024, we made good progress at LNG Canada, the single largest private-sector energy investment in Canada's history. The facility is expected to initially export up to 14 million tonnes of LNG per annum, contributing up to 5.6 mtpa to Shell's global LNG supply portfolio. The project is on track to ship its first cargoes to global markets by the middle of 2025. LNG Canada has also been designed with energy-efficient natural gas turbines and is expected to use renewable power from an electric utility in the province of British Columbia.

Business and property

Integrated Gas

A complete list of LNG and GTL plants in operation and under construction in which we have an interest is provided below.

LNG liquefaction plants in operation at December 31, 2024 [A]

	Asset	Location	Shell interest (%)	100% capacity (mtpa) [B]	Shell-operated
Asia					
Brunei	Brunei LNG	Lumut	25	7.6	No
Oman	Oman LNG	Sur	30	7.1	No
	Qalhat LNG [C]	Sur	11	3.7	No
Qatar	QatarEnergy LNG N(4) [D]	Ras Laffan	30	7.8	No
Oceania					
Australia	Australia North West Shelf [D]	Karratha	16.7	16.9	No
	Gorgon LNG [D]	Barrow Island	25	15.6	No
	Prelude [D]	Browse Basin	67.5	3.6	Yes
	Queensland Curtis LNG T1 [D]	Curtis Island	50	4.3	Yes
	Queensland Curtis LNG T2 [D]	Curtis Island	97.5	4.3	Yes
Africa					
Egypt	Egyptian LNG T1	Idku	35.5	3.6	No
	Egyptian LNG T2	Idku	38	3.6	No
Nigeria	Nigeria LNG T1-T6	Bonny	25.6	24.1	No
South America					
Peru	Peru LNG	Pampa Melchorita	20	4.5	No
Trinidad and Tobago	Atlantic LNG T1/T2/T3 [E]	Point Fortin	47.15	9.3	No
	Atlantic LNG T4	Point Fortin	51.1	5.2	No

[A] We have offtake rights via a lease to 100% of the capacity (2.5 mtpa) of the Kinder Morgan-operated Elba Island liquefaction plant in Georgia, USA.
[B] 100% capacity represents the total capacity that all trains can process as reported by the operator.
[C] The interest is held via an indirect shareholding through Oman LNG.
[D] These assets are clustered as integrated assets and have onshore or offshore upstream production.
[E] Shell % applies from October 1, 2024, as result of the agreement between Shell, the government of Trinidad and Tobago, and Atlantic LNG and its shareholders to restructure the Atlantic LNG facility. Prior to the restructuring, Shell's equity was 46% in T1 and 57.5% in T2/T3.

LNG liquefaction plants under construction at December 31, 2024 [A]

	Asset	Location	Shell interest (%)	100% capacity (mtpa) [B]	Shell-operated
Africa					
Nigeria	Train 7 [C]	Bonny	25.6	7.6	No
North America					
Canada	LNG Canada T1-2 [D]	Kitimat	40.0	14.0	No
Asia					
Qatar	QatarEnergy LNG NFE(2) [E]	Ras Laffan	25.0	8.0	No
	QatarEnergy LNG NFS(2) [F]	Ras Laffan	25.0	6.0	No

[A] In July 2024, we agreed to invest in the Ruwais LNG project in Abu Dhabi through a 10% participating interest. The Ruwais LNG project, which is already under construction, will consist of two 4.8 mtpa LNG liquefaction trains with a total capacity of 9.6 mtpa. LNG deliveries are expected to start in 2028. The deal is subject to completion.
[B] 100% capacity represents the total capacity that all trains are expected to process as reported by the operator.
[C] First LNG is expected in the second half of the 2020s.
[D] Construction started in October 2018 and first LNG is expected by mid-2025.
[E] Shell holds 25% in the joint venture, which owns 25% of the North Field East expansion project, which has a nameplate capacity of 32 mtpa. First LNG is expected in the second half of the 2020s.
[F] Shell holds 25% in the joint venture, which owns 37.5% of the North Field South expansion project, which has a nameplate capacity of 16 mtpa. First LNG is expected in the second half of the 2020s.

GTL plants in operation at December 31, 2024

	Asset	Location	Shell interest (%)	100% capacity (b/d) [A]	Shell-operated
Asia					
Malaysia	Shell MDS	Bintulu	72.0	14,700	Yes
Qatar	Pearl	Ras Laffan	100.0	140,000	Yes

[A] 100% capacity represents the total capacity of the plant.

LNG regasification terminals

In 2024, we held interests in regasification terminals: Dragon LNG in the UK (Shell interest 50%), Shell Energy India Pvt Ltd (Shell interest 100%) and Shell LNG Gibraltar (Shell interest 51%). We had rights in other regasification terminals in Mexico (Shell capacity rights 2.7 mtpa), the Netherlands (Shell capacity rights 4.6 mtpa), Singapore (mainly licences to import LNG and sell regasified LNG in Singapore with no volume cap) and the USA (total Shell capacity rights 24.7 mtpa). Total Shell regasification capacity rights were 7.7 mtpa in Europe, 27.4 mtpa in North America and 6 mtpa in Asia.

Oil and natural gas production, exploration and development

Australia

We operate the Queensland Curtis LNG (QCLNG) venture's natural gas operations in the onshore Surat Basin. Our interests range from 44% to 74% in 25 field compression stations and six central processing plants. Gas from the Surat Basin is supplied to the QCLNG liquefaction plant and the domestic gas market. Also in Queensland, we have a 50% interest in the Arrow joint venture with China National Petroleum Corporation (CNPC). Arrow owns coalbed methane assets and a domestic power business. In August 2024, we announced plans to develop Phase 2 of Arrow Energy's Surat Gas Project.

Shell has interests in offshore production, LNG liquefaction and exploration licences in the Browse Basin, and in the North West Shelf (NWS) and Greater Gorgon areas of the Carnarvon Basin. Woodside operates the NWS joint venture (Shell interest 16.7%). We have a 25% interest in the Chevron-operated Gorgon LNG joint venture that includes offshore production. In the Browse Basin, Shell operates the Prelude field (Shell interest 67.5%), the Crux gas and condensate development field (Shell interest 84.5%) and other backfill projects for the Prelude FLNG.

Bolivia

We have a 37.5% interest in the Repsol-operated Caipipendi block where natural gas is produced and delivered to domestic and export markets. We also have a 25% interest in the Tarija XX West block which produces from the Itaú field.

Canada

We produce and market natural gas, natural gas liquids and condensate. We hold mineral acres, primarily in the Montney play in British Columbia and Alberta. We operate four natural gas processing facilities at our Groundbirch asset in British Columbia with another natural gas processing facility that will be commissioned and operational in early 2025. Shell's working interest across the Groundbirch acreage ranges from 88% to 92%.

Photo: Shell Canada Integrated Gas employees at work on a pipeline project, Fort St. John, British Columbia.

China
We develop and produce from the onshore Changbei tight-gas field under a PSC with China National Petroleum Corporation.

Egypt
We have a range of venture and concession interests. The Burullus Gas Company joint venture (Shell interest 25%) operates the West Delta Deep Marine concession (Shell interest 50%) and supplies gas to the domestic market and an Egyptian LNG plant. The Rashid Petroleum Company (Rashpetco) joint venture (Shell interest 50%) operates the Rosetta concession (Shell interest 100%). The El Burg Offshore Company (EBOC) joint venture (Shell interest 30%) operates the El Burg offshore concession (Shell interest 60%).

We also have interests in several exploration concessions in the Nile Delta and the wider East Mediterranean.

Oman
We have a concession agreement for the development and production of natural gas and condensate in the Shell-operated Block 10 (Shell interest 53.45%). We have a separate gas sales agreement and oil supply agreement for production from the block. We also have an exploration and production-sharing agreement for the exploration and appraisal of natural gas and condensate in the Shell-operated Block 11 (Shell interest 67.5%).

Qatar
Under a development and production-sharing contract with the government, we operate the fully integrated Pearl GTL plant (Shell interest 100%). Pearl GTL has the capacity to produce, process and transport 1.6 billion standard cubic feet per day (scf/d) of gas from Qatar's North Field.

We have a 30% interest in QatarEnergy LNG N(4), an integrated onshore gas-processing facility operated by QatarEnergy LNG, which can produce around 1.4 billion scf/d of gas from Qatar's North Field. We also have a 25% interest in the QatarEnergy LNG NFE(2) joint venture, which owns a 25% interest in the North Field East (NFE) project. Shell's ownership of NFE via the joint venture is 6.25%. In addition, we have a 25% interest in the QatarEnergy LNG NFS(2) joint venture which owns a 37.5% interest in the North Field South (NFS) project. Shell's ownership of NFS via the joint venture is 9.375%.

Russia
In 2022, Shell announced its intent to withdraw in a phased manner from its involvement in all Russian hydrocarbons, including crude oil, petroleum products, gas and LNG. Shell still holds a 27.5% (minus one share) interest in Sakhalin Energy Investment Company Ltd. (SEIC), a Bermudan entity, which purportedly no longer holds any licences, rights and obligations in Sakhalin-2. Shell still holds one long-term LNG purchase contract with a Novatek entity.

Trinidad and Tobago
We have interests in three concessions with producing fields: Central Block (Shell interest 65%), North Coast Marine Area (Shell interest 80.5%) and East Coast Marine Area (Shell interest 100%), where in July 2024 we took an FID on the Manatee project.

In 2024, we signed a Sales and Purchase Agreement (SPA) with Touchstone Exploration Trinidad Limited for the sale of our interest in the Central Block facility. We expect to complete this transaction in the first half of 2025.

We have a 100% interest in exploration blocks 5(c)REA, 5(d) and 6(d). We also have a 50% interest in exploration blocks 25a, 25b and 27 in the Columbus Basin. We operate Block 27 and bp is the operator of the remaining two. Furthermore in 2024, we signed the PSC for modified block U(c) (Shell share 100%).

Other
We also have interests in Barbados, Colombia, Cyprus, Tanzania and Venezuela.

Trading and Optimisation
Our trading organisation markets and sells a portion of our share of equity production of LNG and third-party LNG through our UK, UAE and Singapore trading hubs. We have term sales contracts for most of our LNG liquefaction and term purchase contracts. Our shipping network, regasification terminals, and ability to buy and deliver spot cargoes from third parties enable us to optimise the income we generate from our LNG cargoes. For example, if a customer no longer needs a scheduled cargo, we can deliver it to another customer. Similarly, if a customer needs an additional cargo not available from our own production, we contract with third parties to deliver that cargo. We conduct paper trades, primarily to manage commodity price risk related to sales and purchase contracts.

Increasing natural gas and LNG production in Australia

We continue to grow our natural gas and liquefied natural gas (LNG) businesses in Queensland, Australia, by supplying increasing volumes of natural gas to the domestic market and LNG to customers in Asia.

Shell QGC (Shell interest between 44% and 74%) produces natural gas from wells drilled into coal seams in the Surat Basin. Extending across several thousand square kilometres, Shell QGC's operations span around 3,500 wells (gross), gas processing infrastructure and the two-train Shell-operated QCLNG facility on Curtis Island.

In 2024, QGC celebrated 10 years of LNG production and export by achieving its highest production levels ever.

We also announced plans to develop Phase 2 of Arrow Energy's Surat Gas Project (Shell interest 50%, non-operated) in Queensland, which is expected to contribute around 22,400 barrels of oil equivalent (130 million standard cubic feet) per day at peak production. First gas is expected in 2026. Gas from the project will flow to Shell's QCLNG facility to meet long-term contracts and supply domestic customers.

Long-term supplies of Australian LNG can help support the energy security and net-zero emission ambitions of countries in Asia. QCLNG has shipped more than 1,100 cargoes of LNG to customers since it began operating in 2014. The increase in production capacity at QGC and Arrow Energy will make a significant contribution to Shell's plan to grow its LNG business.

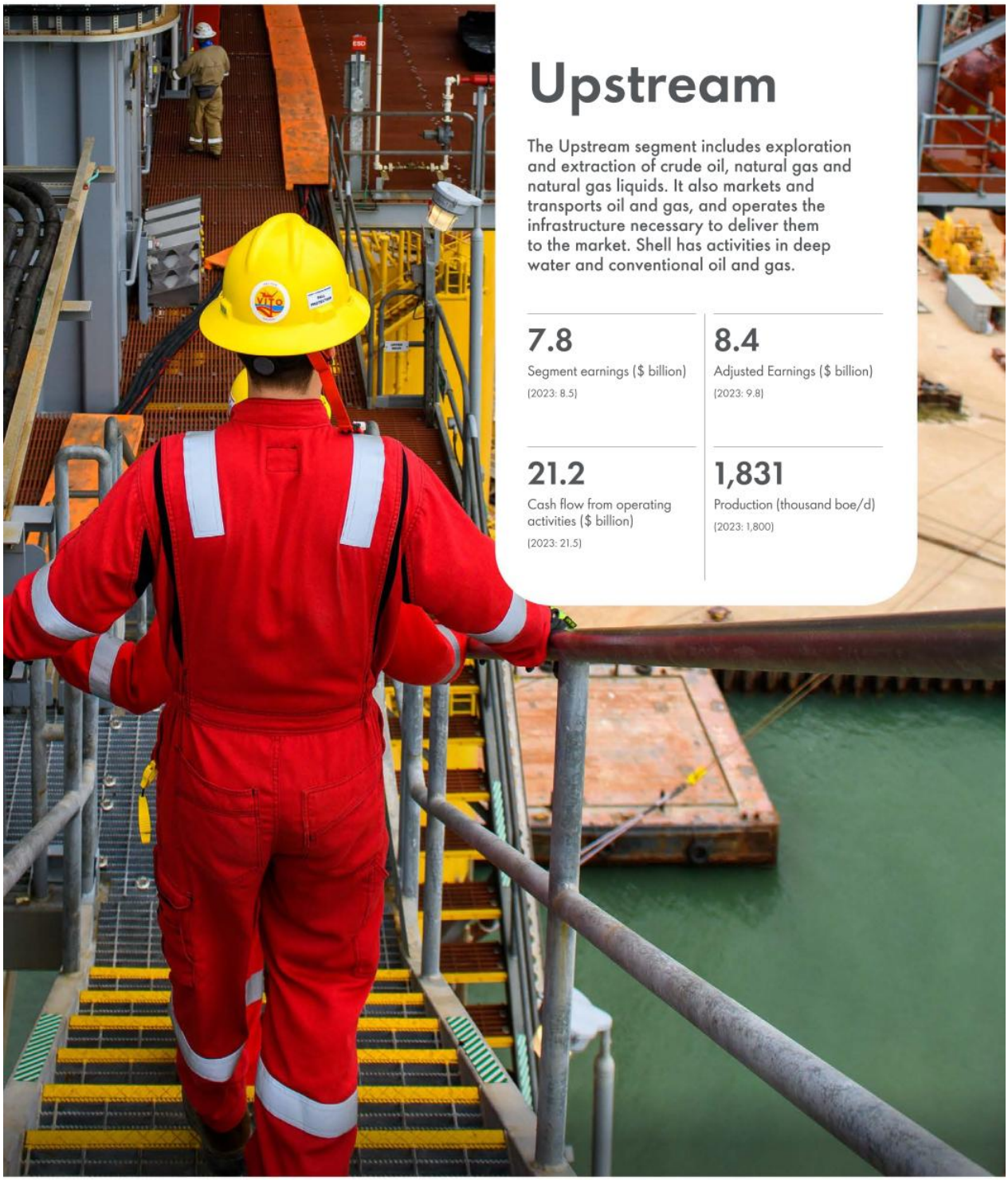
Shell QGC has long used advanced technology such as sensors, drones and satellites to detect potential methane leaks from its extensive infrastructure and improve emissions reporting. This has helped QGC reduce reported methane emissions by 70% compared with 2016. Shell's aim is to maintain methane emissions intensity for global operated oil and gas assets below 0.2%, which we met in 2024, and achieve near-zero methane emissions by 2030 [A].

Shell QGC contributes significantly to Australia's economy through the stable supply of gas for power generation, manufacturing and transport. It also supports local communities through employment programmes and initiatives, and provides educational support, skills development training and economic development assistance for First Nations people and communities. In 2024 alone, Shell QGC spent AUD 322 million with local suppliers in regional Queensland.

1. Shell QGC is a leading natural gas producer in Queensland, Australia. QGC includes a two-train LNG facility (pictured), which produces LNG for international markets.

2. Staff at Shell QGC's training centre in Chinchilla, Queensland. Shell QGC has employed more than 400 apprentices and trainees in the past decade.

[A] On an intensity basis.



Upstream

The Upstream segment includes exploration and extraction of crude oil, natural gas and natural gas liquids. It also markets and transports oil and gas, and operates the infrastructure necessary to deliver them to the market. Shell has activities in deep water and conventional oil and gas.

7.8
Segment earnings ($ billion)
(2023: 8.5)

8.4
Adjusted Earnings ($ billion)
(2023: 9.8)

21.2
Cash flow from operating activities ($ billion)
(2023: 21.5)

1,831
Production (thousand boe/d)
(2023: 1,800)

In 2024, Upstream delivered consistent performance through improved operations, cost reductions, portfolio optimisation and strategic investments. Our assets improved their availability and reliability, and we completed several major scheduled maintenance activities ahead of time, paving the way for higher production. We reached several milestones as part of our strategy to focus on high-margin basins, including investments in projects like the Atapu-2 field, which will increase our offshore production capacity in Brazil, and achieving first gas from Malaysia's Jerun field. We also took the final investment decision on the Vito waterflood project in the Gulf of America, and on Bonga North in the Gulf of Guinea – demonstrating how we can secure long-term value from existing assets. Our Whale platform, also in the Gulf of America, started production in January 2025 and is an example of how we are building on four decades of deep-water expertise and replicating innovative projects for more value. See "Outlook" on pages 16-17 for our Capital Markets 2025 investor update.

Business conditions

For the business conditions relevant to Upstream, see "Market overview" on pages 28-30.

Financial delivery

Earnings 2024-2023

Segment earnings decreased by $768 million compared with 2023. This reflected unfavourable tax movements ($1,289 million), lower realised prices (a decrease of $949 million) and higher well write-offs (an increase of $541 million), partly offset by the comparative favourable impact of $962 million mainly relating to gas storage effects. Segment earnings in 2024 also included a loss of $325 million related to the impact of the weakening Brazilian real on a deferred tax position, net impairment charges and reversals of $323 million and charges of $214 million related to redundancy and restructuring, partly offset by gains of $638 million related to the impact of inflationary adjustments in Argentina on a deferred tax position. These charges and gains are part of identified items and compare with 2023, where segment earnings included net impairment charges and reversals of $642 million, and net charges of $295 million related to the impact of the weakening Argentine peso and strengthening Brazilian real on a deferred tax position.

Adjusted Earnings and Adjusted EBITDA were driven by the same factors as the segment earnings and adjusted for identified items.

Prior year earnings summary

Segment earnings, compared with 2022, mainly reflected lower realised oil and gas prices (decrease of $5,696 million) and lower volumes (decrease of $2,001 million).

Segment earnings in 2023 also included net impairment charges and reversals of $642 million, and net charges of $295 million, which related to the impact of the weakening Argentine peso and strengthening Brazilian real on a deferred tax position. These charges and gains are part of identified items and compare with 2022, where segment earnings included net impairment reversals and charges of $853 million, and charges of $1,385 million relating to the EU solidarity contribution and $802 million relating to the UK Energy Profits Levy.

Adjusted Earnings and Adjusted EBITDA were driven by the same factors as the segment earnings and adjusted for identified items.

* Non-GAAP measure (see page 445).

Key metrics [A]

	$ million, except where indicated		
	2024	2023	2022
Segment earnings*[B]	7,772	8,540	16,258
Identified items	(623)	(1,267)	(1,096)
Adjusted Earnings* [B]	8,395	9,806	17,355
Adjusted EBITDA* [B]	31,264	30,622	42,144
Cash flow from operating activities	21,244	21,450	29,641
Cash capital expenditure*	7,890	8,343	8,143
Liquids production available for sale (thousand b/d)	1,320	1,325	1,333
Natural gas production available for sale (million scf/d)	2,964	2,754	3,272
Total production available for sale (thousand boe/d)	1,831	1,800	1,897

[A] See Note 7 to the "Consolidated Financial Statements" which includes an explanation of the reporting segment changes applicable from 2024.
[B] Segment earnings, Adjusted Earnings, and Adjusted EBITDA are presented on a current cost of supplies basis.

Cash flow from operating activities

Cash flow from operating activities for 2024 was primarily driven by Adjusted EBITDA, partly offset by tax payments of $7,851 million and the timing impact of dividends (net of profits) from joint ventures and associates of $946 million.

Shell's policy is to settle the inter-segment use of tax attributes between business segments. This settlement is usually made in cash but in certain instances there is no cash settlement. In 2024, the Integrated Gas segment's deferred tax assets ($974 million) were mainly used by the Upstream ($759 million) and Chemicals and Products ($183 million) segments, for which no cash settlement was made.

Cash capital expenditure

Cash capital expenditure in 2024 was lower compared with 2023. The decrease was mainly a result of projects ramp-up in the Gulf of America and Brazil in 2023. This was partially offset by higher spend from projects in Nigeria and the UK in 2024. Cash capital expenditure* is expected to be around $7 billion in 2025.

Operational performance

Production available for sale

In 2024, liquids production was flat and natural gas production increased by 8%, compared with 2023.

Total production, compared with 2023, increased mainly due to new liquids and gas production, partly offset by field decline.

Strategic progress

Portfolio and business developments

Significant portfolio and business developments:

- In May 2024, the Petrobras-operated Atapu consortium (Shell interest 16.7%) announced a final investment decision (FID) for the Atapu-2 project, a second floating production, storage and offloading (FPSO) vessel to be deployed at the Atapu field in Brazil's offshore Santos basin.
- In July 2024, first gas was achieved at the Jerun field (Shell interest 30%) in Malaysia. Jerun is operated by SapuraOMV Upstream (40%) in partnership with our subsidiary Sarawak Shell Berhad and PETRONAS Carigali Sdn Bhd (30%).
- In August 2024, we announced an FID on a waterflood project at our Vito asset in the Gulf of America. Water will be injected into the reservoir formation to displace additional oil.

- In October 2024, we announced the start of production of the FPSO Marechal Duque de Caxias in the Mero field, in the pre-salt area of the Santos Basin, offshore Brazil. Also known as Mero-3, the FPSO has an operational capacity of 180,000 barrels of oil per day (Shell share 19.3%).
- In December 2024, we, along with Equinor ASA, announced to combine our UK offshore oil and gas assets and expertise to form a new company which will be the UK North Sea's biggest independent producer. On deal completion, the new independent producer will be jointly owned by Equinor (50%) and Shell (50%). Completion of the transaction remains subject to approvals and is expected by the end of 2025.
- In December 2024, we announced a final investment decision (FID) on Bonga North, a deep-water project off the coast of Nigeria. Shell (55%) operates the Bonga field in partnership with Esso Exploration and Production Nigeria Ltd. (20%), Nigerian Agip Exploration Ltd. (12.5%), and TotalEnergies Exploration and Production Nigeria Ltd. (12.5%), on behalf of the Nigerian National Petroleum Company Limited.
- In January 2025, we announced the start of production at the Shell-operated Whale floating production facility in the Gulf of America. The Whale development is owned by Shell (60%, operator) and Chevron U.S.A. Inc. (40%).
- In February 2025, we announced production restart at the Penguins field in the UK North Sea with a modern floating, production, storage and offloading (FPSO) facility (Shell 50%, operator; NEO Energy 50%). The previous export route for this field was via the Brent Charlie platform, which ceased production in 2021 and is being decommissioned.
- In February 2025, we signed an agreement to acquire a 15.96% working interest from ConocoPhillips Company (COP) in the Shell-operated Ursa platform in the Gulf of America. Shell's working interest in the platform, pipeline and associated fields will increase from around 45.39% to a maximum of 61.35%. The transaction is subject to regulatory and other conditions, and is expected to be completed by the end of the second quarter of 2025.
- On March 13, 2025, we completed the sale of The Shell Petroleum Development Company of Nigeria Limited (SPDC) to Renaissance.

Business and property

Our subsidiaries, joint ventures and associates are involved in all aspects of upstream activities. These activities include land tenure and the exploration, development and production of crude oil, natural gas and natural gas liquids. They also include the marketing and transportation of oil and gas, as well as the operation of the infrastructure necessary to deliver them to market.

The conditions of the leases, licences and contracts under which oil and gas interests are held vary from country to country. In almost all cases outside North America, legal agreements are generally granted by, or entered into with, a government, state-owned company, government-run oil and gas company or agency. The exploration risk usually rests with the independent oil and gas company. In North America, these agreements may also be with private parties that own mineral rights. Of these agreements, the following are most relevant to our interests:

- Licences (or concessions), which entitle the holder to explore for hydrocarbons and exploit any commercial discoveries. Under a licence, the holder bears the risk of exploration, development and production activities, and is responsible for financing these activities. In principle, the licence holder is entitled to the totality of production less any royalties in kind. The government, state-owned company or government-run oil and gas company may sometimes enter into a joint arrangement as a participant, sharing the rights and obligations of the licence but usually without sharing the exploration risk. In a few cases, the state-owned company, government-run oil and gas company or agency has an option to purchase a certain share of production.
- Lease agreements, which are typically used in North America and are usually governed by terms similar to licences. Participants may include governments or private entities. Royalties are paid either in cash or in kind.
- Production-sharing contracts (PSCs) entered into with a government, state-owned company or government-run oil and gas company. PSCs generally oblige the independent oil and gas company, as contractor, to provide all the financing and bear the risk of exploration, development and production activities in exchange for a share of the production. Usually, this share consists of a fixed or variable part that is reserved for the recovery of the contractor's cost (cost oil). The remaining production is split with the government, state-owned company or government-run oil and gas company on a fixed or volume/revenue-dependent basis. In some cases, the government, state-owned company or government-run oil and gas company will participate in the rights and obligations of the contractor and will share in the costs of development and production. Such participation can be across the venture or on a field-by-field basis. Additionally, as the price of oil or gas increases above certain predetermined levels, the independent oil and gas company's entitlement share of production normally decreases, and vice versa. Accordingly, its interest in a project may not be the same as its entitlement.

Europe

Germany

Shell is a 50% shareholder in BEB Erdgas und Erdoel GmbH & Co. KG (BEB), which owns interests in various concessions, mainly in Lower Saxony. ExxonMobil Production Deutschland GmbH has a service contract with BEB, under which it provides operating services to BEB for most of the concessions.

Italy

Shell has a 39% interest in the Val d'Agri producing concession, operated by ENI S.p.A., and a 25% interest in the Tempa Rossa producing concession, operated by TotalEnergies EP Italia S.p.A.

Netherlands

Shell and ExxonMobil are 50:50 shareholders in Nederlandse Aardolie Maatschappij B.V. (NAM). NAM holds a 60% interest in the onshore low-calorific Groningen gas field (the remaining 40% interest is held by EBN, a Dutch government entity), the Schoonebeek oil field, some 25 smaller hydrocarbon production licences and two underground gas storage facilities.

Historical production from the Groningen field induces earthquakes which have led to damage claims, security concerns, and a strengthening operation to make buildings earthquake resistant.

In June 2018, NAM's shareholders and the Dutch government signed a Heads of Agreement (HoA) to inter alia reduce, and eventually cease, production from the Groningen field. Under the terms of the HoA, it was agreed that the Dutch government would pass on to NAM costs insofar as the costs corresponded to NAM's liability. Further agreements were signed to implement the HoA. Shell has put in place an appropriate security to fulfil its obligation under the HoA.

NAM is working with the Dutch government to fulfil its financial obligations for earthquake costs. These include compensating for damage caused by the earthquakes and paying to strengthen houses where this is required for safety. In 2022, NAM started arbitrations with the Dutch government to have its financial liability determined for the costs the Dutch government has charged to NAM in relation to the strengthening operation and the handling of claims for physical damage to property. The outcomes of these arbitrations are expected in 2025.

On the instructions of the Dutch government, production at the Groningen field ceased on October 1, 2023, and a law was passed to shut down the field permanently from April 19, 2024. On July 18, 2024, NAM signed an agreement to divest OneGas East, its offshore asset in the Dutch North Sea, to Tenaz Energy. The transaction is expected to be completed by mid-2025.

See Note 32 NAM (Groningen gas field) litigation in the "Consolidated Financial Statements" on page 309.

Norway

Shell holds participating interests in 15 production licences on the Norwegian continental shelf, and is the operator of three of these. In 2024, Shell was awarded one new licence, relinquished four licences and divested the Linnorm gas field. Shell has participating interests in two producing gas fields in Norway: Shell-operated Ormen Lange (Shell interest 17.8%) and Equinor-operated Troll (Shell interest 8.19%). In 2024, significant projects were executed at both assets. The Troll B and C platforms were partially electrified, which is expected to reduce annual emissions of CO_2 by 250,000 tonnes. At Ormen Lange, subsea compression, powered from shore, is being installed to enhance gas recovery.

Additionally, Shell holds a 10% participating interest in the Irpa gas discovery, operated by Equinor, which is under development. We operate two licences which are being decommissioned: Knarr and Gaupe. We are also the technical service provider for the Nyhamna gas facility, operated by Gassco, which processes and exports gas from several Norwegian fields.

UK

Shell operates a number of assets on the UK continental shelf, mostly under unincorporated joint-venture agreements. Shell also has non-operated positions in the West of Shetland area, including the Clair (Shell interest 27.97%) and Schiehallion (Shell interest 44.89%) fields, which are both operated by bp.

In December 2024, Shell, along with Equinor ASA, announced a combination of our UK offshore oil and gas assets and expertise to form a new company which will be the UK North Sea's biggest independent producer. On deal completion, the new independent producer will be jointly owned by Equinor (50%) and Shell (50%). Completion of the transaction remains subject to approvals and is expected by the end of 2025.

In April 2023, Shell restarted operations at the Pierce field (Shell interest 92.5%) in the North Sea after a major redevelopment to enable gas production after years of the field producing only oil. The Haewene Brim floating production, storage and offloading (FPSO) vessel, which produces from the Pierce field, was shut down between August 2023 and April 2024 to allow completion of mooring lines integrity works. The FPSO vessel is fully operational and back in production.

The operated Penguins FPSO vessel (Shell interest 50%) was successfully moored in the northern North Sea in September 2024 with first oil in February 2025.

Victory (Shell interest 100%), a subsea tieback to the Total-operated Greater Laggan Area facilities, is on track for an expected start-up in 2026. Priority work activities for 2024 were delivered ahead of schedule with new subsea pipelines installed in preparation for well execution in 2025.

Significant progress has also been made on the Jackdaw project (Shell interest 100%) in the North Sea and it is expected to become operational in the mid-2020s. On January 29, 2025, the Court of Session (Outer House) in Scotland ruled, in legal proceedings brought by the non-governmental organisation, Greenpeace, that the original consents for Jackdaw are no longer valid, though importantly, work on the project can continue while new consents are being sought. This ruling has not been appealed.

Within Shell's UK exploration portfolio, there is an ongoing judicial review by Oceana UK challenging the award of tranche three of the 33rd licensing round awards (including two licences awarded to Shell in the Mid-North Sea High area) which is expected to be heard by the High Court in March 2025.

In July 2024, Shell signed an agreement with RockRose Energy Limited, a subsidiary of Viaro Energy, to divest its equity stake in 11 gas fields and one exploration prospect in the UK Southern North Sea, as well as the onshore gas processing terminal in Bacton, England. The sale is subject to regulatory approvals and is expected to complete in 2025.

In July 2023, the UK government announced that the Acorn carbon capture, utilisation and storage project (Shell interest 30%) had been selected as one of two clusters to enter Track 2 of the UK's cluster sequencing process for carbon capture and storage (CCS). In 2024, Shell had expected to start more detailed discussions about the project with the UK government, but these have not yet commenced in earnest.

The Offshore Petroleum Regulator for Environment and Decommissioning (OPRED) continues to assess the Brent Field decommissioning programme for the Brent gravity-based substructures. The Brent Charlie topside was lifted and transported to shore in July 2024.

Decommissioning of the Heather A platform and Curlew FPSO asset continued in 2024. Shell is also continuing with the campaign of subsea well plug and abandonment activity to decommission 25 wells in the Central North Sea which began in 2023.

Rest of Europe

Shell also has interests in Albania.

Asia (including the Middle East)

Brunei

Shell and the Brunei government are 50:50 shareholders in Brunei Shell Petroleum Company Sendirian Berhad (BSP). BSP has long-term onshore and offshore oil and gas concession rights and sells most of its gas production to Brunei LNG Sendirian Berhad, with the remainder sold in the domestic market.

In addition to our interest in BSP, we have a non-operated 35% interest in the offshore Block B concession, which is operated by Hibiscus Petroleum. The gas and condensate are produced from the Maharaja Lela field.

We have a non-operated 20% interest under a PSC in a gas-holding area for deep-water Block CA2, which is operated by Petronas.

We operate the deep-water Block CA1 (Shell interest 86.95%) in which the Jagus East field is located and forms part of the unitised GKGJE field under a PSC. As referred to in the Malaysia section the unitised GKGJE field is operated by Shell Malaysia.

See "Integrated Gas" on pages 31-37.

Iraq

Shell has a 44% interest in the Basrah Gas Company, which gathers, treats and processes associated gas that was previously flared from the Rumaila, West Qurna 1 and Zubair fields. Processed gas and associated products, such as condensate and LPG, are sold to the domestic and international markets.

Karachaganak Expansion Project 1A completed
Karachaganak is one of the world's largest gas and condensate fields. It produces around 260,000 barrels of oil and condensate per day, which are processed by Karachaganak Petroleum Operating B.V. (KPO) for export. Shell is the joint operator, along with Eni, of the Karachaganak field (Shell interest 29.3%).

In 2024, KPO completed the Karachaganak Expansion Project 1A (KEP1A) to maintain production levels and extend the field's long productive life by reinjecting gas into the reservoir through a new fifth gas compressor. Around 7,000 local people were employed during construction.

The project was completed one month ahead of schedule, after starting in December 2020, and was delivered within budget. This success can be attributed to the resilience of the team who worked hard to achieve the result, despite the disruption caused by the COVID-19 pandemic and the nearby Russia–Ukraine war.

KEP1A is a key example of Shell's focus on performance and discipline.

KPO is now working on the installation of a sixth gas reinjection compressor as part of Karachaganak Expansion Project 1B to maintain pressure in the reservoir and keep production levels stable. The project is scheduled for completion in 2026.

Photo: Staff at Karachaganak, Kazakhstan.

Kazakhstan
Shell is the joint operator with ENI S.p.A. of the onshore Karachaganak oil and condensate field (Shell interest 29.3%) in north-west Kazakhstan which covers more than 280 square kilometres.

We also have a 16.8% interest in the North Caspian Sea PSA, which includes the Kashagan field in the Kazakh sector of the Caspian Sea. The North Caspian Operating Company is the operator. This shallow-water field covers around 3,400 square kilometres.

Shell has a 7.4% interest in the Caspian Pipeline Consortium (CPC), which owns and operates an oil pipeline running from the Caspian Sea to the Black Sea across parts of Kazakhstan and Russia. We hold our interest in the CPC via three legal entities. Two of these are wholly owned by Shell and the other is a joint venture with Rosneft, Rosneft-Shell Caspian Ventures Ltd (Cyprus) (RSCV) (Shell interest 49%), which was formed in 1996 to own and manage pipeline capacity rights. We continue to manage our interest in CPC held through RSCV in full compliance with applicable laws, including sanctions.

We have several matters in dispute involving non-operated ventures and the Republic of Kazakhstan, including court proceedings in respect of a sulphur permitting outcome and two arbitrations under the applicable production-sharing agreements. There remains a high degree of uncertainty regarding the outcomes, as well as the potential effect on future operations, earnings, cash flows and Shell's financial condition.

See Note 32 to the "Consolidated Financial Statements" on pages 308-310.

Kuwait
Shell Kuwait Exploration and Production B.V. (Shell interest 100%) holds three enhanced technical service agreements (ETSA) with Kuwait Oil Company. The ETSA Jurassic Gas runs to 2026, the ETSA Heavy Oil and ETSA Conventional Oil run to 2027.

Malaysia
Shell explores for and produces oil and gas off the coast of Sabah and Sarawak under 20 PSCs, in which our interests range from 20% to 92.5%.

Offshore Sabah
We operate two producing oil fields: the Malikai deep-water field (Shell interest 35%) in the Block G PSC, and the unitised Gumusut-Kakap Geronggong-Jagus East (GKGJE) field in the Block J PSC which straddles the Malaysia-Brunei border (Shell interest 37.89%).

We hold a 50% operated participating interest in exploration phase Block 2W, Block X, Block ND6 and Block ND7 PSCs. Our exploration activities in Block ND6 and Block ND7 PSCs were suspended in 2005 because of Malaysia's border disputes with Indonesia.

Our non-operated portfolio includes two producing fields: the unitised Siakap North-Petai deep-water field in Block G PSC (Shell interest 21%) and the Kebabangan Cluster PSC (Shell interest 30%). We also hold interests in exploration phase Block SB 2K, Block N and Block 2V PSCs, which range from 25.1% to 40%. In 2024, we signed a new non-operated PSC for Ubah Cluster, a deep-water project off the coast of Sabah (Shell interest 35%).

Offshore Sarawak
We are the operator of four PSCs producing gas and oil, holding interests ranging from 30% to 75% under the MLNG, SK308, SK408 and SK318 PSCs. Nearly all the gas produced offshore Sarawak is supplied to Malaysia LNG (MLNG) and to our gas-to-liquids plant in Bintulu. We also continue to explore in the MLNG PSC.

Photo: The Jerun offshore gas field (Shell interest 30%) in Malaysia achieved first gas in July 2024, adding to Shell's contribution to Malaysia's offshore gas production.

The SK318 PSC contains the Timi field (Shell interest 75%), the unitised Rosmari field (Shell interest 68%) and the unitised Marjoram field (Shell interest 72%). Rosmari-Marjoram is a natural gas project situated around 220 kilometres off the coast of Bintulu, comprising a remotely operated offshore platform and onshore gas plant. These fields will mainly be powered by renewable energy from solar power offshore and hydroelectric power onshore.

We hold participating interests ranging from 45% to 92.5% in the exploration phase Block SK437, Blocks SK439/440 and Block 3B PSCs. In 2024, we signed a new PSC for Block 5E (Shell interest 50%), a deep-water block off the coast of Sarawak.

In our non-operated portfolio, we hold a 20% interest in the Pegaga field under the Block SK320 PSC and a 30% interest in the Jerun, Larak and Bakong fields which are part of the SK408 PSC. Jerun achieved first gas in July 2024.

See "Integrated Gas" on pages 31-37.

Oman

Shell has a 34% interest in Petroleum Development Oman (PDO), which operates the Block 6 oil concession. Shell is entitled to 34% of oil produced from Block 6 through its interest in Private Oil Holdings Oman Ltd. The government of Oman has a 60% interest in PDO and the Block 6 oil concession through its wholly owned company, Energy Development Oman (EDO). PDO operates a concession area of about 90,000 square kilometres and has more than 200 producing oil fields.

We have a 50% interest in Block 42 under an exploration and production-sharing agreement (EPSA) where Shell is the operator. We also operate in Block 55 under an EPSA (Shell interest 100%). We are in the process of relinquishing our interests in Block 42 and Block 55 to the government.

See "Integrated Gas" on pages 31-37.

Syria

Shell holds a 65% interest in Syria Shell Petroleum Development B.V. (SSPD), a joint venture between Shell and the China National Petroleum Corporation. SSPD holds a 31.25% interest in Al Furat Petroleum Company, a Syrian joint stock company whose role was to perform petroleum operations. Shell also holds a 70% interest in two exploration licences via Shell South Syria Exploration B.V. In December 2011, in compliance with international sanctions on Syria, including European Council Decision 2011/782/CFSP, Shell suspended all exploration and production activities in Syria as well as its participation and/or support in activities related to Al Furat Petroleum Company. SSPD continued to fulfil minimum contractual obligations towards the Syrian finance and labour ministries, in compliance with applicable trade control laws. In 2024, as part of the minimum contractual obligations, payments for taxes related to salary and social security amounted to $282. In addition, in 2024, in compliance with applicable sanctions on Syria, we reimbursed an employee $713.05 for the renewal of his and his son's Syrian passport, which was paid to the Syrian Embassy in Kuwait.

Rest of Middle East and Asia

Shell has certain interests in the United Arab Emirates including a 15% shareholding in the Abu Dhabi Gas Industries Limited ("ADNOC Gas Processing") operating joint venture which is a key supplier of natural gas in the country.

Africa

Nigeria

In 2024, Shell operated a number of interests in onshore and offshore oil exploration and production assets in Nigeria.

See "Risk factors" on pages 138.

Onshore

The Shell Petroleum Development Company of Nigeria Limited (SPDC) is the operator of the SPDC joint venture (SPDC JV, Shell interest 30%) which has 15 Niger Delta onshore oil mining leases (OMLs) and three shallow-water leases (OML 74, 77 and 79).

On March 13, 2025, Shell completed the sale of SPDC to Renaissance. As part of the transaction and ongoing business arrangements, Shell provided loan facilities for amounts up to $2.5 billion. Shell will continue to support Renaissance in the development of its gas reserves and retain an interest in the performance of the export feedgas business.

Offshore

Our main offshore deep-water activities are carried out by our wholly owned subsidiary Shell Nigeria Exploration and Production Company Limited (SNEPCo). SNEPCo has interests in three deep-water blocks that are under PSC terms: the producing assets Bonga (OML 118) and Erha (OML 133), and the non-producing asset Bolia Chota (OML 135). SNEPCo operates OML 118 (Shell interest 55%), including the Bonga field FPSO vessel. We also operate OML 135 (Shell interest 55%), encompassing the Bolia and Doro fields. We have a 43.8% non-operated interest in OML 133 (including the Erha FPSO). In addition, SNEPCo holds a 40% interest in a non-producing shallow-water lease (OML 144) that is held in a joint venture with Sunlink Energies.

In December 2024, we announced a final investment decision (FID) on Bonga North (OML 118), a deep-water project off the coast of Nigeria.

Authorities have investigated our involvement in the 2011 settlement of litigation pertaining to OPL 245. In January 2020, criminal charges alleging disobeying direction of law related to tax waivers were filed in Nigeria against Shell Nigeria Ultra Deep Ltd., SNEPCO, and third parties including Nigeria Agip Exploration Limited (NAE). In March 2024, the Court approved the defendant's no-case submission and dismissed the charges against all defendants.

See Note 32 to the "Consolidated Financial Statements" on pages 308-310 for more information about OPL 245.

Business update

Security issues, sabotage and crude oil theft in the Niger Delta continued and remained significant challenges to our onshore operations in 2024. We will continue to monitor the situation closely and evaluate implications for the integrity of our infrastructure and the sustainability of our current operations. We continue to put the safety of our employees and contractors first.

In our Nigerian operations, we face various risks and adverse conditions which could have a significant adverse effect on our operational performance, earnings, cash flows and financial condition.

See "Respecting nature" on pages 109-113.

There are limitations to the extent to which we can mitigate these risks. We monitor the security situation and liaise with host communities, and governmental and non-governmental organisations to help promote peaceful and safe operations for our people and local communities. We test the economic and operational resilience of our Nigerian projects against a range of assumptions and scenarios. When we participate in joint ventures in Nigeria, we require that they operate in accordance with good industry practice. We seek to proportionally share risks and funding commitments with joint-venture partners. As a result of the completion of the sale of SPDC, our exposure to the risks arising from onshore operations is expected to reduce. Shell has other businesses in Nigeria that are outside the scope of the announced transaction.

See "Risk factors" on page 138.

We support the Nigerian government's efforts to improve the efficiency, functionality and domestic benefits of Nigeria's oil and gas industry. We report spills and how we respond to spills, including those that are caused by third-party interference. We implement a maintenance strategy to support sustainable equipment reliability and we have a multi-year programme to reduce routine flaring of associated gas.

See "Our journey to net zero" on page 95.

Rest of Africa

Shell also has interests in Algeria, Namibia, São Tomé and Príncipe, South Africa and Tunisia.

In 2021, Shell announced plans to hand back upstream assets associated with the Miskar and Hasdrubal concessions to the government of Tunisia. In June 2022, Shell handed back the Miskar concession upon its expiry. Discussions are ongoing with the competent authorities for the hand-back/relinquishment of Hasdrubal concession.

North America

USA

The majority of our oil and gas interests in the USA comprise leases for federal offshore blocks in the deep waters of the Gulf of America. Such leases usually have a fixed primary term and, once production is established, remain in effect through continued production, subject to compliance with the relevant terms and provisions (including applicable laws and regulations).

In 2024, we relinquished our interest in one licence in the North Slope area of Alaska.

Gulf of America

Shell's major production area in the USA is the Gulf of America. We have a total of 304 active federal offshore leases where Shell is the operator, and 62 active federal offshore leases where Shell has a non-operated interest.

We are the operator of 10 production hubs: Mars (Shell interests 33.7% to 100%), Olympus (Shell interests 71.5% to 100%), Auger (Shell interests 27.5% to 100%), Perdido (Shell interests 33.3% to 40%), Ursa (Shell interests 45.4% to 100%), Enchilada/Salsa (Shell interests 37.5% to 75%), Appomattox (Shell interests 79% to 80%), Vito (Shell interest 63.1%), Stones (Shell interest 100%) and Whale (Shell interest 60%). We also have an interest in the West Delta 143 offshore processing facilities (Shell interest 71.5%).

We continue to produce from the Coulomb field (Shell interest 100%), which ties into the Na Kika platform (Shell interest 50%) and which is co-owned and operated by BP Exploration and Production Inc.

We continued exploration, development and decommissioning activities in the Gulf of America in 2024.

In February 2024, we began production at Rydberg (Shell interest 80%), a subsea tie-back to the Shell-operated Appomattox production hub (Shell interest 79%). Rydberg is expected to produce up to 16,000 barrels of oil equivalent per day (boe/d) at peak rates expected between September 2025 to January 2026.

In August 2024, an FID was taken on a waterflood project at Vito where water will be injected into the reservoir formation to displace additional oil. The process is due to begin in 2027 and is expected to enhance volume capacity at the Vito field.

In December 2024, FID was announced on a Phase 3 Silvertip project, which will deliver two wells to boost production at the Shell-operated Perdido spar. These wells, located in the Silvertip Frio reservoir (Shell interest 40%), are expected to collectively produce up to 6,000 barrels of oil equivalent per day (boe/d) at peak rates. First production is expected in 2026.

In January 2025, we began production at the Shell-operated Whale stand-alone host (Shell interest 60%). Whale is expected to produce up to 100,000 boe/d at peak rates in 2027.

In February 2025, we signed an agreement to acquire a 15.96% working interest from ConocoPhillips Company (COP) in the Shell-operated Ursa platform in the Gulf of America. Shell's working interest in the platform, pipeline and associated fields will increase from around 45.39% to a maximum of 61.35%. The transaction is subject to regulatory and other conditions, and is expected to be completed by the end of the second quarter of 2025.

Rest of North America

Shell also has deep-water licences and one shallow-water licence in Mexico, and we are in the process of relinquishing them to the government.

South America

Argentina

Shell has interests in the onshore Vaca Muerta Basin in the Neuquén Province. We are the operator of the Cruz de Lorena, Sierras Blancas, Coiron Amargo Sur Oeste (Shell interest 90% in each), and Bajada de Añelo (Shell interest 50%) areas. We have non-operated interests in the areas of Rincon La Ceniza and La Escalonada (Shell interest 45% in each), both operated by Total Austral S.A., and in the Bandurria Sur area (Shell interest 30%), operated by YPF S.A. Shell has a participating interest in the oil pipeline connecting Sierras Blancas and the regional distribution network and is the administrator in the joint property agreement that regulates its operation (Shell interest 60%). Shell also has a participating interest in the oil pipeline in the northern area of the basin which connects to the Pacific Evacuation Route (Shell interest 13.3%), operated by YPF S.A.

In the north-western Argentina basin, we have a non-operated interest in the onshore Acambuco area (Shell interest 22.5%), operated by Pan American Energy.

In addition to the producing interests, we are the operator of two frontier exploration blocks offshore Argentina (Shell interest 60% in each), and we have a non-operated interest in an adjacent block (Shell interest 30%) operated by Equinor.

Brazil
Shell's operates the Bijupirá and Salema fields (Shell interest 80% in each), which are being decommissioned; the producing BC-10 field (Shell interest 50%) in the Campos Basin; and the Gato do Mato and adjacent Sul de Gato do Mato areas in the Santos Basin (Shell interest 50%), which are subject to unitisation and with development options under evaluation. We also hold interests in 11 exploration blocks in the Santos Basin (Shell interests 70%), six exploration blocks in the Barreirinhas Basin (Shell interests 50% to 100%), three in the Campos Basin (Shell interests 40% to 100%) and one in the Potiguar Basin (Shell interest 100%).

Our non-operated portfolio consists of eight producing fields in the offshore Santos Basin:
- the Sapinhoá field (Shell interest 30%, operated by Petrobras and straddling the BM-S-9 and Entorno de Sapinhoá blocks already unitised);
- the Lapa field (Shell interest 30% in Block BM-S-9A, operated by TotalEnergies);
- the Berbigão and Sururu fields (Shell interest 25% in Block BM-S-11A, operated by Petrobras and subject to ongoing unitisation agreement discussions);
- the Atapu field (Shell interest 16.7% and straddling the BM-S-11A and Atapu PSC area already unitised);
- the Tupi field (Shell interest 23%, already unitised, in Block BM-S-11 and operated by Petrobras);
- the Iracema field (Shell interest 25% in Block BM-S-11 and operated by Petrobras); and
- the Mero field in the Libra PSC area (Shell interest 19.3%, already unitised with an adjoining open area and operated by Petrobras).

In addition to the producing assets, we hold interests in 33 non-operated exploration blocks: two in the Santos Basin (Shell interests 20% to 40%, operated by Petrobras), two in the Potiguar Basin (Shell interests 40%, both operated by Petrobras) and 29 blocks in the Pelotas Basin (Shell interests 30%, all operated by Petrobras).

In October 2024, production started at the Marechal Duque de Caxias FPSO in the Mero field. Mero is expected to receive one more FPSO and start producing from it by the end of 2025.

Rest of South America
Shell also has interests in Suriname and Uruguay.

Trading and Supply
Shell markets and trades equity crude oil from its Upstream operations through our main trading offices in the UK, Singapore, the USA, The Bahamas and Canada. We are active in most crude oil markets and, with our global network of supply and distribution activities and shipping and maritime capabilities, we manage and optimise the supply of crude to Shell's refineries, and the sale of crude to third-party customers.

Whale produces first oil in the Gulf of America

The simplified and cost-efficient Whale platform started oil production in the Gulf of America in January 2025. Whale, operated by Shell, has an estimated peak production of 100,000 barrels of oil equivalent per day – enough to fuel the daily journeys of 2.7 million cars in the USA.

Whale is a close replica of the Shell-operated Vito platform, which started production in the Gulf of America in early 2023. Vito is significantly smaller than its original design, resulting in lower costs and emissions. Whale will operate with around 30% lower carbon intensity over its life cycle than Vito.

Investments in oil and gas platforms such as Whale are needed to meet the world's energy demand while low-carbon alternatives are developed and made commercially available. Energy companies like Shell are finding ways to produce oil and gas with lower greenhouse gas emissions.

Power turbines are one of the biggest producers of emissions on offshore platforms. To reduce emissions on Whale, engineers have fitted waste-heat recovery units to all its power turbines. These units capture energy that would otherwise be lost to the atmosphere. This energy is then reused to heat the raw fluids so they can be exported from the platform.

The process of compressing gas before it is exported to the shore is another contributor to emissions on offshore facilities. To reduce these emissions on Whale, engineers have installed compressors which use less energy than a typical system.

Most of Whale's operations can be managed from New Orleans, which is about 600 kilometres away from the platform. Engineers use virtual reality headsets to carry out checks. They also deploy drones to inspect other areas, keeping the number of people needed on the platform to a minimum.

Whale has been designed to hold just 60 people, compared with the 180 people that can live on the Shell-operated Appomattox platform in the Gulf of America, which started production in 2019. Weighing around 25,000 tonnes, Whale is a third of the weight of Appomattox. The smaller scale helped designers to cut the cost of building the facility.

The Whale development is owned by Shell Offshore Inc. (60%) and Chevron U.S.A. Inc. (40%) and lies 320 kilometres south of Houston.

1. The Shell-operated Whale platform has a smaller footprint and lower carbon intensity over its life cycle than earlier platforms.

2. Whale is controlled by remote from New Orleans, some 600 km away. With just 60 people on board and a simplified, more energy-efficient design, Whale is reducing costs and emissions.

Oil and gas information

This section sets out information about Shell's oil and gas exploration and production activities, which include the extraction of oil, condensates, natural gas liquids, oil sands and natural gas from their natural reservoirs. These activities are undertaken within the Integrated Gas, Upstream and the Chemicals and Products (includes oil sands) segments. They do not represent the full extent of the activities of these segments, and exclude GTL processing, some LNG activities, trading and optimisation, as well as other non-extractive activities.

Proved developed and undeveloped reserves of Shell subsidiaries and Shell share of joint ventures and associates

	Crude oil and natural gas liquids (million barrels)	Synthetic crude oil (million barrels)	Natural gas (thousand million scf)	Total (million boe)
Shell subsidiaries				
At January 1, 2024	3,512	757	23,276	8,283
Increase/(decrease) in 2024:				
Revisions and reclassifications	408	(13)	(82)	381
Improved recovery	48	–	7	49
Extensions and discoveries	52	–	1,983	394
Purchases and sales of minerals in place	13	16	100	46
Total before taking production into account	521	3	2,008	870
Production [A]	(507)	(19)	(2,726)	(997)
Total	14	(16)	(718)	(127)
At December 31, 2024	3,526	741	22,558	8,156
Shell share of joint ventures and associates				
At January 1, 2024	392	–	6,453	1,504
Increase/(decrease) in 2024:				
Revisions and reclassifications	(5)	–	148	21
Improved recovery	–	–	–	–
Extensions and discoveries	–	–	149	26
Purchases and sales of minerals in place	–	–	–	–
Total before taking production into account	(5)	–	297	47
Production [B]	(24)	–	(366)	(87)
Total	(29)	–	(69)	(40)
At December 31, 2024	363	–	6,384	1,464
Totals				
At January 1, 2024	3,904	757	29,729	9,787
Increase/(decrease) before taking production into account	516	3	2,305	917
Production	(531)	(19)	(3,092)	(1,084)
Increase/(decrease)	(15)	(16)	(787)	(167)
At December 31, 2024 [C] [D] [E]	3,889	741	28,942	9,620
Reserves attributable to non-controlling interest in Shell subsidiaries at December 31, 2024	–	370	–	370

[A] Includes 41 million boe consumed in operations (natural gas: 238 thousand million scf; synthetic crude oil: 1 million barrels).
[B] Includes 5 million boe consumed in operations (natural gas: 27 thousand million scf).
[C] On March 13, 2025, Shell completed the sale of its Nigerian onshore subsidiary The Shell Petroleum Development Company of Nigeria Limited (SPDC) which holds a 30% interest in the SPDC JV to Renaissance. As of December 31, 2024, Shell had proved reserves of 453 million boe in SPDC.
[D] Pursuant to Shell's 2017 agreement with Canadian Natural Resources Limited, its remaining mining interest and associated synthetic crude oil reserves will be swapped for an additional 10% interest in the Scotford Upgrader and Quest CCS project. The transaction is expected to close by the end of the first half of 2025, subject to regulatory approvals. The associated proved reserves as of December 31, 2024 were 741 million barrels (of which 50% attributable to non-controlling interest).
[E] On December 5, 2024, Shell and Equinor ASA, announced the combination of their UK offshore oil and gas assets and expertise to form a new company which will be the UK North Sea's biggest independent producer. On deal completion, the new independent producer will be jointly owned by Equinor (50%) and Shell (50%) and 157 million boe (as of December 31, 2024) of Shell's proved reserves will be contributed to the new joint venture alongside proved reserves contributed by Equinor. Subsequently, Shell will report 50% of the proved reserves of the new joint venture as part of Shell's share of proved reserves from joint ventures and associates.

Proved reserves

Before taking production into account, our proved reserves increased by 917 million boe in 2024. This consisted of an increase of 870 million boe from Shell subsidiaries and an increase of 47 million boe from the Shell share of joint ventures and associates. After taking production into account, our proved reserves decreased by 167 million boe in 2024 to 9,620 million boe at December 31, 2024.

Shell subsidiaries

Before taking production into account, Shell subsidiaries' proved reserves increased by 870 million boe in 2024. This consisted of an increase of 521 million barrels of crude oil and natural gas liquids, an increase of 346 million boe (2,008 thousand million scf) of natural gas and an increase of 3 million barrels of synthetic crude oil. The 870 million boe increase comprised an increase of 394 million boe from extensions and discoveries, a net increase of 381 million boe from revisions and reclassifications, an increase of 49 million boe from improved recovery and a net increase of 46 million boe related to purchases and sales of minerals in place.

After taking into account production of 997 million boe (of which 41 million boe were consumed in operations), Shell subsidiaries' proved reserves decreased by 127 million boe in 2024 to 8,156 million boe. In 2024, Shell subsidiaries' proved developed reserves (PD) increased by 25 million boe to 6,346 million boe and proved undeveloped reserves (PUD) decreased by 152 million boe to 1,810 million boe.

Shell share of joint ventures and associates

Before taking production into account, the Shell share of joint ventures and associates' proved reserves increased by 47 million boe in 2024. This consisted of an increase of 52 million boe (297 thousand million scf) of natural gas, and a decrease of 5 million barrels of crude oil and natural gas liquids. The 47 million boe increase comprised an increase of 26 million boe from extensions and discoveries and a net increase of 21 million boe from revisions and reclassifications.

After taking into account production of 87 million boe (of which 5 million boe were consumed in operations), the Shell share of joint ventures and associates' proved reserves decreased by 40 million boe to 1,464 million boe at December 31, 2024.

The Shell share of joint ventures and associates' PD increased by 9 million boe to 517 million boe, and PUD decreased by 49 million boe to 947 million boe.

See "Supplementary information - oil and gas (unaudited)" on pages 313-332 for more information about proved oil and gas reserves of Shell subsidiaries and the Shell share of the proved oil and gas reserves of joint ventures and associates.

Proved undeveloped reserves

In 2024, Shell subsidiaries' and the Shell share of joint ventures and associates' PUD decreased by 201 million boe to 2,757 million boe. There were decreases of 617 million boe as a result of maturation to PD, mainly 305 million boe in Kashagan (Kazakhstan), 65 million boe in Mero (Brazil), 38 million boe in Mabrouk North-East (Oman), and 209 million boe spread across other fields and a net decrease of 71 million boe as a result of revisions, reclassifications and entitlement changes, which were mainly because of the decrease of 137 million boe in Groundbirch due to low average Alberta Energy Company (AECO) prices in 2024, an increase of 102 million boe due to an FID on an additional FPSO in Atapu, Brazil, and a decrease of 36 million spread across other fields. These were offset by an increase of 7 million boe due to de-maturation of PD to PUD, an increase of 420 million boe due to extensions and discoveries, mainly 286 million boe in Manatee (T&T), and 134 million boe spread across other fields, an increase of 49 million boe due to improved recovery, and a net increase of 11 million boe due to purchases and sales of minerals in place.

In addition to the maturation of 617 million boe from PUD to PD, 61 million boe were matured to PD as through PUD as a result of project execution during the year.

PUD held for five years or more (PUD5+) on December 31, 2024, amounted to 138 million boe, a decrease of 74 million boe compared with the end of 2023. The decrease in PUD5+ during 2024 was driven mainly by changes in Tupi (Brazil), Gbaran (Nigeria) and Kolo Creek (Nigeria).

The fields with the largest PUD5+ on December 31, 2024, were Assa North (Nigeria) and Penguins (UK). These PUD5+ remain undeveloped because of delays in drilling operations and security incidents impacting facility construction (Nigeria) and due to project delays (UK).

During 2024, we spent $8.2 billion on development activities related to PUD maturation.

Delivery commitments

We sell crude oil and natural gas from our producing operations under a variety of contractual obligations. Most contracts generally commit us to sell quantities based on production from specified properties, although some natural gas sales contracts specify delivery of fixed and determinable quantities, as discussed below.

In the past three years, we met our contractual delivery commitments, with the notable exceptions of Egypt, Trinidad and Tobago, and Malaysia. The delivery commitments for Egypt and Trinidad and Tobago have been renegotiated. In the period 2025-2027, we are contractually committed to deliver to third parties, joint ventures and associates a total of some 4,945 billion scf of natural gas from our subsidiaries, joint ventures and associates. The sales contracts contain a mixture of fixed and variable pricing formulae that are generally referenced to the prevailing market price for crude oil, natural gas or other petroleum products at the time of delivery.

In the period 2025-2027, we expect to meet our delivery commitments for almost all the areas in which they are carried, with an estimated 74% coming from PD, 4% through the delivery of gas that becomes available to us from paying royalties in cash, and 22% from the development of PUD as well as other new projects and purchases. In Malaysia Sabah, one of the third-party gas supply lines remains non-operational. New contracts for Domestic and LNG Markets were agreed and signed in 2024, resulting in no shortfall in the period 2025-2027.

Summary of proved oil and gas reserves of Shell subsidiaries and Shell share of joint ventures and associates (at December 31, 2024)

Based on average prices for 2024

	Crude oil and natural gas liquids (million barrels)	Natural gas (thousand million scf)	Synthetic crude oil (million barrels)	Total (million boe) [A]
Proved developed				
Europe	116	2,142	–	485
Asia	1,318	9,548	–	2,964
Oceania	43	4,786	–	868
Africa	216	1,072	–	401
North America	–	–	–	–
USA	285	226	–	324
Canada	–	–	741	741
South America	886	1,120	–	1,080
Total proved developed	2,864	18,894	741	6,863
Proved undeveloped				
Europe	43	454	–	121
Asia	405	5,243	–	1,309
Oceania	22	1,304	–	246
Africa	78	880	–	230
North America	–	–	–	–
USA	152	272	–	199
Canada	–	–	–	–
South America	325	1,895	–	652
Total proved undeveloped	1,025	10,048	–	2,757
Total proved developed and undeveloped				
Europe	159	2,596	–	606
Asia	1,723	14,791	–	4,273
Oceania	65	6,090	–	1,114
Africa	294	1,952	–	631
North America	–	–	–	–
USA	437	498	–	523
Canada	–	–	741	741
South America	1,211	3,015	–	1,732
Total [B]	3,889	28,942	741	9,620
Reserves attributable to non-controlling interest in Shell subsidiaries	–	–	370	370

[A] Natural gas volumes are converted into oil equivalent using a factor of 5,800 scf per barrel.
[B] See footnote C, D and E in the proved developed and undeveloped reserves table on page 47.

Exploration

Shell continues to explore for and mature hydrocarbons across our Integrated Gas and Upstream businesses. Exploration may result in discoveries of oil and gas that we can develop, helping maintain energy security and contributing to our strategy.

We use our integrated exploration, development and project commercial and technical expertise to mature these opportunities and actively manage non-technical risks. We benchmark our projects internally and externally to make sure our proposals are competitive. We review the maturation progress of our various opportunities and perform post-investment reviews to extract learnings for implementation in future opportunities.

In 2024, hydrocarbons were found in Brunei, Oman and the Gulf of America.

Key exploration portfolio developments

UK

The UK government ratified 13 licences that we were awarded in the 33rd Offshore Licensing Round (Shell interests 50% to 100%), of which three are non-operated (Shell interests 50%). We relinquished two Shell-operated licences (Shell interests 70% and 100%), and one non-operated licence (Shell interest 33%). We also acquired an additional 15% interest in two licences, bringing our interest in each to 65%.

Malaysia

We signed one exploration PSC for an operated offshore Sarawak block (Shell interest 50%).

Oman
We are in the process of relinquishing to the government our operated interest in two blocks (Shell interests 50% and 100%).

Egypt
The Egyptian government ratified an agreement in which we farmed out 40% of our participating interest in one operated concession (Shell retained interest 60%). We were directly awarded one concession in the West Nile Delta, which is pending government approval (Shell interest 100%, operator). We also relinquished five operated concessions (Shell interests 21% to 100%) and one non–operated concession (Shell interest 30%).

Gulf of America
In Lease Sale 261, we acquired 63 operated leases (Shell interest 100%). We sold our operated interest in 14 leases (Shell interests 55.88% to 66.66%) and non-operated interest in 32 leases (Shell interests 33.33%). We also relinquished 33 operated leases (Shell interests 50% to 100%) and 11 non-operated ones (Shell interests 25% to 40%).

Brazil
We farmed out 30% of our interest in four operated Santos Basin blocks, retaining an interest of 70% in each. The Brazilian government ratified 29 Petrobras-operated Pelotas Basin blocks (Shell interests 30%), which were secured in the 4th Permanent Offer Concession Bid-Round in 2023.

Trinidad and Tobago
Near the Eastern Coast area, we signed one PSC for one operated block (Shell interest 100%). We are also in the process of relinquishing to the government one operated licence (Shell interest 100%).

Other
In Mauritania, we relinquished two operated blocks (Shell interests 90% and 50%).

In São Tomé and Príncipe, we signed one operated exploration PSC (Shell interest 85%).

In Barbados, we relinquished one non-operated licence (Shell interest 40%) and we are in the process of relinquishing another non-operated one (Shell interest 40%).

In Uruguay, the government ratified one non-operated exploration block secured in the 2022 Open Uruguay Round (Shell interest 50%).

See "Supplementary information - oil and gas (unaudited)" on pages 313-332.

Location of oil and gas exploration and production activities

Location of oil and gas exploration and production activities [A] (at December 31, 2024)

	Exploration	Development and/or Production	Shell operator [B]
Europe			
Albania	●	●	●
Cyprus		●	
Germany		●	
Italy		●	
Netherlands	●	●	●
Norway	●	●	●
UK	●	●	●
Asia			
Brunei	●	●	●
China		●	●
Kazakhstan		●	
Malaysia	●	●	●
Oman	●	●	●
Qatar		●	●
Oceania			
Australia	●	●	●
Africa			
Egypt	●	●	●
Namibia	●		●
Nigeria	●	●	●
São Tomé and Príncipe	●		●
South Africa	●		●
Tanzania		●	●
Tunisia		●	
North America			
Barbados	●		
Canada	●	●	●
Mexico	●		●
USA	●	●	●
South America			
Argentina	●	●	●
Bolivia		●	
Brazil	●	●	●
Colombia	●	●	●
Suriname	●		●
Trinidad and Tobago	●	●	●
Uruguay	●		●
Venezuela		●	●

[A] Includes joint ventures and associates. Where a joint venture or an associate has properties outside its base country, those properties are not shown in this table.
[B] In several countries where "Shell operator" is indicated, Shell is the operator of some but not all exploration and/or production ventures.

Oil and gas production available for sale

Crude oil and natural gas liquids [A]

Thousand barrels

	2024		2023		2022	
	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates
Europe						
Italy	8,551	–	8,373	–	9,091	–
UK	22,910	–	23,458	–	23,905	–
Other [B]	2,730	526	2,493	524	3,722	621
Total Europe	34,191	526	34,324	524	36,718	621
Asia						
Brunei	1,148	15,987	1,271	14,395	3,256	16,282
Kazakhstan	37,744	–	38,765	–	29,667	–
Malaysia	11,763	–	12,630	–	16,759	–
Oman	86,235	–	82,849	–	82,006	–
Russia	–	–	–	–	10,955	1,963
Other [B]	24,068	7,392	25,240	7,443	24,965	7,498
Total Asia	160,958	23,379	160,755	21,838	167,608	25,743
Oceania						
Australia	12,775	–	10,370	–	9,391	–
Total Oceania	12,775	–	10,370	–	9,391	–
Africa						
Nigeria	39,758	–	37,137	–	27,554	–
Other [B]	978	–	1,084	–	1,855	–
Total Africa	40,736	–	38,221	–	29,409	–
North America						
USA	108,090	–	112,912	–	121,690	–
Canada	538	–	597	–	687	–
Total North America	108,628	–	113,509	–	122,377	–
South America						
Argentina	15,610	–	12,152	627	9,023	2,587
Brazil	133,355	–	136,825	–	127,862	–
Other [B]	1,240	–	1,425	–	1,583	–
Total South America	150,205	–	150,402	627	138,468	2,587
Total	507,493	23,905	507,581	22,989	503,971	28,951

[A] Reflects 100% of production of subsidiaries except in respect of production-sharing contracts (PSCs), where the figures shown represent the entitlement of the subsidiaries concerned under those contracts.
[B] Comprises countries where production was lower than 10,100 thousand barrels or where specific disclosures are prohibited.

Synthetic crude oil

Thousand barrels

	2024	2023	2022
	Shell subsidiaries	Shell subsidiaries	Shell subsidiaries
North America - Canada	18,548	19,102	16,949

Natural gas [A]

Million standard cubic feet

	2024		2023		2022	
	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates
Europe						
Netherlands	–	37,601	–	55,351	–	133,210
Norway	176,629	–	150,318	–	174,523	–
UK	61,098	–	70,585	–	69,647	–
Other [B]	36,570		38,774	–	45,159	–
Total Europe	274,297	37,601	259,677	55,351	289,329	133,210
Asia						
Brunei	15,276	144,410	13,531	136,684	15,328	138,007
China	39,592	–	48,170	–	56,008	–
Kazakhstan	75,668	–	75,521	–	57,932	–
Malaysia	219,485	–	173,638	–	200,249	–
Oman	83,520	–	55,675	–	–	–
Russia	–	–	–	–	2,085	37,897
Other [B]	354,653	118,375	369,125	118,252	378,313	118,435
Total Asia	788,194	262,785	735,660	254,936	709,915	294,339
Oceania						
Australia	736,482	39,281	700,248	29,773	693,293	22,577
Total Oceania	736,482	39,281	700,248	29,773	693,293	22,577
Africa						
Egypt	27,737	–	21,434	–	49,618	–
Nigeria	129,533	–	96,967	–	118,032	–
Other [B]	3,022	–	3,423	–	11,966	–
Total Africa	160,292	–	121,824	–	179,616	–
North America						
USA	100,971	–	104,079	–	112,560	–
Canada	152,576	–	137,660	–	122,753	–
Total North America	253,547	–	241,739	–	235,313	–
South America						
Bolivia	33,453	–	35,432	–	40,360	–
Brazil	66,534	–	71,162	–	73,975	–
Trinidad and Tobago	159,937	–	199,877	–	186,150	–
Other [B]	17,942	–	14,204	857	12,912	2,227
Total South America	277,866	–	320,675	857	313,397	2,227
Total	2,490,678	339,667	2,379,823	340,917	2,420,863	452,353

[A] Reflects 100% of production of subsidiaries except in respect of PSCs, where the figures shown represent the entitlement of the subsidiaries concerned under those contracts.
[B] Comprises countries where production was lower than 41,795 million scf or where specific disclosures are prohibited.

Average realised price by geographical area

Crude oil and natural gas liquids

$/barrel

	2024		2023		2022	
	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates
Europe	70.82	76.61	77.19	79.10	94.52	91.26
Asia	76.13	79.77	76.57	82.24	88.69	100.81
Oceania	63.98	–	58.31	–	78.37	–
Africa	79.63	–	84.33	–	104.84	–
North America - USA	74.07	–	75.07	–	92.89	–
North America - Canada	38.52	–	46.45	–	62.10	–
South America	71.85	–	71.93	67.98	85.84	71.21
Total	74.04	79.70	75.12	81.75	90.06	97.80

Synthetic crude oil

$/barrel

	2024	2023	2022
	Shell subsidiaries	Shell subsidiaries	Shell subsidiaries
North America - Canada	68.35	69.26	86.93

Natural gas

$/thousand scf

	2024		2023		2022	
	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates
Europe	12.76	9.63	17.47	18.89	27.24	39.11 [A]
Asia	2.62	7.23	2.84	7.60	3.74	10.88
Oceania	10.47	6.40	11.05	6.23	13.21	6.75
Africa	3.02	–	3.25	–	7.08	–
North America - USA	3.50	–	3.74	–	8.46	–
North America - Canada	1.19	–	2.25	–	4.08	–
South America	4.13	–	5.10	3.69	8.71	3.90
Total	6.47	7.44	7.40	9.78	10.88	17.59 [A]

[A] As revised, following a reassessment.

Average production cost by geographical area

Crude oil, natural gas liquids and natural gas [A]

$/boe

	2024		2023		2022	
	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates
Europe	17.05	28.54	20.93	25.33	24.83	12.25
Asia	6.33	9.10	6.35	9.64	6.75	8.06
Oceania	7.85	19.49	9.01	21.23	10.32	24.97
Africa	11.95	–	11.12	–	13.66	–
North America - USA	10.11	–	9.62	–	11.03	–
North America - Canada	9.30	–	9.70	–	11.15	–
South America	7.51	–	7.36	9.03	6.91	7.74
Total	8.74	11.60	9.08	12.29	10.20	9.59

[A] Natural gas volumes are converted into oil equivalent using a factor of 5,800 scf per barrel.

Synthetic crude oil

$/barrel

	2024	2023	2022
	Shell subsidiaries	Shell subsidiaries	Shell subsidiaries
North America - Canada	17.00	19.47	23.05

Marketing

Marketing comprises the Mobility, Lubricants, and Sectors and Decarbonisation businesses. Mobility operates Shell's retail network, including electric vehicle charging services and the wholesale commercial fuels business, which provides fuels for transport, industry and heating. The Lubricants business produces, markets and sells lubricants for road transport, and machinery used in manufacturing, mining, power generation, agriculture and construction. The Sectors and Decarbonisation business sells fuels, speciality products and services including low-carbon energy solutions to commercial customers including the aviation, marine, and agricultural sectors.

1.9
Segment earnings ($ billion)
(2023: 3.1)

3.9
Adjusted Earnings ($ billion)
(2023: 3.3)

7.4
Cash flow from operating activities ($ billion)
(2023: 5.6)

2,843
Marketing sales volumes (thousand b/d)
(2023: 3,045)

Our Marketing business grew as a result of higher margins in fuels and lubricants as we focused on high-value customers and profitable market segments. We have been the leading finished lubricants supplier in the world for 18 years, according to Kline & Company data for 2023. Mobility continued to focus on key markets and we completed the sale of Shell Pakistan. We have also installed more than 70,000 electric vehicle public charge points globally achieving yet another aim one year ahead of schedule. As an example of our focus on discipline, we have paused on-site construction work at our planned biofuels facility in Rotterdam to address project delivery and ensure future competitiveness. See "Outlook" on pages 16-17 for our Capital Markets 2025 investor update.

Business conditions

For the business conditions relevant to Marketing, see "Market overview" on pages 28-30.

Financial delivery

Earnings 2024-2023

Segment earnings decreased by $1,163 million compared with 2023. This reflected higher Marketing margins (increase of $483 million) including higher unit margins in Lubricants and Mobility. This was partly offset by lower Sectors and Decarbonisation margins. Segment earnings also reflected lower operating expenses (decrease of $449 million). These were partly offset by unfavourable tax movements ($157 million) and higher depreciation charges (increase of $142 million). The 2024 segment earnings also included net impairment charges and reversals of $1,423 million, mainly related to an asset in the Netherlands, net losses of $386 million related to the sale of assets and charges of $215 million related to redundancies and restructuring. These charges are part of identified items and compare with the full year 2023, which included net impairment charges and reversals of $466 million, and charges of $113 million related to redundancies and restructuring, partly offset by gains of $298 million related to indirect tax credits.

Adjusted Earnings increased by $573 million, compared with 2023, as a result of the following:

- Mobility (including wholesale commercial fuels) Adjusted Earnings were $392 million higher, mainly as a result of higher unit margins and lower operating expenses. This was partly offset by higher depreciation and higher taxes;
- Lubricants Adjusted Earnings were $329 million higher, mainly because of higher margins; and
- Sectors and Decarbonisation Adjusted Earnings were $148 million lower, mainly because of lower earnings in joint ventures partly offset by lower operating expenses.

Prior year earnings summary

Segment earnings in 2023 were 33% higher than in 2022, reflecting higher margins (increase of $1,482 million), including higher unit margins in Mobility, higher margins in Lubricants because of lower feedstock costs, and higher volumes in Sectors and Decarbonisation.

These increases were partly offset by higher operating expenses (increase of $730 million) and higher depreciation charges (increase of $267 million), mainly due to asset acquisitions.

* Non-GAAP measure (see page 445).

Key metrics [A]

	$ million, except where indicated		
	2024	2023	2022
Segment earnings*[B]	1,894	3,057	2,292
Identified items	(1,991)	(254)	(612)
Adjusted Earnings* [B]	3,885	3,312	2,905
Adjusted EBITDA* [B]	7,476	6,337	5,613
Cash flow from operating activities	7,363	5,561	3,810
Cash capital expenditure*	2,445	5,790	4,978
Marketing sales volumes (thousand b/d)	2,843	3,045	3,043

[A] See Note 7 to the "Consolidated Financial Statements" which includes an explanation of the reporting segment changes applicable from 2024.
[B] Segment earnings, Adjusted Earnings, and Adjusted EBITDA are presented on a current cost of supplies basis.

Segment earnings in 2023 included impairment charges of $466 million and charges of $113 million related to redundancy and restructuring, partly offset by gains of $298 million related to indirect tax credits. These charges and gains are part of identified items and compare with 2022, which included net impairment charges and reversals of $321 million; net losses of $122 million related to the sale of assets; and provisions for onerous contracts of $62 million.

Adjusted Earnings increased by $407 million compared with 2022, as a result of the following:

- Mobility (including wholesale commercial fuels) Adjusted Earnings were $73 million lower, mainly as a result of higher operating expenses and higher depreciation. This was partly offset by better margins;
- Lubricants Adjusted Earnings were $339 million higher, mainly because of higher margins due to lower feedstock costs; and
- Sectors and Decarbonisation Adjusted Earnings were $141 million higher, mainly because of increased volumes and higher earnings in joint ventures.

Cash flow from operating activities

Cash flow from operating activities in 2024 was primarily driven by Adjusted EBITDA, working capital inflows of $998 million, and dividends (net of profits) from joint ventures and associates of $262 million. These inflows were partly offset by tax payments of $562 million, non-cash cost of supplies adjustment of $254 million, and outflows from the timing impact of $221 million in payments related to emission certificates and biofuel programmes.

Cash capital expenditure

Cash capital expenditure* of $2.4 billion in 2024 reflected $0.8 billion in low-carbon energy solutions, compared with $3.3 billion in 2023.

Cash capital expenditure in low-carbon energy solutions was higher in 2023, mainly due to the acquisition of Nature Energy and the expansion of our Mobility electric vehicle charging business.

Our cash capital expenditure* is expected to be in the range of $2-3 billion in 2025.

Operational performance

Marketing sales
Marketing sales volumes, which comprise hydrocarbon sales, decreased compared with 2023. This was mainly as a result of reduced sales volumes in Mobility because of our focus on value over volume.

Number of electric vehicle charge points
In 2024, the number of electric vehicle charge points owned or Shell-branded was almost 73,000 compared with 54,000 in 2023.

Strategic progress

Portfolio and business developments
Significant portfolio and business developments:
- In July 2024, we announced that we had paused on-site construction work at the biofuels facility at the Shell Energy and Chemicals Park Rotterdam in the Netherlands to assess the most commercial way forward for the project.

Business and property
Mobility
Shell Mobility is where we connect with individual customers on a personal level. Shell Mobility is one of the world's largest mobility retailers by number of sites, with more than 44,000 Shell-branded mobility sites, including service stations, in more than 80 markets at the end of 2024. We operate different models across these markets, from full ownership of sites to brand licensing agreements. In line with our strategy to focus on markets that provide high returns on investment, we are continuing with our plan to divest around 500 low-return Shell-owned sites (including joint ventures) each year until 2025. The sale of Shell Pakistan in 2024 has helped us achieve our aim.

Every day, around 33 million retail customers visit Shell-branded mobility sites for a range of quality fuels, electric vehicle charging, and convenience and non-fuel products and services. Through Shell Fleet Solutions, our business customers can obtain fuel cards, road services and carbon-offset offers, among other products and services.

We are expanding our convenience and non-fuel retail offer to cater to our customers' needs. At many of our sites, we offer convenience items, including beverages and fresh food, and services, such as lubricant changes and car washes. At the end of 2024, Shell operated 13,000 convenience stores worldwide. We have upgraded more than 2,500 stores with our Shell Café premium fresh coffee and food offer since launching in 2021.

Low-carbon products and services
Shell Mobility offers customers lower-emission products and services, including biofuels and electric vehicle charging. We are focusing on growing our presence in China, Europe and the USA. At the end of 2024, we had almost 73,000 public charge points globally at Shell forecourts, on-street locations, mobility hubs and other sites, such as supermarkets. This was an increase from around 54,000 at the end of 2023. As part of our value over volume focus, we no longer set a volumetric target for the number of charge points by 2030.

Shell's global electric vehicle charging business is not yet profitable. However, we remain committed to investing in this sector as we anticipate future profitability. The timeline and extent of this profitability will be influenced by factors, such as network accessibility, market competition, customer demand, advancements in cost-related technologies and supportive government policies.

As we work to provide more low-carbon alternatives to our customers, we also continue to develop traditional fuels for drivers of internal combustion engine vehicles. Aided by our partnership with Scuderia Ferrari, we have concentrated on developing fuels with special formulations designed to clean engines and improve performance. An example of this is Shell V-Power. We sold fuels under the Shell V-Power brand in 72 markets in 2024.

Partnering with Ferrari in motorsport
We are the lead technical partner to the Scuderia Ferrari F1™ team, with the partnership being one of the longest and most successful in motorsport. The partnership is the ultimate test bed for our products, challenging them to perform in some of the most extreme conditions and ensuring our customers are getting the very best. In October 2024, a multi-year renewal was announced. Taking effect on January 1, 2026, the partnership will encompass Scuderia Ferrari HP, Ferrari Hypercar and the Ferrari Challenge Series. We are helping to shape the future of fuels by supporting Scuderia Ferrari with the development of an advanced sustainable race fuel for the 2026 F1™ World Championship season. The fuel will meet FIA requirements of achieving greenhouse gas emissions savings, relative to fossil-fuel-derived petrol, of at least 65%.

Photo: Imagery of Scuderia Ferrari HP driver Charles Leclerc driving at the 2024 Singapore Grand Prix, Round 18.

Shell Commercial Road Transport (CRT) is also working to help drive the decarbonisation of the transport sector by providing fuels, lubricants and digital services to customers with heavy-duty vehicles in their fleets. We have a public electric vehicle charging facility for trucks in Hamburg, Germany, which has four fast-charging stations.

We also offer drivers using heavy-duty LNG-fuelled trucks access to Shell-operated and partner networks in Europe. We have LNG refuelling sites in Austria and Hungary.

Photo: A heavy-duty LNG-fuelled truck on Shell and IVECO's "On the road to net-zero emissions" bioLNG tour of Europe in 2023.

In April 2024, we opened our bioLNG liquefaction plant at the Shell Energy and Chemicals Park Rheinland. This can produce 100,000 tonnes of bioLNG per annum, which will help around 5,000 LNG trucks reduce their carbon emissions. Since 2022, our customers in the Netherlands have been able to opt for a bioLNG blend.

Trading and Supply
Through our main trading and supply offices in London, Houston, Singapore and Rotterdam, we trade low-carbon fuels, refined products, chemical feedstocks and environmental products. We trade in physical and financial contracts, and have wholesale commercial fuel activities. Shell Wholesale Commercial Fuels provides fuels for transport, industry and heating – from reliable main-grade fuels to premium products. With about 180 Shell and joint-venture (including pipeline) terminals and operating in around 25 countries, our infrastructure is well positioned to make deliveries around the world.

Lubricants
Shell Lubricants has been the number one global finished lubricants supplier in terms of market share for 18 consecutive years, according to Kline & Company data for 2023. Shell lubricants are available across more than 175 markets for passenger cars, motorcycles, trucks, coaches, and machinery used in manufacturing, mining, power generation, agriculture and construction.

In addition to making premium lubricants for conventional vehicles, we also make Shell E-fluids for electric vehicles from base oils made from natural gas at Pearl gas-to-liquids (GTL) plant in Qatar.

Our global lubricants supply chain has a network of 32 lubricants blending plants, four base oil plants (one of which we operate), 10 grease plants and five GTL base oil storage hubs.

Sectors and Decarbonisation
The Sectors and Decarbonisation business sells fuels, speciality products and services including low-carbon energy solutions to a broad range of commercial customers including the aviation, marine, and agricultural sectors.

Shell Bitumen supplies customers across several markets and provides enough bitumen to resurface 500 kilometres of road lanes every day.

Shell Sulphur Solutions manages the value chain of sulphur from refining to marketing. It provides sulphur for use in applications, such as fertiliser, mining and chemicals. It also licenses Shell Thiogro technologies to create sulphur-enhanced fertilisers.

Aviation
Shell Aviation provides aviation fuel, lubricants and low-carbon solutions globally. Shell's Avelia platform is one of the world's first blockchain-powered sustainable aviation fuel (SAF) book-and-claim solutions for business travel. It is designed to help trigger demand for SAF – increased demand would help encourage investment in SAF production. Wider production and supply, driven by increased demand, could help lower the price point for these fuels. Since launch, Avelia has injected more than 18 million gallons of SAF into the fuel network at nine airports around the world and supported more than 36 airlines and corporate customers in accessing the environmental attributes of SAF.

Marine
Shell Marine serves customers whose vessels range from ocean-going tankers to fishing boats. We supply seven types of fuel, more than 300 grades of lubricants and low-carbon solutions. Our global supply network covers key bunkering locations. Shell Marine also supplies chemical products, and marine-related technical and digital services. Our lubricants are used in around 10,000 vessels and are available in more than 700 ports across more than 50 countries.

Biofuels
Shell and the non-operated joint venture Raízen (Shell interest 44%) are, together, one of the world's largest blenders and distributors of biofuels. Biofuels, along with natural gas, will play a key role in reducing emissions from heavy-duty transport.

In 2024, around 10.37 billion litres of biofuels (2023: 9.7 billion litres) were blended into Shell's sale of fuels worldwide, which includes the Shell share of sales made by Raízen. Raízen produced, on a 100% basis, around 3.16 billion litres of ethanol in 2024 (2023: 3.12 billion litres). The cellulosic ethanol plant at Raízen's Costa Pinto mill in Brazil produced 61 million litres of second-generation ethanol in 2024 (2023: 30 million litres). Expansion began in 2024, with the start-up at a new plant and commissioning of two further plants at the end of 2024. The majority of the ethanol and cellulosic ethanol produced by Raízen is sold unblended to international customers in markets such as the USA, Europe and Japan. Raízen also produced around 5.1 million tonnes of sugar from sugar cane (2023: 5.8 million tonnes).

Renewable natural gas (RNG), also known as biogas or biomethane, is gas derived from processing organic waste in a controlled environment until it is fully interchangeable with conventional natural gas.

Nature Energy, which Shell acquired in 2023, is one of Europe's largest producers of RNG. In 2024, Nature Energy opened its first biogas plant in France. The Sécalia plant is operated in partnership with the Dijon Céréales consortium of 150 farmers. It is France's largest renewable gas plant with annual production of 230 GWh of biogas. Together with its partners, Nature Energy also owns and operates 13 biogas plants in Denmark and one in the Netherlands.

In March 2024, we started operations at Shell Downstream Bovarius, which is one of two facilities at the Bettencourt Dairies in Wendell, Idaho, USA, where we are converting dairy manure to RNG. Bovarius is expected to produce around 400,000 MMBtu a year of RNG. The second facility, Shell Downstream Friesian, is expected to produce around 350,000 MMBtu a year of RNG and operations are expected to start in 2025.

Marketing data tables

Branded mobility locations [A]

	2024	2023	2022
Europe	8,227	8,346	8,260
Asia [B]	7,742	10,824	10,470
Oceania [B]	1,047	1,087	1,083
Africa	2,994	2,917	2,815
Americas [C]	24,099	23,830	23,597
Total [D]	44,109	47,004	46,225

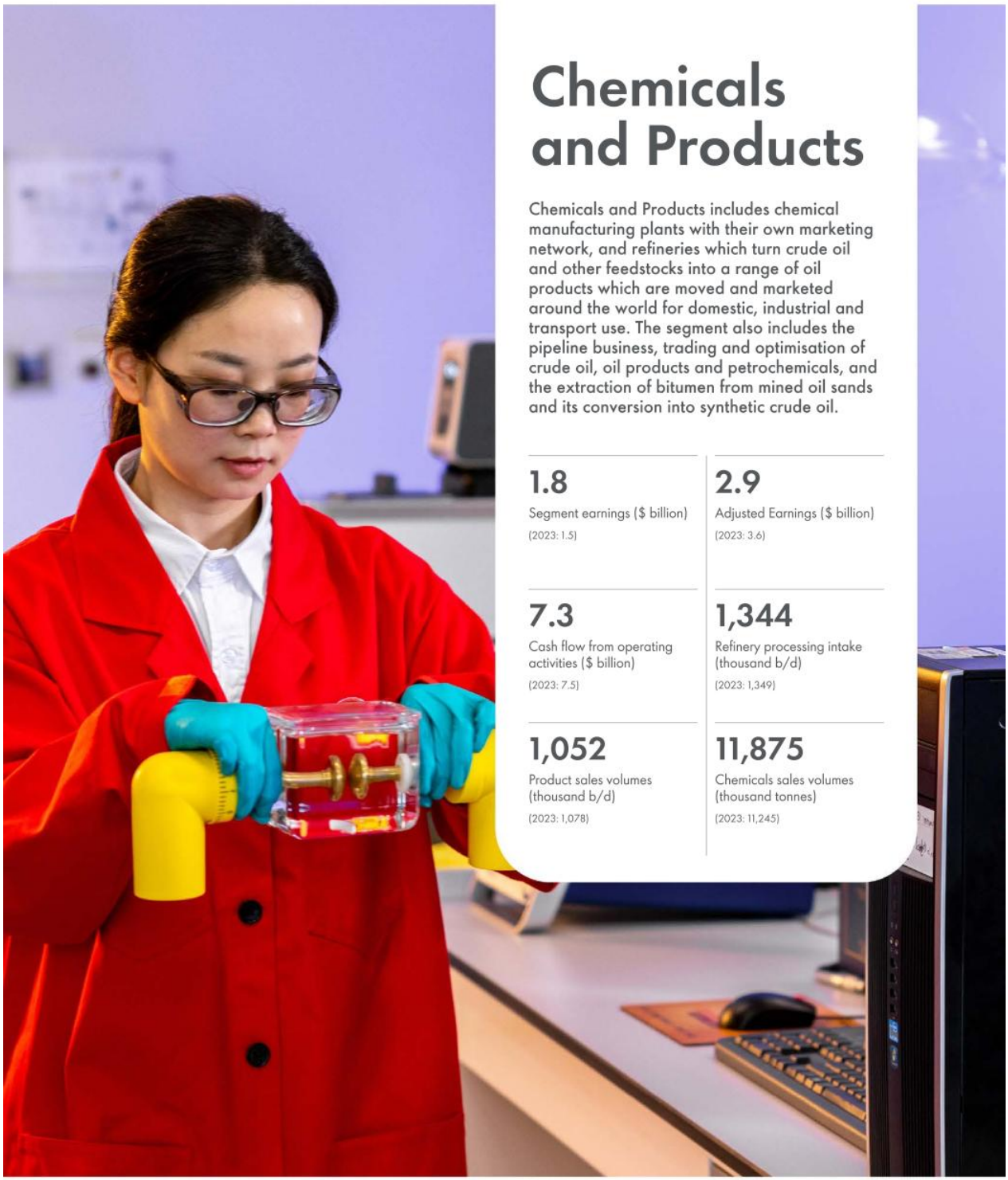
[A] Includes different models, from full-ownership retail sites, and sites operated by joint ventures, through to trademark licensing agreements, and excludes sites closed for more than six months.
[B] Asia includes Turkey; Oceania includes French Polynesia, Guam, Palau and New Caledonia. Decrease in sites is primarily due to exit from Japan market.
[C] 2024 includes around 8,138 sites operated by the Raízen joint venture.
[D] 2024 includes 8,030 sites operated through trademark licensing agreements.

Marketing sales volumes [A][B][C][D]

Thousand b/d

	2024	2023	2022
Europe			
Mobility	611	626	614 [E]
Lubricants	16	16	16
Sectors and Decarbonisation	192	186	176 [E]
Total	819	828	806
Asia			
Mobility	594	607	635 [E]
Lubricants	40	39	38
Sectors and Decarbonisation	104	138	113 [E]
Total	738	784	786
Africa			
Mobility	63	74	86 [E]
Lubricants	2	3	3
Sectors and Decarbonisation	6	9	8 [E]
Total	71	86	97
Americas			
Mobility	790	919	938 [E]
Lubricants	23	24	25
Sectors and Decarbonisation	402	404	390 [E]
Total	1,215	1,347	1,354
Total product sales			
Mobility	2,057	2,226	2,274 [E]
Lubricants	82	82	83
Sectors and Decarbonisation	704	737	686 [E]
Total	2,843	3,045	3,043
Gasolines	1,282	1,321	1,307
Kerosenes	391	386	345
Gas/Diesel oils	960	1,012	1,057
Fuel oil	22	23	24
Other products [F]	188	303	310
Total	2,843	3,045	3,043

[A] Excludes deliveries to other companies under reciprocal sale and purchase arrangements, that are in the nature of exchange contracts.
[B] Includes the Shell share of Raízen's sales volumes and other joint ventures' sales volumes.
[C] Excludes sales volumes from markets where Shell operates under trademark licensing agreements.
[D] From the first quarter 2024, wholesale commercial fuels forms part of Mobility with inclusion in the Marketing segment (previously Chemicals & Products segment). Prior period comparatives have been revised to conform with current year presentation with an offsetting impact between Marketing and Chemicals and Products segments.
[E] Previously reported within the Sectors and Decarbonisation class of business, with effect from July 1, 2023, the Commercial Road Transport business (CRT) is part of Mobility and Customer Operations is part of Lubricants. Comparative information has been revised.
[F] Includes LPG sales volumes of 26 thousand b/d (2023: 29 thousand b/d; 2022: 33 thousand b/d).



Chemicals and Products

Chemicals and Products includes chemical manufacturing plants with their own marketing network, and refineries which turn crude oil and other feedstocks into a range of oil products which are moved and marketed around the world for domestic, industrial and transport use. The segment also includes the pipeline business, trading and optimisation of crude oil, oil products and petrochemicals, and the extraction of bitumen from mined oil sands and its conversion into synthetic crude oil.

1.8
Segment earnings ($ billion)
(2023: 1.5)

2.9
Adjusted Earnings ($ billion)
(2023: 3.6)

7.3
Cash flow from operating activities ($ billion)
(2023: 7.5)

1,344
Refinery processing intake (thousand b/d)
(2023: 1,349)

1,052
Product sales volumes (thousand b/d)
(2023: 1,078)

11,875
Chemicals sales volumes (thousand tonnes)
(2023: 11,245)

We announced the decision to stop processing crude oil into petrol, jet fuel and diesel at our Wesseling site in Germany, and to produce premium oils instead. We also opened our first bioLNG liquefaction plant in Germany. In Chemicals, we saw improved utilisation thanks to the ramp-up of operations at Shell Polymers Monaca, USA, and we took a final investment decision to expand our CSPC petrochemicals joint venture with CNOOC in Daya Bay, China. See "Outlook" on pages 16-17 for our Capital Markets 2025 investor update.

Business conditions

For the business conditions relevant to Chemicals and Products, see "Market overview" on pages 28-30.

Financial delivery

Earnings 2024-2023

Segment earnings in 2024 increased by $275 million compared with 2023. This reflected lower operating expenses (a decrease of $812 million) and higher Chemicals margins (increase of $602 million). These were partially offset by lower Products margins (a decrease of $1,832 million), mainly driven by lower refining margins and unfavourable tax movements ($248 million). Segment earnings in 2024 also included:

- net impairment charges and reversals of $1,176 million mainly relating to assets in Singapore;
- charges of $142 million related to redundancy and restructuring; and
- unfavourable movements of $86 million relating to an accounting mismatch due to fair value accounting of commodity derivatives, partly offset by favourable deferred tax movements of $114 million.

These charges and movements are part of identified items, and compare with the full year 2023 which included net impairment charges and reversals of $2,195 million mainly relating to the Chemicals assets in Singapore, and charges of $82 million related to redundancy and restructuring partly offset by favourable movements of $214 million relating to an accounting mismatch due to fair value accounting of commodity derivatives.

In 2024, Adjusted Earnings from Chemicals accounted for (15)%, Refining for 34% and Trading and Optimisation including pipelines for 81%. The decrease in Adjusted Earnings of $683 million was driven by the following:

- Products Adjusted Earnings were $1,818 million lower than in 2023, mainly driven by lower refining and oil sands margins and unfavourable tax movements, higher depreciation partly offset by lower operating expenses.
- Chemicals negative Adjusted Earnings were $1,135 million lower than in 2023, mainly because of higher margins and lower operating expenses, and lower depreciation.

Prior year earnings summary

Segment earnings in 2023 were 66% lower than in 2022, reflecting lower Products margins (a decrease of $1,545 million), mainly driven by lower refining margins and partly offset by higher margins from trading and optimisation. The segment earnings also reflected higher depreciation charges (an increase of $543 million) due to the start-up of operations at Shell Polymers Monaca in the USA. These losses were partly offset by higher Chemicals margins (an increase of $612 million). Segment earnings in 2023 included the following:

- net impairment charges and reversals of $2,195 million, mainly related to the Chemicals assets in Singapore; and
- charges of $82 million related to redundancy and restructuring, partly offset by favourable movements of $214 million related to the fair value accounting of commodity derivatives.

* Non-GAAP measure (see page 445).

Key metrics [A]

	$ million, except where indicated		
	2024	2023	2022
Segment earnings*[B]	1,757	1,482	4,380
Identified items	(1,177)	(2,135)	(213)
Adjusted Earnings*[B]	2,934	3,617	4,592
Adjusted EBITDA*[B]	6,783	7,489	8,305
Cash flow from operating activities	7,253	7,513	11,472
Cash capital expenditure*	3,290	3,014	3,691
Chemicals manufacturing plant utilisation (%)	76%	68%	79%
Refinery utilisation (%)	85%	85%	86%
Refinery processing intake (thousand b/d)	1,344	1,349	1,402
Product sales volumes (thousand b/d)	1,052	1,078	1,160
Chemicals sales volumes (thousand tonnes)	11,875	11,245	12,281

[A] See Note 7 to the "Consolidated Financial Statements" which includes an explanation of the reporting segment changes applicable from 2024.
[B] Segment earnings, Adjusted Earnings, and Adjusted EBITDA are presented on a current cost of supplies basis.

These charges and gains are part of identified items and compare with 2022, which included:

- net impairment charges and reversals of $226 million;
- legal provisions of $149 million;
- unfavourable movements of $142 million related to the fair value accounting of commodity derivatives;
- tax charges relating to the EU solidarity contribution of $74 million; partly offset by gains of $210 million, related to the sale of assets; and
- gains of $104 million, related to the remeasurement of redundancy and restructuring costs.

In 2023, Adjusted Earnings from Chemicals accounted for (43)%, Refining for 67% and Trading and Optimisation including pipelines for 76%. The decrease in Adjusted Earnings of $975 million was driven by the following:

- Products Adjusted Earnings were $758 million lower than in 2022, mainly driven by lower refining and oil sands margins and partly offset by higher margins from Trading & Optimisation.
- Chemicals negative Adjusted Earnings were $217 million more than in 2022, mainly because of higher depreciation and operating expenses, partly offset by higher margins and Income from associates.

Cash flow from operating activities

Cash flow from operating activities in 2024 was primarily driven by Adjusted EBITDA, working capital inflows of $524 million, dividends (net of profits) from joint ventures and associates of $304 million and net cash inflows relating to commodity derivatives of $219 million. These inflows were partly offset by cash outflows relating to legal provisions of $215 million, tax payments of $146 million, cash outflows relating to the timing impact of payments relating to emission certificates and biofuel programmes of $114 million, and a non-cash cost of supplies adjustment of $109 million.

Shell's policy is to settle the inter-segment use of tax attributes between business segments. This settlement is usually made in cash but in certain instances there is no cash settlement. In 2024, the Integrated Gas segment's deferred tax assets ($974 million) were mainly used by the Upstream ($759 million) and Chemicals and Products ($183 million) segments, for which no cash settlement was made.

Cash capital expenditure

Cash capital expenditure* increased by $0.3 billion in 2024 to $3.3 billion mainly because of growth projects in China. Our cash capital expenditure* is expected to be around $3 billion in 2025.

Operational performance

Chemicals manufacturing plant utilisation

Utilisation is defined as the actual use of the plants as a percentage of the rated capacity. Chemicals manufacturing plant utilisation was 8 percentage points higher than in 2023, mainly due to economic optimisation in 2023. The increase was also driven by the ramp-up of Shell Polymers Monaca and lower unplanned maintenance in 2024.

Refinery utilisation

Utilisation is defined as the actual use of the plants as a percentage of the rated capacity. Refinery utilisation of 85% was in line with 2023.

Chemicals and Products sales

Chemicals sales volumes were 6% higher than in 2023, mainly due to higher polyethylene volumes partly offset by lower intermediate volumes.

Products sales volumes were 2% lower than in 2023 due to lower Trading sales volumes in Europe partly offset by increases in the USA and Asia.

Strategic progress

Portfolio and business developments

Significant portfolio and business developments:

- In January 2024, we took an FID to convert the hydrocracker of the Wesseling site at the Energy and Chemicals Park Rheinland in Germany into a production unit for Group III base oils.
- In May 2024, we agreed to sell our Energy and Chemicals Park in Singapore to CAPGC Pte. Ltd., a joint venture company between Chandra Asri Capital Pte. Ltd. and Glencore Asian Holdings Pte. Ltd. The transaction will transfer all of Shell's interests in Shell Energy and Chemicals Park Singapore to CAPGC [A].
- In June 2024, we took an FID for Polaris, a carbon capture project at the Shell Energy and Chemicals Park Scotford in Alberta, Canada. We also took an FID to proceed with the Atlas Carbon Storage Hub which will store CO_2 captured by the Polaris project.
- In January 2025, CNOOC and Shell Petrochemicals Company Limited (CSPC), a 50-50 joint venture between Shell Nanhai B.V and CNOOC Petrochemicals Investment Ltd, took an FID to expand its petrochemical complex in Daya Bay, Huizhou, south China.

Business and property

Energy and chemicals plants

We are repurposing our refineries into energy and chemicals parks to focus on meeting customers' low-carbon and sustainability needs. This is underway at Norco in the USA, Scotford in Canada, Rotterdam in the Netherlands and Rheinland in Germany. We continue to explore options for the former Convent Refinery in Louisiana, USA, which has been shut down, and we have agreed to sell our Energy and Chemicals Park in Singapore. As we transform our refineries, we are building new facilities or converting existing units to support low-carbon products, while dismantling units that do not deliver sustainable long-term value.

Chemicals

Products made from chemicals are used in everyday life, including in medical equipment, construction, transport, electronics, agriculture and sports. Our plants produce a range of base chemicals, including ethylene, propylene and aromatics, and intermediate chemicals, such as styrene monomer, propylene oxide, solvents, linear alpha olefins, detergent alcohols, ethylene oxide, ethylene glycol and polyethylene. We have the capacity to produce around 8.1 million tonnes of ethylene a year (including the Shell share of capacity entitlement (offtake rights) of joint ventures and associates, which may be different from nominal equity interest).

[A] Transaction subject to completion.

Our Pennsylvania chemical project, Shell Polymers Monaca, which commenced operations in November 2022, was not fully functional during 2023 due to operational and start-up challenges. The facility has since ramped up operations since the first quarter of 2024.

We are expanding our product portfolio to include chemicals made from circular feedstocks, and more intermediates and performance chemicals, such as polyethylene and polycarbonate.

We operate chemical plants worldwide and have a balance of locations, feedstocks and products. In 2024, we began production at our new pyrolysis oil upgrader at the Shell Chemicals Park Moerdijk in the Netherlands. The unit improves the quality of pyrolysis oil, a liquid made from hard-to-recycle plastic waste, and turns it into chemical feedstock. The plant has the capacity to process up to 50,000 tonnes of pyrolysis oil per year.

Products – Refining and Trading

Refining

We have interests in eight refineries, with a total capacity to process 1.6 million barrels of crude oil a day. The distribution of our refining capacity is 60% in Europe, 26% in the Americas and 14% in Asia.

In 2024, we took an FID to convert the hydrocracker of the Wesseling site at the Energy and Chemicals Park Rheinland in Germany into a production unit for Group III base oils. These mineral base oils have a very high viscosity index, which meets transport industry standards, and are produced with hydrocracking technology. The market for high-quality engine and transmission oils, as well as electric vehicle fluids and cooling fluids, some of which are made from these oils, is expected to grow. Crude oil processing will end at the Wesseling site in 2025 but continue at the Godorf site.

Photo: Barges at the Shell Energy and Chemicals Park Rheinland in Germany.

Trading and Supply

Through our main trading offices in London, Houston, Singapore and Rotterdam, we trade crude oil, low-carbon fuels, refined products, chemical feedstocks and environmental products. We trade in physical and financial contracts, lease storage and transportation capacities, and manage global shipping activities.

Shipping and Maritime enables the safe delivery of our contracts and this includes supplying feedstock for our refineries and chemical plants, and finished products such as gasoline, diesel and aviation fuel to our Marketing segment and customers.

Pipelines

We own and operate three tank farms across the USA through Shell Pipeline Company LP (Shell interest 100%). It transports around 1.5 billion barrels of crude oil, refined products and chemicals a year through around 5,500 kilometres of pipelines in the Gulf of America and nine US states. Our non-operated ownership interests provide another 13,000 kilometres of pipeline.

Our pipelines carry more than 40 types of crude oil and more than 20 grades of fuel and chemicals, including petrol, diesel, aviation fuel and chemicals including ethylene.

We own, operate, develop and acquire pipelines and other midstream and logistics assets. Our assets include interests in entities that own crude oil and refined products pipelines and terminals that serve as key infrastructure to:

- transport onshore and offshore crude oil production to US Gulf Coast and Midwest refining markets; and
- deliver refined products from those markets to major demand centres.

Our assets also include interests in entities that own natural gas and refinery gas pipelines that transport offshore natural gas to market hubs and deliver refinery gas from refineries and plants to chemical sites along the US Gulf Coast.

Oil Sands

Synthetic crude oil is produced by mining bitumen-saturated sands, extracting the bitumen and transporting it to a processing facility where hydrogen is added to make a wide range of feedstocks for refineries. The Athabasca Oil Sands Project (AOSP) in Alberta, Canada, includes the Albian Sands mining and extraction operations, the Scotford Upgrader and the Quest Carbon Capture and Storage (CCS) facility. Quest CCS captures about 1 million tonnes per year of CO_2 from the hydrogen manufacturing units within the upgrader. Since opening in 2015, Quest CCS has safely stored more than 9 million tonnes of CO_2.

We have a 50% interest in 1745844 Alberta Ltd. (formerly known as Marathon Oil Canada Corporation), which holds a 20% interest in the Athabasca Oil Sands Project.

Pursuant to our 2017 agreement with Canadian Natural Resources Limited, our remaining mining interest and associated synthetic crude oil reserves will be swapped for an additional 10% interest in the Scotford Upgrader and Quest CCS project. The transaction is expected to close by the end of the first half of 2025, subject to regulatory approvals.

Chemicals and Products data tables

The tables below reflect Shell subsidiaries and instances where Shell owns the crude oil or feedstocks processed by a refinery. Other joint ventures and associates are only included where explicitly stated.

Products sales volumes [A][B][C]

Thousand b/d

	2024	2023	2022
Europe	507	560	574
Asia	248	240	274
Africa	–	–	–
Americas	297	278	312
Total	1,052	1,078	1,160
Gasolines	141	154	264
Kerosenes	94	104	93
Gas/Diesel oils	321	346	291
Fuel oil	200	221	257
Other products [D]	296	252	256
Total	1,052	1,078	1,160

[A] Excludes deliveries to other companies under reciprocal sale and purchase arrangements, which are in the nature of exchanges. Sales of condensate are included.
[B] Certain contracts are held for trading purposes and reported net rather than gross. The effect in 2024 was a reduction in refining and trading sales of around 1,286 thousand b/d (2023: 1,202 thousand b/d; 2022: 1,197 thousand b/d).
[C] From the first quarter 2024, Wholesale Commercial Fuels forms part of Mobility with inclusion in the Marketing segment (previously Chemicals and Products segment). Prior period comparatives have been revised to conform with current year presentation with an offsetting impact between Marketing and Chemicals and Products segments.
[D] Includes LPG sales volumes of 54 thousand b/d (2023: 55 thousand b/d; 2022: 48 thousand b/d).

Cost of crude oil processed or consumed [A]

$/barrel

	2024	2023	2022
Total	77.97	71.13	84.39

[A] Includes Upstream and Integrated Gas margins on crude oil supplied by Shell subsidiaries, joint ventures and associates.

Crude distillation capacity [A]

Thousand b/stream day [B]

	2024	2023	2022
Europe	975	975	990
Asia	237	237	237
Africa	–	–	23
Americas	435	435	449
Total	1,646	1,646	1,698

[A] Average operating capacity for the year, excluding mothballed capacity.
[B] Stream day capacity is the maximum capacity with no allowance for downtime.

Crude oil processed [A]

Thousand b/d

	2024	2023	2022
Europe	742	732	715
Asia	165	168	184
Africa	–	–	16
Americas	359	322	353
Total	1,266	1,222	1,268

[A] Includes natural gas liquids, share of joint ventures and associates and processing for others.

Refinery processing intake [A]

Thousand b/d

	2024	2023	2022
Europe	742	764	763
Asia	166	171	184
Africa	–	–	16
Americas	437	414	439
Total	1,344	1,349	1,402

[A] Includes crude oil, natural gas liquids and feedstocks processed in crude distillation units and in secondary conversion units.

Refinery processing outturn [A]

Thousand b/d

	2024	2023	2022
Gasolines	486	489	477
Kerosenes	162	168	166
Gas/Diesel oils	506	516	512
Fuel oil	80	88	90
Other	186	149	193
Total	1,419	1,410	1,438

[A] Excludes own use and products acquired for blending purposes.

Manufacturing plants at December 31, 2024

Refineries

Thousand barrels/stream day, 100% capacity [B]

	Location	Asset class	Shell interest (%) [A]	Crude distillation capacity	Thermal cracking/ visbreaking/ coking	Catalytic cracking	Hydro-cracking
Europe							
Germany	Miro [C]	■	32	313	40	96	–
	Rheinland	■ ●	100	339	32	–	87
	Schwedt [C]	■	38	234	46	57	–
Netherlands	Pernis	■ ●	100	447	–	53	104
Asia							
Singapore	Pulau Bukom[D]	■ ●	100	237	–	–	61
Americas							
Argentina	Buenos Aires [E]	● ◆	44	112	14	22	–
Canada							
Alberta	Scotford	■	100	100	–	–	83
Ontario	Sarnia	◆	100	85	5	21	10
USA							
Louisiana	Norco	■	100	250	29	119	44

[A] Shell interest is rounded to the nearest whole percentage point; Shell share of production capacity may differ.
[B] Stream day capacity is the maximum capacity with no allowance for downtime.
[C] Not operated by Shell.
[D] Refinery has been classified as held for sale.
[E] Owned through Raízen joint venture.

■ Integrated refinery and chemical complex
● Refinery complex with cogeneration capacity
◆ Refinery complex with chemical unit(s)

Chemicals data tables

The tables below reflect Shell subsidiaries and instances where Shell owns the crude oil or feedstocks processed by a refinery. Other joint ventures and associates are only included where explicitly stated.

Ethylene capacity [A]

Thousand tonnes/year

	2024	2023	2022
Europe	1,713	1,710	1,710
Asia	2,542	2,542	2,542
Americas [B]	3,821	3,821	3,821
Total	8,076	8,073	8,073

[A] Includes the Shell share of capacity entitlement (offtake rights) of joint ventures and associates, which may be different from nominal equity interest. Nominal capacity is quoted at December 31, 2024.
[B] Shell Polymers Monaca, which commenced operations in November 2022, was not fully functional during 2023 due to operational and start-up challenges. The facility has since ramped up operations since the first quarter of 2024.

Chemicals sales volumes [A]

Thousand tonnes/year

	2024	2023	2022
Europe			
Base chemicals	2,113	1,741	2,809
Intermediates and other chemical products	1,889	1,848	1,955
Total	4,001	3,589	4,764
Asia			
Base chemicals	1,198	1,190	825
Intermediates and other chemical products	1,744	1,917	2,147
Total	2,943	3,107	2,972
Americas			
Base chemicals	1,366	1,508	2,125
Intermediates and other chemical products	3,566	3,041	2,420
Total	4,932	4,549	4,545
Total product sales			
Base chemicals	4,677	4,439	5,759
Intermediates and other chemical products	7,199	6,806	6,522
Total	11,875	11,245	12,281

[A] Excludes feedstock trading and by-products.

Major chemical plants [A]

		Thousand tonnes/year, Shell share capacity [B]					
	Location	Ethylene	Polyethylene	Styrene monomer	Ethylene glycol	Higher olefins [C]	Additional products
Europe							
Germany	Rheinland	324	–	–	–	–	A
Netherlands	Moerdijk	974	–	817	154	–	A, I
UK	Mossmorran [D]	415	–	–	–	–	O
Asia							
China	Nanhai [D]	1,100	605	645	415	–	A, I
Singapore	Jurong Island [E][F]	281	40	1,069	924	–	A, I, P, O
	Pulau Bukom [F]	1,161	–	–	–	–	A
Americas							
Canada	Scotford	–	–	475	462	–	A, I
USA	Monaca	1,500	1,600	–	–	–	
	Deer Park	889	–	–	–	–	A, I
	Geismar	–	–	–	400	1,390	I
	Norco	1,432	–	–	–	–	A
Total		8,076	2,245	3,006	2,355	1,390	

[A] Major chemical plants are large integrated chemical facilities, typically producing a range of chemical products from an array of feedstocks.
[B] Shell share of capacity of subsidiaries, joint arrangements and associates (Shell- and non-Shell-operated), excluding capacity of the Infineum additives joint ventures.
[C] Higher olefins are linear alpha and internal olefins (products range from C4 to C2024).
[D] Not operated by Shell.
[E] The polypropylene and olefins production mentioned refers to Shell share of capacity of our non-operated joint ventures Petchem Corporation of Singapore (PCS) and The Polyolefin Company (TPC) which are on Jurong Island.
[F] The plant has been classified as held for sale.

A Aromatics, lower olefins
I Intermediates
P Polypropylene
O Other

Other Chemicals locations [A]

	Location	Products
Europe		
Germany	Karlsruhe	A
	Schwedt	A
Netherlands	Rotterdam	A, I, O
Americas		
Argentina	Buenos Aires	I
Canada	Sarnia	A, I

[A] Other chemical locations reflect locations with smaller chemical units, typically serving more local markets.

A Aromatics, lower olefins
I Intermediates
O Other

Progressing CCS to help decarbonise our and customers' activities

As part of our strategy to deliver more value with less emissions, we are investing in carbon capture and storage (CCS) projects to help decarbonise our own operations, as well as those of our customers.

In June 2024, we took a final investment decision to proceed with the Polaris carbon capture project (Shell interest 100%) at the Shell Energy and Chemicals Park Scotford in Alberta, Canada. Polaris is designed to capture an estimated 650,000 tonnes of CO_2 annually. We also took a final investment decision to proceed with the Atlas Carbon Storage Hub which will store the CO_2 captured by the Polaris project.

Both Polaris and Atlas are expected to begin operations towards the end of 2028. A future additional phase of Atlas that could potentially store carbon for the partners and other companies is subject to a future possible investment decision.

Polaris and Atlas will build on the success of the Quest Carbon Capture and Storage (CCS) facility (Shell interest 10%) at Scotford, which has captured and stored more than 9 million tonnes of CO_2 since 2015 (as at the end of 2024). The CO_2 captured by Quest CCS from the hydrogen manufacturing units within the upgrader is stored in a saline aquifer more than 2 kilometres underground.

Northern lights shipments due in 2025

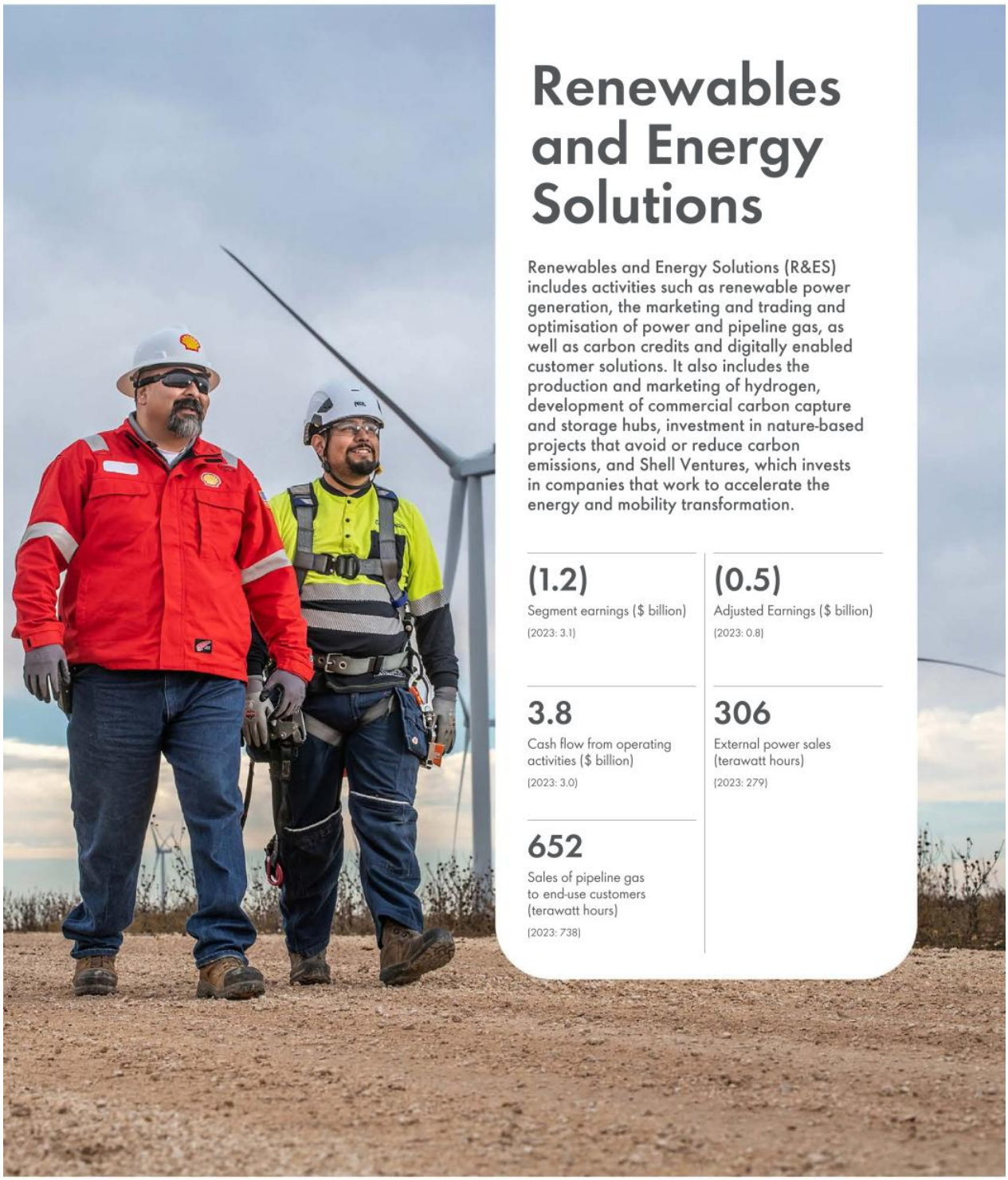
In September 2024, our Northern Lights joint venture in Norway (Shell interest 33.3%) with Equinor and TotalEnergies, completed the onshore and offshore facilities for the world's first project to offer commercial carbon transport and storage as a service. The first marine CO_2 shipments are expected in 2025.

Carbon dioxide captured by customers in industries that are difficult to decarbonise is liquefied, transported by ship to a receiving terminal on the Norwegian coast, then piped 100 km offshore for safe, permanent storage 2,600 metres under the North Sea. Agreements have already been signed with Yara, the crop nutrition company, and Ørsted, the renewable energy company, to transport and store CO_2 from production facilities in the Netherlands and Denmark respectively.

Northern Lights has the capacity to store around 1.5 million tonnes of CO_2 per year. It is part of the Norwegian government's Longship project to develop a decarbonisation value chain, from carbon capture to transport and storage, for companies in Norway and across Europe.

CCS hubs developed to offer CCS-as-a-service to our customers are reported in the Renewable and Energy Solutions segment. Where existing or future CCS projects may help to decarbonise our own assets, they will be reported in the segment where the asset sits.

1, 2. The Northern Lights receiving terminal in Norway. CO_2 is transported by ship, then piped 100 km offshore and stored 2,600 metres under the North Sea.



Renewables and Energy Solutions

Renewables and Energy Solutions (R&ES) includes activities such as renewable power generation, the marketing and trading and optimisation of power and pipeline gas, as well as carbon credits and digitally enabled customer solutions. It also includes the production and marketing of hydrogen, development of commercial carbon capture and storage hubs, investment in nature-based projects that avoid or reduce carbon emissions, and Shell Ventures, which invests in companies that work to accelerate the energy and mobility transformation.

(1.2)
Segment earnings ($ billion)
(2023: 3.1)

(0.5)
Adjusted Earnings ($ billion)
(2023: 0.8)

3.8
Cash flow from operating activities ($ billion)
(2023: 3.0)

306
External power sales (terawatt hours)
(2023: 279)

652
Sales of pipeline gas to end-use customers (terawatt hours)
(2023: 738)

In 2024, we continued to develop our portfolio of renewable and low-carbon solutions, with an increased focus on energy storage, flexible generation and, increasingly, on power trading. We started commercial operations at an offshore wind park in the Netherlands and at two solar parks in Italy and the USA. We also agreed to acquire a combined-cycle gas turbine power plant to strengthen our power business in New England, USA. We made progress in carbon capture and storage by taking the final investment decisions to proceed with two projects in Canada, while our Northern Lights joint venture completed its onshore and offshore facilities in Norway for the world's first commercial carbon transport and storage project. See "Outlook" on pages 16-17 for our Capital Markets 2025 investor update.

Business conditions

For the business conditions relevant to Renewables and Energy Solutions, see "Market overview" on pages 28-30.

Financial delivery

Earnings 2024-2023 [A]

Segment earnings in 2024 decreased by $4,318 million compared with 2023. This reflected lower margins (decrease of $1,719 million), mainly from trading and optimisation primarily in Europe due to lower volatility. This was partly offset by lower operating expenses (decrease of $632 million). Segment earnings in 2024 also included net impairment charges and reversals of $1,085 million, mainly related to renewable generation assets in North America, and partly offset by favourable movements of $300 million relating to an accounting mismatch due to fair value accounting of commodity derivatives, and a net gain on sale of assets of $94 million. These net charges and favourable movements are part of identified items and compare with the full year 2023 which included favourable movements of $2,756 million due to the fair value accounting of commodity derivatives, partly offset by net impairment charges and reversals of $669 million. As part of Shell's normal business, commodity derivative hedge contracts are entered into for the mitigation of economic exposures on future purchases, sales and inventory.

Adjusted Earnings were a loss of ($497) million in 2024. Adjusted Earnings from Renewable Power Generation, Hydrogen, CCS, Nature-Based Solutions (NBS) and Shell Ventures accounted for 146% of 2024 negative Adjusted Earnings. These were partially offset by positive Adjusted Earnings contributions from Energy Marketing and Trading and Optimisation (46%).

Prior year earnings summary

Segment earnings reflected lower margins (a decrease of $684 million), mainly from trading and optimisation. This was due to lower gas and power price volatility in 2023, unfavourable tax movements (a decrease of $218 million), and higher operating expenses resulting from business growth (an increase of $168 million). Segment earnings also included favourable movements of $2,756 million due to the fair value accounting of commodity derivatives, partly offset by net impairment charges and reversals of $669 million. These favourable movements and charges are part of identified items and compare with 2022, which included unfavourable movements of $2,443 million due to the fair value accounting of commodity derivatives and impairment charges of $361 million.

Cash flow from operating activities

Cash flow from operating activities was primarily driven by net cash inflows related to derivatives of $3,012 million and working capital inflows of $923 million, partly offset by tax payments of $457 million and Adjusted EBITDA.

* Non-GAAP measure (see page 445).

Key metrics [A]

	$ million, except where indicated		
	2024	2023	2022
Segment earnings*[B]	(1,229)	3,089	(1,027)
Identified items	(732)	2,333	(2,805)
Adjusted Earnings*[B]	(497)	756	1,778
Adjusted EBITDA*[B]	(22)	1,481	2,503
Cash flow from operating activities	3,798	2,984	(6,394)
Cash capital expenditure*	2,549	2,681	3,469
External power sales (terawatt hours) [C]	306	279	243
Sales of pipeline gas to end-use customers (terawatt hours) [D]	652	738	843

[A] See Note 7 to the "Consolidated Financial Statements" which includes an explanation of the reporting segment changes applicable from 2024.
[B] Segment earnings, Adjusted Earnings and Adjusted EBITDA are presented on a current cost of supplies basis.
[C] Physical power sales to third parties; excluding financial trades and physical trade with brokers, investors, financial institutions, trading platforms, and wholesale traders.
[D] Physical natural gas sales to third parties; excluding financial trades and physical trade with brokers, investors, financial institutions, trading platforms, and wholesale traders. Excluding sales of natural gas by other segments and LNG sales.

Cash capital expenditure

Within cash capital expenditure, $1.6 billion was in low-carbon energy solutions. This includes Renewable Power Generation, Environmental Solutions, Hydrogen and CCS. In 2023, cash capital expenditure included $2.3 billion in low-carbon energy solutions. Higher cash capital expenditure in 2023 was mainly a result of Hollandse Kust Noord spending.

Our cash capital expenditure* is expected to be in the range of $2-3 billion in 2025.

See "Our journey to net zero" on page 87.

Operational performance

External power sales

In 2024, our external power sales increased compared with 2023 as a result of organic customer growth across the portfolio and acquisitions.

Sales of pipeline gas to end-use customers

In 2024, the decrease in our sales of pipeline gas to end-use customers was mainly driven by the decision to prioritise value over volume, focusing on higher-margin sales.

Strategic progress

Portfolio and business developments

Key portfolio and business developments:

- In January 2024, our Savion subsidiary completed the sale of its 50% interest in the Madison Fields 180 MW solar development in Ohio, USA, to InfraRed Capital Partners.
- In March 2024, we sold our 50% interest in SouthCoast Wind, a joint venture established to develop wind projects off the coast of Massachusetts, USA, to our partner, Ocean Winds.
- In March 2024, Hollandse Kust Noord, our offshore wind park in the Netherlands (Shell interest 79.9%), achieved commercial operations.
- In May 2024, Shell opened its first solar park in Zamboni, Italy, with a capacity of 20 MW.
- In June 2024, together with our partner, ATCO EnPower we took the final investment decision on the Atlas Carbon Storage Hub in Canada.

- In July 2024, we took the final investment decision to build REFHYNE II, a 100 MW electrolyser to produce renewable hydrogen, in Germany.
- In September 2024, the Northern Lights joint venture (Shell interest 33.3%) completed the construction of carbon storage facilities in Norway.
- In October 2024, we signed an agreement to acquire RISEC Holdings, which owns a 609 MW two-unit combined-cycle gas turbine power plant in Rhode Island, USA. We completed the transaction in January 2025.
- In December 2024, Rangebank battery energy storage system (BESS) in Australia became operational.

Business and property

We are building a business to deliver clean energy for our customers.

Despite the rapid growth seen in recent years, the renewable energy sector as a whole is experiencing significant challenges, including supply chain disruptions and regulatory hurdles, which have led to delays, increased costs and downward pressure on margins. 2024 was a year of significantly lower volatility in gas and power markets, which prevented us from maintaining trading and optimisation results at the levels we have seen in previous years. Our market outlook and supply chain environment has also deteriorated, resulting in significant impairment charges across various assets within our North American and European portfolios. To address this and given our focus on value, we refreshed our renewable generation, energy marketing, and gas and power trading strategy in December 2024. As part of this refresh, we are shifting our asset portfolio towards energy storage and flexible generation, and we are reducing investments in offshore wind assets. Our refresh also sees an increased focus on gas and power trading, leveraging our existing capabilities and technology to improve returns of this business. We also aim to maximise returns from our existing onshore positions by using capital-light business models, debt finance and working with partners.

Energy marketing

We provide electricity and smart energy solutions to residential, commercial and industrial customers. We do this through direct electricity sales, storage solutions and energy optimisation services. Our largest markets for commercial and industrial customers are Australia and the USA. In Australia, we are one of the largest commercial and industrial retailers of electricity in the market.

Trading and optimisation

We trade and optimise power and pipeline gas, and carbon credits from our own assets and from third parties. We work with Shell businesses across regions to offer energy solutions that can help our customers decarbonise. We have a gas and power trading presence in key markets, including the Americas and Europe, but also in Australia and Asia.

In October 2024, we signed an agreement to acquire RISEC Holdings, which owns a 609 MW two-unit combined-cycle gas turbine power plant in Rhode Island, USA. We completed the transaction in January 2025. This acquisition secures long-term supply and capacity offtake for Shell in the deregulated Independent System Operator New England (ISO New England) power market.

Renewable power generation

We enable renewable power generation by owning and operating solar plants and wind farms, and by participating in joint ventures. We target selective growth in markets where there is potential for integration with our value chain.

A significant milestone was achieved by the CrossWind joint venture (Shell interest 79.9%) when the Hollandse Kust Noord offshore wind development in the Netherlands achieved commercial operations in March 2024 after producing its first electricity in June 2023. The wind farm plans to supply electricity to the 200 MW electrolyser Holland Hydrogen 1 (Shell interest 100%) that we are building in the Netherlands

Savion completes build and sale of Madison Fields

In the USA, our wholly owned subsidiary Savion is a utility-scale solar and energy storage developer. Savion specialises in developing solar power and energy storage projects, serving a variety of customers, including utilities and major commercial and industrial organisations.

In January 2024, Savion completed the construction and sale of its 50% interest in the Madison Fields 180 MW solar park to InfraRed Capital Partners. Madison Fields, in Madison County, Ohio, is the first project to be designed, developed and owned by Savion. In July 2024, the project achieved commercial operations and Savion entered into a long-term power purchase agreement (PPA) with Amazon for the offtake of the facility's full capacity generation of solar energy.

Savion also signed an agreement in June 2024 to sell the 150 MW Cass County Solar Project in Illinois, to Ameren Missouri. In December 2024, Savion's solar farm in Martin County in Kentucky, USA reached commercial operations.

Photo: Madison Fields solar park, Ohio, USA.

In May 2024, Shell opened its first solar park in Zamboni, Italy, with a capacity of 20 MW. Shell also signed a power purchase agreement for Baker Hughes to offtake part of the power generated at the plant.

At the end of 2024, our share of renewable power generation capacity was 3.4 GW in operation and 4.0 GW in development. Our renewable power generation capacities are listed below:

Renewable power generation capacity in operation and in development as of December 31, 2024 - by region

	In operation [A]		In development [B]	
Location	100% capacity (MW)	Shell interest (MW)	100% capacity (MW)	Shell interest (MW)
Asia	2,394	1,983	2,220	2,047
Europe	1,858	1,118	965	661
Americas	465	214	1,920	1,165
Australia	–	–	120	120
Other	84	76	18	17
Total	4,801	3,391	5,243	4,010

Renewable power generation capacity in operation and in development as of December 31, 2024

	2024	2023	2022
Renewable power generation capacity (Shell interest - gigawatts):			
In operation [A]	3.4	2.5	2.2
In development [B]	4.0	4.1	4.2

[A] Renewable generation capacity post commercial operation date.
[B] Renewable generation capacity under construction and/or committed for sale under long-term offtake agreements (PPA).

Hydrogen

Hydrogen can help reduce emissions for our customers in sectors which are hard to decarbonise, such as heavy industry and heavy-duty road transport. We can also use it to help decarbonise our own assets. Shell is part of joint ventures and alliances that have built electrolysers and hydrogen filling stations. We have also participated in feasibility studies that aim to show the viability of a global import and export market for hydrogen.

When it comes to developing hydrogen investment opportunities, we aim to do so where we see adjacencies with our integrated business value chain and where we believe there are pathways to attractive returns. Since 2021, we have operated an electrolyser (Shell interest 100%) in Germany, which produces hydrogen using electricity from renewable sources. In July 2022 we announced the final investment decision to build Holland Hydrogen I. Construction is progressing well, and we expect to start commissioning in late 2026, with production ramp-up in 2027. In July 2024, we took the final investment decision to build REFHYNE II, a 100 MW electrolyser to produce renewable hydrogen in Germany. We plan to use this hydrogen to partially decarbonise the Shell Energy and Chemicals Park Rheinland. We expect the electrolyser to be operational by the end of the decade.

Photo: Holland Hydrogen I, one of Europe's largest renewable hydrogen plants, under construction in the Netherlands.

Carbon capture and storage (CCS)

We report existing CCS operations that help decarbonise our own assets in the segment where the relevant asset sits. We also offer carbon capture, transport and storage to our customers as we seek to help them decarbonise.

In September 2024, the Northern Lights joint venture (Shell interest 33.3%) in Norway completed the construction of its carbon storage facilities. Northern Lights is designed to transport and store up to 1.5 million tonnes of CO_2 per year in its first phase. We expect the first shipment of CO_2 in early 2025 from industrial customers in Norway and Continental Europe. Equinor and TotalEnergies are equal partners in the joint venture.

In June 2024, Shell took an FID with its partner, ATCO EnPower, on the Atlas Carbon Storage Hub (Shell interest 50%). Atlas is designed to store an estimated 650,000 tonnes of CO_2 captured annually from the Shell Energy and Chemicals Park Scotford in Alberta, Canada. The CO_2 is to be captured by Shell's Polaris project for which an FID was also taken in 2024. Both Polaris and Atlas are expected to begin operations towards the end of 2028.

See "Progressing CCS to decarbonise our and customers' activities" on page 67.

Shell also has CCS project opportunities at earlier stages of development in Canada, the USA, Europe, the Middle East and Asia.

Nature and environmental solutions

Through the Nature Based Solutions (NBS) business and the Environmental Products Trading Business (EPTB), we provide carbon credits to our customers. NBS invests in projects that conserve, enhance and restore ecosystems – such as forests, grasslands and wetlands – to prevent GHG emissions or reduce atmospheric CO_2 levels.

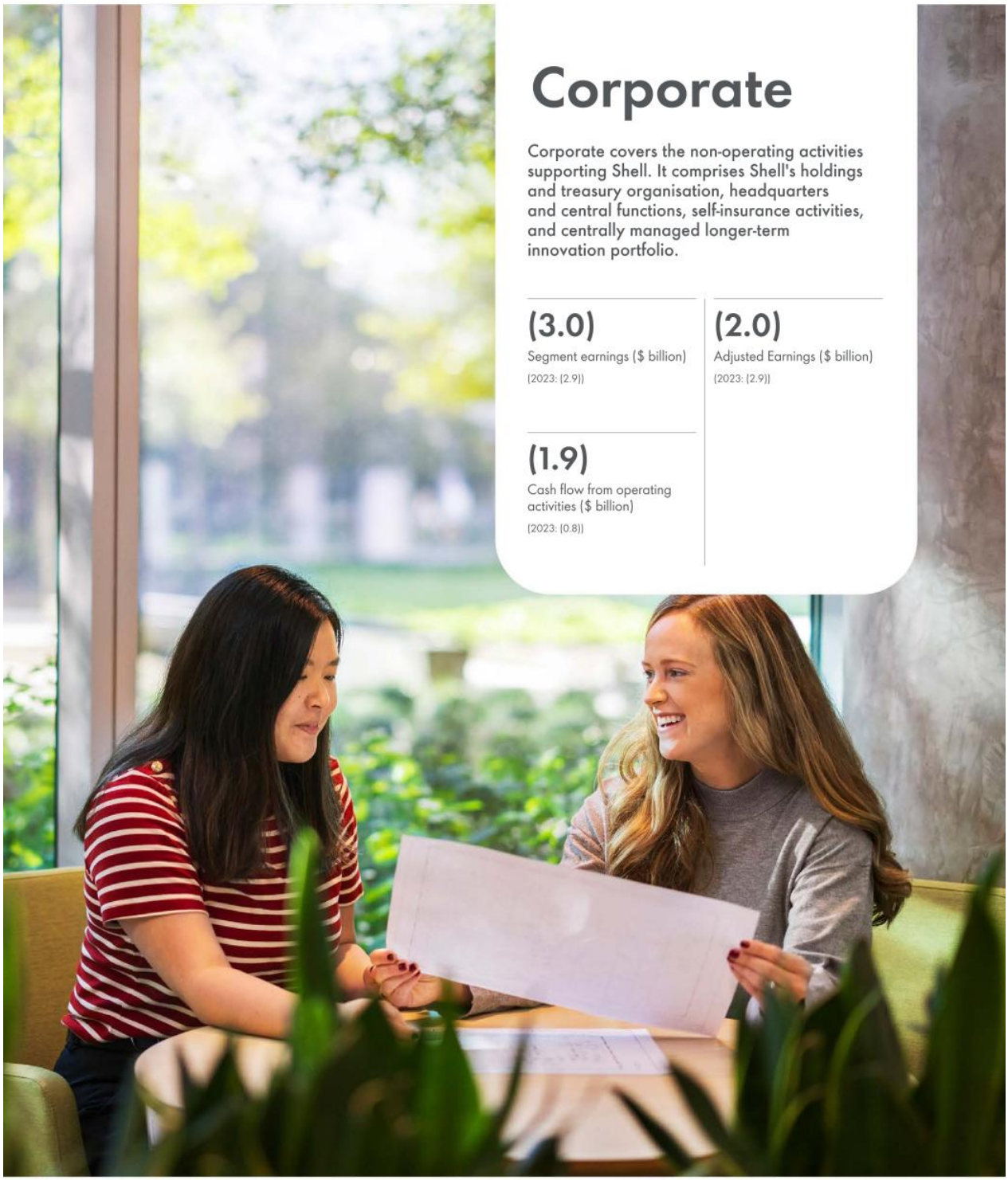
Through EPTB, we develop, source, offtake, trade and supply environmental products across compliance and voluntary markets. This includes working with our other businesses such as Integrated Gas or Marketing to provide integrated energy solutions to customers.

Shell Ventures

Through Shell Ventures entities we act as an investor and a partner to start-ups, businesses and venture funds to help accelerate the energy and mobility transformation. We invest in companies that work on solutions to lower emissions, electrify energy systems, gain data-based insights and provide innovative consumer solutions.

Investments

Within R&ES, we maintain an integrated business model with trading and optimisation to help us manage our value delivery. Our investments in low-carbon solutions are subject to financial modelling and stress-testing, due diligence and risk assessments to ensure that our capital is allocated to the most attractive low-carbon projects and opportunities.



Corporate

Corporate covers the non-operating activities supporting Shell. It comprises Shell's holdings and treasury organisation, headquarters and central functions, self-insurance activities, and centrally managed longer-term innovation portfolio.

(3.0)
Segment earnings ($ billion)
(2023: (2.9))

(2.0)
Adjusted Earnings ($ billion)
(2023: (2.9))

(1.9)
Cash flow from operating activities ($ billion)
(2023: (0.8))

Headquarter and central functions provide communications, finance, treasury, human resources, information technology (IT), legal, real estate and security services to the businesses. These functions also provide support for shareholder-related activities, such as investor relations. The central functions are supported by business service centres, which process transactions, manage data and produce regulatory returns, among other services.

All finance expense, income and related taxes for Shell, which is headquartered in London, are included in the Corporate segment earnings rather than the business segment earnings. Most headquarter and central function costs are recovered from the business segments. Costs that are not recovered or relate to centrally managed activities are retained in Corporate.

The Holdings and Treasury organisation manages many of our corporate entities. It is the point of contact between Shell and external capital markets and, for example, raises debt instruments and conducts foreign exchange transactions. Treasury centres in London and Singapore support these activities.

Shell's innovation portfolio is managed as a central function. We have major research and development (R&D) centres in the Netherlands, the USA and India, and smaller specialised centres in Germany, Brazil and China. We use technology to enhance our existing value chains and help build the energy system of the future. Shell's longer-term innovation portfolio is reported as part of the Corporate segment. Other innovation portfolio activities are reported in the business segments.

Earnings 2024-2023

An increase in the negative segment earnings was mainly driven by reclassifications, from equity to profit and loss, of cumulative currency translation differences principally triggered by changes in the funding structure. This resulted in unfavourable movements of $1,122 million, included in identified items, and was partially offset by favourable tax movements, net interest movements and currency exchange rate effects.

Photo: A view of the Shell Centre, our headquarters, from across the River Thames in London, UK.

Key metrics [A]

	$ million, except where indicated		
	2024	2023	2022
Segment earnings*[B]	(2,992)	(2,944)	(2,562)
Identified items	(1,024)	(69)	(90)
Adjusted Earnings*[B]	(1,968)	(2,875)	(2,472)
Adjusted EBITDA*[B]	(675)	(1,164)	(856)
Cash flow from operating activities	(1,882)	(832)	2,192

[A] See Note 7 to the "Consolidated Financial Statements" which includes an explanation of the reporting segment changes applicable from 2024.
[B] Segment earnings, Adjusted Earnings and Adjusted EBITDA are presented on a current cost of supplies basis.
* Non-GAAP measure (see page 445).

Prior year earnings summary

An increase in the negative segment earnings was mainly driven by unfavourable movements in currency exchange rate effects and tax credits.

Cash flow from operating activities

Cash flow from operating activities decreased primarily due to unfavourable working capital movements.

Self-insurance

Shell, like other major oil and gas companies, self-insures most of its exposures to hazard risks. Our Group insurance companies are wholly owned subsidiaries. They provide insurance coverage to our subsidiaries and entities in which we have an interest, including those that are not controlled by Shell.

We continually assess the safety performance of our operations and make risk mitigation recommendations, where relevant, to keep the risk of an accident as low as possible. Our insurance companies are adequately capitalised and they may transfer risks to third-party insurers where economical, effective and relevant.

See "Risk factors" on page 140.

Other central activities

Shell operates certain key activities centrally. These include Projects & Technology, intellectual property and information technology. This allows us to provide leadership, innovation and risk management across our business.

Information technology and cyber security

Digitalisation is a key success factor in delivering Shell's strategy. We are transforming our IT systems to support our evolving portfolio of businesses. We invest in new technologies, such as artificial intelligence (AI) and quantum computing, to enhance our IT capabilities and bring value to the business.

The growing dependence on IT and rising data volumes introduce risks. A breach in IT systems or data loss could significantly impact Shell and its supply chain, leading to productivity disruptions, loss of confidential information, regulatory penalties, and potential reputational harm. Additionally, sanctions, including orders to delete data and regulatory fines, might be imposed on Shell if authorities find Shell failed to meet its obligations in relation to cyber security or personal data protection.

In 2024, we continued to implement a comprehensive cyber security programme as part of our cyber defence strategy. This was done through the formalisation of the Information and Digital Technology (IDT) requirements based on the Shell Performance Framework (SPF). Our Information and Digital Technology Standard sets out a structured approach to identify, assess and mitigate IT and cyber security risks. Following the approval of the IDT requirements, we refreshed our Information Risk Management (IRM) capabilities and streamlined the organisational structure to enhance the formal Chief Information Security Officer (CISO) role, with support from the Executive Committee. This included integrating the cyber defence teams and other decentralised cyber security functions into the central IRM organisation. These changes are in effect from March 2025.

Our global integrated IRM and cyber defence teams are staffed with cyber security professionals that monitor, assure and help defend our global IT and data landscape. As all our employees play a role in protecting our IT systems, we give them training on data protection, regulatory compliance and regularly run cyber security awareness campaigns and simulations on how to respond to cyber-attacks.We evaluate emerging digital technologies with our businesses annually to align on their impact and necessary remediation, considering the value and opportunities they present, as well as their incremental risks. Additionally, Shell works to monitor and respond in real time to cyber security incidents as they happen.

Cyber security risk management

Our cyber security capabilities are embedded into our IT systems, and our IT and data are protected by various detective and protective technologies and controls. A structured approach to identify, assess and mitigate the IT and cyber security risks is built into our support processes and is benchmarked to external best practices. We continuously track cyber-attacks, threat intelligence, cyber legislation (including the EU AI Act) and vulnerabilities relevant to our IT landscape and have a well-structured incident management and escalation process in place.

The security of IT services, where operated by external IT companies, is managed through contractual clauses and additionally through formal supplier assurance reports for critical IT services. Shell collaborates bi-annually with third parties and supplements these reports with bi-annual internal benchmarking to assess our cyber security risk management practices against cyber security best practices and peer organisations. Using the insights gained from these assessments, along with changes in external risks and the outcome of internal audits and control testing results, we enhance our cyber security capabilities and adopt a risk-based strategy for our investment decisions concerning cyber risk exposure.

Shell employees and contract staff are required to complete mandatory training courses and participate in regular cyber threat awareness campaigns. In 2024, we introduced the Think Secure Scorecard across the organisation. This provides data insights into the cyber behaviour of Shell staff on an individual level, encouraging continuous learning about cyber threats and advocating personal accountability. Shell has robust governance processes to monitor key cyber risks, provide risk assurance and encourage a corporate culture that prioritises security.

Our cyber security strategy is regularly reviewed and updated, as required, by our CISO and Shell's Information and Digital Technology leadership team, with oversight from the EC, the Audit and Risk Committee, and the Board. These reviews involve consideration of external environment changes; strategic, operational, and cultural risks; response to cyber security risks and implementation of further remedial actions as appropriate; and updates on the performance and benchmarking of the Group's cyber defences. In 2024, dedicated deep dives into areas, such as geopolitical developments and artificial intelligence (AI), were performed. In 2024, Shell reported data privacy incidents to regulatory authorities across multiple jurisdictions. There were no cyber or data privacy incidents that had a material impact on Shell's business strategy, operations, or financial condition.

The IRM organisation leadership teams involved in monitoring and managing our cyber security threat risk and assurance process have an average of around 25 years of experience. The IRM organisation is led by our CISO, who has more than 20 years of experience in the IT and information security field, including serving as the chief information officer for various large public companies. In addition to holding the Certified Information Systems Security Professional (CISSP) certification, our CISO holds other qualified technical expert certifications, has completed the London School of Economics Executive Development programme, and holds an undergraduate degree in management information systems, risk management, and corporate finance. Our CISO is active in various cyber-security industry trade groups and is on the board of Oil and Natural Energy Information Sharing and Analysis Center (ONE-ISAC), having previously held leadership positions in the oil and gas cyber security sector.

Intellectual property

At Shell, we have a wide-ranging intellectual property (IP) portfolio which includes patents, trademarks, know-how, trade secrets and copyrights. The distinctive Shell Pecten, a trademark in use since the early 20th century, and trademarks where the word Shell appears, help raise the profile of our Shell brand globally. We protect and defend our IP and we respect the valid IP rights of others. At December 31, 2024, we held 8,677 patents. This includes granted patents and pending patent applications.

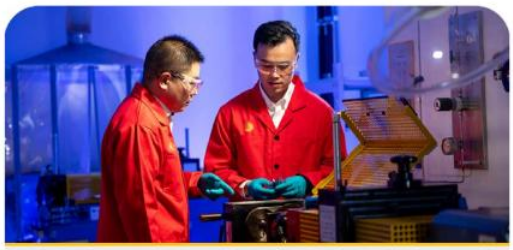
Shell holds trademarks globally, even in countries where we no longer operate. For instance, in 2024, we renewed national trademark registrations for the word marks "Shell", "Shell Spirax" and the Shell logo, through our local agent SABA Intellectual Property, who paid $10,543 in official fees to the Syrian Patent Office. Although we ceased operations in Syria in 2011, these renewals do not indicate any product sales in the country.

Innovation

We use technology to improve our efficiency, safety and competitiveness. By applying our technical and digital capabilities, we can also help build the low-carbon energy system of the future. In 2024, we invested $1,099 million in research and development (R&D). We combine our expertise in R&D with digital solutions, often powered by AI, to help accelerate innovation and scale up more effectively.

Shell's Projects & Technology organisation and our businesses work together to determine the content, scope and budget for developing new technology that supports our activities. This includes partnering with start-ups and small- to medium-sized enterprises that are in the early stages of developing new technologies through our Shell Ventures and Shell GameChanger programme. New technology is developed using a maturation process, to systematically mitigate technical and commercial risks, while staying aligned with Shell's strategic ambitions and deployment commitments.

See "Risk factors" on page 141.



Innovation is pivotal to what we do

Our research and development (R&D) seeks to deliver innovative, cost-competitive solutions that meet global energy demands while reducing emissions. To achieve this, we have a network of R&D centres and collaborate closely with our customers, suppliers and partners, as well as with many of the world's leading universities and research institutes.

Global Lubricants

In 2024, for instance, our Global Lubricants business was named industry leader by market analysts Kline + Company for the 18th consecutive year for consumer automotive, commercial automotive and industrial lubricants. These lubricants are designed to continually push the boundaries of engine and equipment performance and longevity, as well as to reduce emissions. This leadership is built on more than 45 years of research and commercial development of our proprietary gas-to-liquids (GTL) technology with which we make high-quality liquid fuels, base oils for lubricants, and other speciality products from natural gas.

Keeping data centres cool

We recently extended our comprehensive GTL product range by developing an immersion cooling fluid for data centres that significantly improves their performance and energy efficiency. Data centres consume vast amounts of electricity to power the servers and cool the heat they generate. Our new GTL immersion cooling fluid allows servers to run faster and cooler, improving computing performance and enabling considerable reductions in energy use, CO_2 emissions and operating costs compared to conventional air cooling.

Second-generation biofuels

Shell is one of the world's largest producers, distributors and traders of biofuels made from sugar cane, corn and other types of biomass. In 2024, we commissioned a demonstration plant in partnership with Green Plains in Nebraska, USA, that uses our proprietary Shell Fibre Conversion Technology to convert the oil in corn kernels into second-generation low-carbon biofuel and high-protein animal feed. This bolt-on technology is designed to help first-generation ethanol producers increase yield and margin – making their operations more valuable and more resilient.

Photo: Two scientists analysing industrial and off-highway lubricants at Shell's Shanghai Technology Centre, China.

Our journey to net zero

We have a target to be a net-zero emissions energy business by 2050 and work with our customers across sectors to help accelerate the energy transition.

Shell's energy transition plans

Our target is to become a net-zero emissions energy business by 2050 and we are transforming our operations and energy products. We believe this target supports the more ambitious goal of the Paris Agreement, to limit the rise in the global average temperature this century to 1.5°C above pre-industrial levels.

The Paris Agreement aims to strengthen the global response to the threat of climate change by "holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels".

As we implement our strategy to deliver more value with less emissions, we are responding to evolving global demand by offering our customers more and cleaner energy solutions.

The world needs a balanced energy transition, one that maintains secure energy supplies, while accelerating the transition to affordable low-carbon solutions. We believe our strategy supports a balanced transition by providing the oil and gas people need today, while helping to build the energy system of the future.

We recognise that the scale of the energy transition requires fundamental change in both supply and demand. It will take supportive government policies, advances in technology and investments by companies across all parts of the economy to achieve this. We advocate policies, legislation and regulations in areas where we can best support the decarbonisation of our customers, reduce our own emissions and help accelerate the energy transition.

There remains significant uncertainty around the shape of the future energy system. As a result, we are developing a multi-energy portfolio that has the flexibility to respond to uncertainty, and that we believe will allow us to remain a successful business while working towards net-zero emissions. We are changing the mix of energy products we sell and developing new carbon removal and abatement businesses.

We aim to lead in the energy transition where we have competitive strengths, see strong customer demand, and identify clear regulatory support from governments.

We are reducing emissions from our operations, and helping our customers transition to more cost-competitive and cleaner energy solutions. Our energy transition plans cover all our businesses.

Integrated Gas - growing our world-leading LNG business with lower carbon intensity

We plan to grow our LNG volumes by adding new liquefaction capacity. We are developing new projects with lower carbon intensity by using renewable power and carbon abatement technology in the form of carbon capture and storage (CCS). Beyond our own production, we will continue to add scale and flexibility to our portfolio by growing the LNG volumes that we purchase from third parties.

LNG provides both energy security and flexibility because it can be easily transported to places where it is needed most. It is also a critical fuel in the energy transition. Natural gas is the lowest-carbon fossil fuel, producing around 50% less carbon emissions than coal when used to generate electricity, according to the International Energy Agency.

Upstream - cutting emissions from oil and gas production.

As we sustain oil and gas liquids production, we will continue to focus on delivering more value with less emissions. The oil we are producing will increasingly come from our deep-water business. Through innovative designs, our deep-water platforms are producing higher-margin and lower-carbon barrels.

As a responsible energy producer, we are implementing carbon management plans and working to reduce carbon emissions from our assets. We are looking at ways to electrify our offshore oil facilities, and using wind and solar power to reduce operational emissions. We see CCS as a core technology to further capture emissions from our facilities, reusing our own oil and gas fields where possible.

We set a target to eliminate routine flaring from our upstream-operated assets by 2025 [A] five years ahead of the World Bank's initiative. Routine flaring burns gas that is not used or reinjected into wells, which is inefficient and contributes to climate change. With effect from January 1, 2025, SPDC has ceased routine flaring of associated gas, with the completion of essential gas capture projects and the shut-in of remaining facilities from which gas cannot be transported to market. We have therefore met our target to eliminate routine flaring from our upstream-operated assets by 2025 as of this date.

[A] This target was subject to the completion of the sale of The Shell Petroleum Development Company of Nigeria Limited (SPDC). As detailed elsewhere in this report, on March 13, 2025, Shell completed the sale of SPDC to Renaissance.

Downstream, Renewables and Energy Solutions – focusing our businesses to offer more low-carbon solutions while reducing sales of oil products.

We are starting from a place of strength. We believe that our global customer reach, our innovation and technology, and the strength of our supply and trading capabilities, mean we are well placed to deliver the low-carbon solutions people and businesses need, such as electric vehicle charging and biofuels, to support our customers as they decarbonise. Leveraging our integrated portfolio of energy and chemicals parks, terminals and blending plants, we will make, buy, and blend products to meet customer demand. We are also able to identify changes in demand for products so that we can respond quickly.

To help us get to net zero, we have set short-, medium- and long-term targets to reduce the carbon intensity of the energy products we sell, measured by using our net carbon intensity (NCI) metric. We believe these targets are aligned with a 1.5°C pathway derived from scenarios developed for the IPCC's Sixth Assessment Report (AR6). For more information see "Setting targets for NCI" on page 102.

We set out our climate-related targets and ambition on page 93.

See "Our strategy" on pages 10-13.

Climate-related targets and ambition

0% **Net-zero emissions by 2050** (Scope 1, 2 and 3)

Emissions from own operations (Scope 1 and 2, operational control)

Target
Halve Scope 1 and 2 emissions by 2030, on a net basis
(2016 baseline)

Target
Eliminate routine flaring
from Upstream operations by 2025 [A]

Target
Maintain methane emissions intensity below 0.2% and achieve near-zero methane emissions by 2030 [B]

Emissions from the products we sell (Scope 3, equity boundary)

Target
Net carbon intensity (NCI)
Reduce NCI by 15-20% by 2030
(2016 baseline)

Ambition
Oil products ambition
Reduce customer emissions from the use of our oil products by 15-20% by 2030, Scope 3, Category 11 [C] (2021 baseline)

All our businesses contribute to delivering more value with less emissions

Leading Integrated Gas

Lower the carbon intensity of our LNG business

Advantaged Upstream

Cutting emissions from oil and gas production

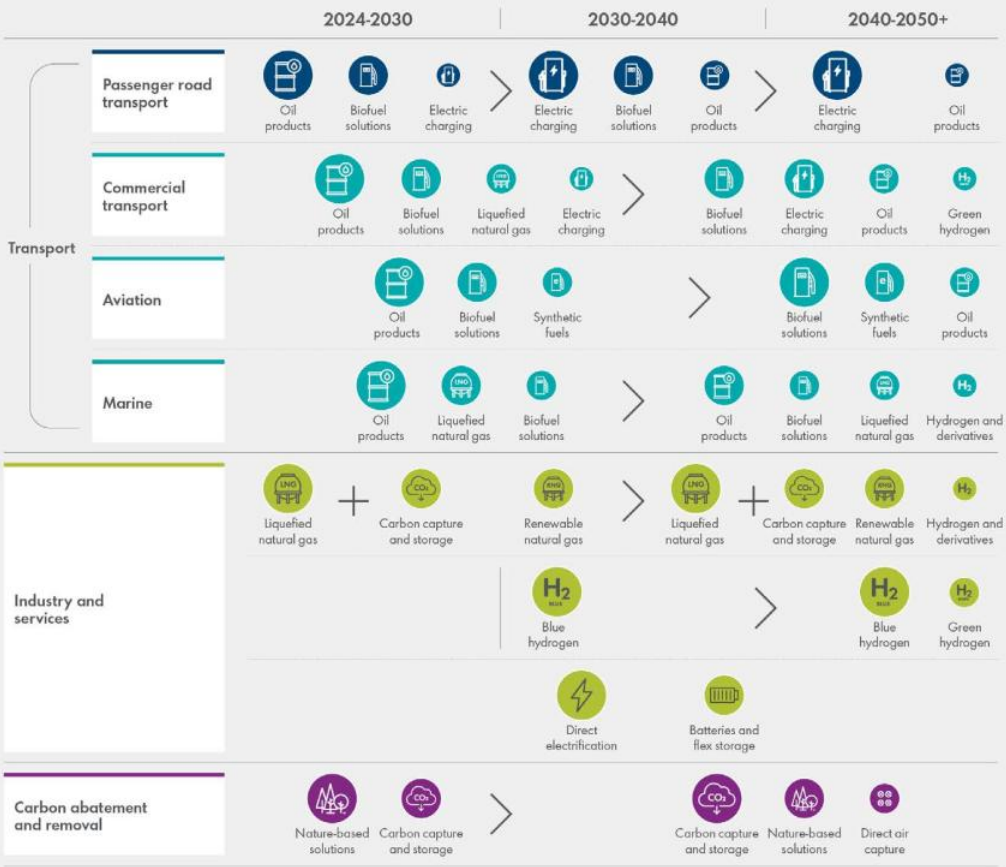
Differentiated Downstream, Renewables and Energy Solutions

Offering more low-carbon solutions while reducing sales of oil products

[A] This target was subject to the completion of the sale of The Shell Petroleum Development Company of Nigeria Limited (SPDC). With effect from January 1, 2025, SPDC ceased routine flaring. As detailed elsewhere in this report, on March 13, 2025, Shell completed the sale of SPDC to Renaissance.
[B] On an intensity basis. Methane intensity is measured separately for oil and gas assets with marketed gas (gas, LNG and GTL available for sale) and assets without marketed gas (oil and gas assets where gas is reinjected).
[C] We set this ambition in March 2024. Customer emissions from the use of our oil products (Scope 3, Category 11) were 517 million tonnes carbon dioxide equivalent (CO_2e) in 2023 and 569 million tonnes CO_2e in 2021.

Focused decarbonisation pathways

We have identified pathways to net zero for our two biggest customer sectors, transport and industry. These two sectors make up more than 70% of total global final energy demand and more than 55% of global carbon emissions today. Our pathways are based on sectors where we believe we have the competitive advantage to provide our customers with the affordable products they need through the transition.



Note: The order from left to right and the size of the circles in the graphic above indicate their likely relative prominence within that section of the pathway. Significant uncertainty remains on the shape of these future pathways.

Leading to our strategic decarbonisation areas for this decade

- Electric vehicle charging
- Biofuels infrastructure
- Integrated power positions
- CO_2 capture and removal value chains

Enabled by our strengths and competitive advantages

- Trading capabilities and infrastructure network
- Technology and innovation
- Policy and advocacy

Climate-related risks and opportunities identified by Shell over the short, medium and long term T

We are continually enhancing our approach to assessing and managing risks and opportunities resulting from climate change. This includes considering different time horizons and their relevance to risk identification and business planning. We actively monitor societal developments, such as regulation-driven carbon pricing mechanisms and customer-driven preferences for products. We incorporate these developments, where relevant, into potential scenarios which provide insights into how the energy transition may unfold in the medium and long term. These insights and those from various external scenarios (such as those prepared for the IPCC AR6) help guide how we set our strategy, capital allocation and climate-related targets and ambition.

The process for identifying and assessing climate-related risks is set out in "Risk management" on page 134. The impact and likelihood assessment described on page 134 helps us to prioritise climate-related risks and determine their relative materiality, based on a comprehensive picture of significant risks to any relevant business objectives. We consider climate-related risks from a strategic, operational, conduct and culture perspective to help us maintain a comprehensive view of the different types of climate risks we face and the different time horizons in which they may affect us. Monitoring and reviewing risks is a key risk management process. The EC, the Board and Board committees review climate-related risks and their impact on the Group, as appropriate. This allows management to take a holistic view and optimise risk mitigation responses, to ensure that climate-related risk responses are properly integrated into the relevant activities.

Shell has identified climate change and the energy transition as a material risk. The risk could potentially continue to result in changes to the demand for our products, supply chains and markets; further changes to the regulatory environment in which we operate; and increased litigation (see Note 32 to the Consolidated Financial Statements "Legal proceedings and other contingencies" on page 309).

The risk is composed of a combination of complex and interrelated elements that affect Shell's value chain and our asset, product and business portfolio. The risk landscape is evolving rapidly. To achieve our climate-related targets and ambition, active holistic management of all climate-related risk components is important. The composite risk is broken down into the following sub-components:

- commercial risk;
- regulatory risk;
- societal risk (including litigation risk); and
- physical risk.

We are working to mitigate our identified climate-related risks and deliver more value with less emissions by focusing on performance, discipline and simplification. We believe we are positioning ourselves to achieve our financial targets, and climate-related targets and ambition by:

- reducing the GHG emissions from our operations (Scope 1 and 2) by improving our energy efficiency, deploying renewable electricity, and reducing methane emissions in our assets and projects;
- growing our LNG business while decarbonising our LNG portfolio in two main ways: by growing our portfolio with a lower carbon intensity, and continuing to invest in emissions abatement projects to reduce both CO_2 and methane emissions;
- managing our Integrated Gas and Upstream portfolio to support a balanced energy transition by cutting emissions from oil and gas production. Oil production is increasingly from our deep-water business which, through innovation, produces higher-margin and lower-carbon barrels; and
- focusing our businesses in Downstream and Renewables and Energy Solutions to offer more low-carbon energy solutions, while reducing sales of oil products.In addition, we adapt our assets and activities as necessary to enhance our resilience to the physical risks related to climate change. Many of these adaptations are based on our Safety, Environment and Asset Management (SEAM) Standards and practices.

See page 83 for more details of physical risks.

Our approach to climate change emphasises the need to work collaboratively. We aim to continue to build strategic alliances with customers, other companies and entire sectors so we and they can make profitable progress towards net zero.

We engage with governments on their climate policies to advocate policies that help establish regulatory frameworks that will help to enable society to reach the goals of the Paris Agreement. We are a founding member of the Oil and Gas Climate Initiative (OGCI), a group of 12 national and international energy companies. The OGCI supports the climate goals of the Paris Agreement and recognises that collective actions can help drive the energy transition.

We are signed up to the Oil and Gas Decarbonization Charter (OGDC), in which companies have pledged to achieve near-zero methane emissions by 2030, zero routine flaring by no later than 2030 and commit to halving scope 1 and 2 emissions by or before 2050. In April 2024, we became the first official partner to the World Bank Global Flaring and Methane Reduction Fund partnership which we committed to at the 28th Conference of the Parties (COP28) in 2023. We are a founding signatory of the Oil and Gas Methane Partnership (OGMP) 2.0 reporting framework. Shell achieved the OGMP 2.0 Gold standard of reporting in 2023.

As a leading global energy business, Shell seeks to identify opportunities in the energy transition. These risks and opportunities are described below. Climate-related risks are also summarised in the "Risk management and risk factors" section on pages 137-138.

Time horizons: short, medium and long

Due to the inherent uncertainty and pervasive risks across our strategy and business model, we monitor climate-related risks and opportunities across multiple time horizons.

- Short term (up to three years): we develop detailed financial projections and use them to manage performance and expectations on a three-year cycle. These projections incorporate decarbonisation measures required to meet our short-term targets.
- Medium term (generally three to 10 years): these are embedded within our Operating Plan, with our continued focus on the customer, the investments and portfolio shifts required in the medium term that will reshape Shell's portfolio.
- Long term (generally beyond 10 years): our portfolio and product mix are expected to evolve over time with changing customer demand.

Transition risks

Description	**CR1 Climate-related commercial risk** ◦ The transition to a low-carbon economy may lead to lower sales volumes and/or margins due to a general reduction or elimination of demand for oil and gas products, possibly resulting in underutilised or stranded oil and gas assets, and a failure to secure new opportunities. ◦ Changing preferences of investors and financial institutions could reduce access to and increase the cost of capital.
Relevant time horizon	medium and long
Potential material impacts	**Lower demand and margins for oil and gas products** ◦ Changing customer sentiment favouring the use of renewable and sustainable energy products may reduce demand for our oil and gas products. An excess of fossil fuel supply over demand could in the future result in reduced fossil fuel prices. This could result in lower earnings in the future, cancelled projects and potential impairment of certain assets. **Changing preferences of investors and financial institutions** ◦ Certain investors have decided to divest their investments in fossil fuel companies. If this were to increase significantly, it could have a material adverse effect on the price of our securities and our ability to access capital markets. Some investors and financial institutions have been aligning their portfolios to a low-carbon and net-zero world, driven by both regulatory and broader stakeholder pressures. ◦ A failure to decarbonise our business portfolios in line with investor and lender expectations could have a material adverse effect on our ability to access financing for certain types of projects. This could also adversely affect our partners' ability to finance their portion of costs, either through equity or debt. ◦ Sensitivity analysis of a 1% shift in Shell's weighted average cost of capital on asset carrying values is presented in the section "Carbon pricing and discount rate sensitivities" on page 89. **Remaining in step with the pace and extent of the energy transition** ◦ The energy transition provides us with significant opportunities, as described in "Climate-related opportunities" (CO1) below. If we fail to stay in step with the pace and extent of change, or customers and other stakeholders' demand for low-carbon products, this could adversely affect our reputation and future earnings. If we move much faster than society, we risk investing in technologies, markets or low-carbon products for which there may be insufficient demand. Therefore we cannot transition too quickly or we will be trying to sell products that customers do not want. If we are slower than society, customers may prefer a different supplier, which would reduce demand for our products and adversely affect our reputation and materially affect our financial results. ◦ Low-carbon technology and innovation are essential to our efforts to help meet the world's energy demands competitively. If we are unable to develop the right technology and products in a timely and cost-effective manner there could be an adverse effect on our future earnings. The operating margins for our low-carbon products and services have been, and could continue to be, lower than the margins we have experienced historically in our oil and gas operations.
Description	**CR2 Climate-related regulatory risks** ◦ The transition to a low-carbon economy has increased, and is likely to continue to increase the cost of compliance for our assets and/or products, and may include restrictions on the use of hydrocarbons. The lack of net-zero-aligned global and national policies and frameworks increases the uncertainty around this risk.
Relevant time horizon	short, medium and long
Potential material impacts	**Increased compliance costs** ◦ Some governments have introduced carbon pricing mechanisms, which we believe can be an effective way to reduce GHG emissions across the economy at the lowest overall cost to society. ◦ Shell's cost of compliance with the Emissions Trading Scheme (ETS) and related schemes was around $381 million in 2024, as recognised in Shell's Consolidated Statement of Income for 2024. A further $3,565 million of costs in respect of emissions schemes and related environmental programmes were incurred in respect of biofuels ($2,942 million) and renewable power ($623 million) programmes (see Note 5 to the "Consolidated Financial Statements" on pages 266-267). ◦ Shell's annual carbon cost exposure (including ETS and related schemes) is expected to increase over the next decade because of evolving carbon regulations, with the forecast annual cost exposure in 2025 estimated to be around $1 billion and around $5 billion in 2034. This estimate is based on a forecast of Shell's equity share of emissions from operated and non-operated assets, and real-term carbon cost estimates using the mid-price scenario (see Note 4 to the "Consolidated Financial Statements" on pages 255-265 for more information) [A]. This exposure also takes into account the estimated impact of available CO_2 free allowances as relevant to assets based on their location [B]. **Restrictions on use of hydrocarbons** ◦ Governments may set regulatory frameworks in the future that could further restrict our exploration and production of hydrocarbons, and introduce controls to limit the use of such products. Failure to replace proved reserves could result in an accelerated decrease of future production, which could have a material adverse effect on our earnings, cash flows and financial condition. **Lack of net-zero-aligned global and national policies and frameworks** ◦ The lack of net-zero-aligned global and national policies and frameworks increases the uncertainty around how carbon pricing and other regulatory mechanisms will be implemented in the future. This makes it harder to determine the appropriate assumptions to be taken into account in our financial planning and investment decision processes which could impair our ability to evaluate the robustness of our plans and opportunities. Changing net-zero policies and regulations could also lead to impairments of our existing oil and gas assets.

[A] Carbon cost estimates that include inflation, usually a yearly 2% inflation is applied.
[B] Free allowances are amounts of CO_2 an asset is allowed to emit without paying the emissions trading scheme (ETS) price/tax.

Transition risks continued

Description	**CR3 Climate-related societal risks (including litigation)** ◦ As societal expectations develop around climate change, there is a potential impact on Shell's licence to operate, reputation, brand and competitive position. This is likely to include litigation.
Relevant time horizon	short, medium and long
Potential material impacts	**Decline in reputation, brand and licence to operate** ◦ Societal expectations of businesses are increasing, with a focus on business ethics, quality of products, contribution to society, safety and minimising damage to the environment. There is a focus on the role of the oil and gas sector in the context of climate change and the energy transition. This could negatively affect our brand, reputation and licence to operate, which could limit our ability to deliver our strategy, reduce consumer demand for our products, harm our ability to secure new resources and contracts, and restrict our ability to access capital markets or attract employees. **Deteriorating relationships with key stakeholders** ◦ Failure to decarbonise Shell's value chain in line with societal, governmental and investor expectations is a material risk to Shell's reputation as a responsible energy company. The impact of this risk includes shareholder divestment, greater regulatory scrutiny and potential asset closure resulting from public interest groups' protests. **Litigation** ◦ There is an increasing risk to oil and gas companies from private (including non-governmental organisations) and governmental lawsuits. If successful, these claims may have wide-ranging consequences, including forcing entities to hand over strategic autonomy in part to regulators, divesting from hydrocarbon technologies, denying entities regulatory approvals and/or requiring payment of fines or penalties or large compensation packages to plaintiffs. ◦ In some countries, governments, regulators, organisations and individuals have filed lawsuits of a wide variety, including seeking to hold oil and gas companies liable for costs associated with climate change, or seeking court-ordered reductions in emissions, challenging the regulatory approvals and operating licences, or challenging energy transition strategies and plans. While we believe these lawsuits to be without merit, losing could have a material adverse effect on our earnings, cash flows and financial condition. ◦ In the Netherlands, in a case against Shell brought by a group of environmental NGOs and individual claimants (referred to herein as "Milieudefensie"), the Hague District Court in 2021 found that while Shell was not acting unlawfully, Shell had the obligation to reduce the aggregate annual volume of CO_2 emissions of Shell operations and energy-carrying products sold across Scope 1, 2 and 3 by 45% (net) by the end of 2030 relative to its 2019 emissions levels. For Scope 2 and 3, this was a significant best-efforts obligation. Shell appealed that ruling. On November 12, 2024, the Hague Court of Appeal upheld Shell's appeal and dismissed the claim against Shell. In doing so, the Court of Appeal annulled the earlier judgment of the District Court in its entirety with immediate effect. On February 11, Milieudefensie filed an appeal to the Supreme Court of the Netherlands. ◦ We have also been subjected to climate activism which has caused disruptions to our operations and such disruptions could happen again in the future.

Physical risks

Description	**CR4 Climate-related physical risks** ◦ The potential physical effects of changing climatic conditions could adversely affect our assets, operations, supply chains, employees and markets.
Relevant time horizon	short, medium and long
Potential material impacts	**Types of physical risk** The impact of physical risks comes from both acute and chronic climate hazards. Acute hazards, such as flooding and droughts, wildfires and more severe tropical storms, and chronic hazards, such as rising temperatures and rising sea levels, could potentially impact some of our facilities, operations and supply chains. The frequency of these hazards and impacts is expected to increase in certain locations. Extreme weather events, whether or not related to climate change, could have a negative impact on our earnings, cash flows and financial condition. Mitigation of physical risks, whether or not related to climate change, is considered and embedded in the design and construction of our projects, and/or operation of our assets to help minimise the risk of adverse incidents to our employees and contractors, the communities where we operate, and our equipment. **Shell's assessment** ◦ In 2023, we carried out a detailed review to assess the impact of a range of changing climatic conditions, including projected changes in temperature, precipitation, wind and sea levels, across segments and geographies for our significant assets. We used IPCC climate modelling data covering three exploratory climate scenarios (RCP2.6, RCP4.5 and RCP8.5 [A]) across the time horizons 2025, 2030 and 2050. These scenarios were selected to ensure a broad range of risks and uncertainties were assessed. There have been no changes to the climate modelling data that would require a full update of the 2023 assessment. We have confirmed there are no changes to the risk profile of our significant assets and accounted for portfolio changes. ◦ In the short to medium term, the risks identified were found to be related to factors that Shell is already aware of (whether or not related to climate change) and that the assets are actively managing to mitigate, e.g. hurricane impacts on the US Gulf Coast, rising air temperatures in the Middle East and water scarcity in Europe and Asia. As an example, in recent years the Rhine river in Europe has seen historic lows during the summer months leading to challenges in the use of barges for transportation of our products. Dredging of harbours and investment in shallower-draft barges have helped to mitigate the risk. ◦ In the long term, the results of the exercise indicated that while we have evaluated against current climate modelling projections and our current asset portfolio, by 2050 the frequency and severity of the climate hazards may differ from current projections. The level of predictability is such that the need for investment in climate adaptation measures at the assets is not immediate and the results mean we are in a position to monitor the assets and determine whether there is any need for adaptation action, e.g. the impact of potential water scarcity on various assets. ◦ Our testing to assess the potential impact of climate-related changes on our significant assets covers over 70% of the carrying value of our physical assets as at December 31, 2023. Over 12% (based on the carrying value) of physical assets tested are considered to be exposed to climate-related physical risks in the short to medium term which the assets are already actively managing to mitigate. In addition, we reviewed significant acquisitions made in 2023 and 2024, none of which were found to have significant climate-related physical risks in the short to medium term. ◦ Our business plan reflects the impact of mitigating actions in the short to medium term for the assets assessed. We will continue to monitor and assess the future exposure of our assets in the longer term to changing climatic conditions to establish the need for any further adaptation actions and related metrics. ◦ The impact of physical climate change on our operations is unlikely to be limited to the boundaries of our assets. For example, the downstream transportation and distribution of our products from our own operations could potentially be exposed to climate-related hazards that ultimately impact our operations. The overall impact, including how supply chains, resource availability and markets may be affected, also needs to be considered for a holistic assessment of this risk. Our assets manage this risk as part of broad risk and threat management processes as required by our SEAM Standards, part of the wider Shell Performance Framework.

[A] Representative Concentration Pathway (RCP) refers to the GHG concentration (not emissions) trajectory adopted by the IPCC. The pathways describe different climate change scenarios, all of which are considered possible depending on the amount of GHG emitted in the years to come.

Opportunities

Description	**CO1 Climate-related opportunities** ▫ The transition to a low-carbon economy also brings significant opportunities for us to benefit from changing customer demands, given our position as a leading global energy provider.
Relevant time horizon	short, medium and long
Potential material impacts	As the global energy mix changes, our current infrastructure, know-how and global footprint put us in an ideal position to service the changing energy demands of the market. Our global customer reach, our use of technology and innovation to develop the business models and fuels of the future and the strength of our trading capabilities, coupled with our own production, will help us deliver affordable and low-carbon solutions for our customers. Our research and development (R&D) activities are an important contributor to achieving our net-zero emissions target. We believe we are the investment case and partner of choice through the energy transition. As we work to deliver more value with less emissions we are focusing on: **LNG** ▫ Demand for LNG is expected to grow. We are one of the world's largest suppliers of LNG, with around 40 million tonnes of equity capacity. Gas is critical to the energy transition and plays an important role in enabling countries to replace coal-fired power generation with a less carbon-intensive alternative, as on average, coal-to-gas switching reduces emissions by 50% when producing electricity [A]. LNG also provides grid stability alongside wind and solar power in electricity generation. LNG is the lowest-carbon marine fuel available at scale today and offers significant GHG emissions reductions compared with conventional fuels. Furthermore, LNG offers a long-term decarbonisation pathway through bioLNG when the supply is scaled up. Shell has developed the world's largest LNG fuelling network of ports and bunker vessels on key trading routes, enabling more customers to choose LNG. Beyond our own production, we expect to continue to add scale and flexibility to our portfolio by buying LNG from others. Our LNG business will remain a key priority for Shell, meeting continued strong demand especially in Asia where we send most of our shipments today. Our integrated model is at the heart of LNG value creation, with our business spanning every stage of the LNG journey. **Biofuels** ▫ We invest in biofuels where we see growing customer demand and where we can use the strength of our supply and trading positions. Aviation and shipping remain some of the slower-to-decarbonise sectors and we expect that they will require low-carbon molecular solutions, such as biofuels, at scale in the future. Shell is already one of the world's largest energy traders and blenders of biofuels, selling significantly more low-carbon fuels than we produce. We expect to continue to grow both our own production and sales of biofuels in the coming years. We are focusing on producing premium biofuels such as sustainable aviation fuel, renewable diesel and renewable natural gas (RNG). We expect that these fuels will help to reduce emissions in commercial road transport. To support our production of biofuels, we are investing in new feedstocks through investments and partnerships, while using the strength of our trading business to expand sales beyond our production volumes. Through our Raízen joint venture in Brazil we are already the largest producer of second-generation ethanol and the leading sugar-cane ethanol producer globally. To support growing demand for biofuels this decade, we are developing more second-generation technologies. We are also developing technologies and feedstocks that aim to allow continued and sustainable growth in biofuels, while minimising impacts on the environment and food supplies. **Integrated power** ▫ Renewable power is expected to be critical for helping our commercial customers decarbonise and we will continue to grow our integrated power business. We are making disciplined choices to create value from our portfolio, stepping back from activities that do not fit our strategy or generate enough return. We aim to use the strength of our trading and optimisation capabilities to meet the growing need for flexible power storage solutions such as batteries. We already have a significant presence in battery and storage through our ventures programme and investments in research and development. We are focusing on selling power, including renewable power, to business customers. We are also using renewable power to decarbonise our own operations. Over time, we expect to use our renewable power capacity to produce low-carbon molecules, such as hydrogen. **Electric vehicle charging** ▫ We are growing our electric vehicle charging business to support customers who choose to change from a petrol or diesel vehicle to an electric one. We are focusing on offering our customers choices where we see increasing demand, such as in the fast-growing electric mobility markets of China and Europe. We are focusing on public charging, rather than home charging, because we believe it will be needed most by our customers. We have a major competitive advantage in terms of locations, as our global network of service stations is one of the largest in the world. We have other competitive advantages, such as our convenience retail offering which allows us to offer our customers coffee, food and other convenience items as they charge their cars. **Carbon capture and storage** ▫ We are developing technologies related to carbon capture and storage (CCS) and carbon removals, which are necessary to reduce emissions where there are few low-carbon alternatives. For the rest of this decade, we expect to direct most of our investments in CCS towards decarbonising our own operations. We are also looking to turn this into a profitable business for Shell by helping other companies decarbonise their operations in the future. However, in many countries CCS still lacks a clear business model. To address this challenge, Shell advocates policy mechanisms to enable CCS, and supports industry partnerships dedicated to the growth of commercially viable CCS projects.

[A] Source "The Role of Gas in Today's Energy Transitions", IEA 2019.

Impact of climate-related risks and opportunities on Shell's businesses, strategy and financial planning T

The transformation of the energy system to net-zero emissions will require simultaneous action in three areas:

- an unprecedented improvement in the efficiency with which energy is used;
- a sharp reduction in the carbon intensity of the energy mix; and
- the mitigation of residual emissions through the use of technology and natural sinks.

While it is difficult to predict the exact combination of actions that will deliver the net-zero goal, scenarios help us to consider the variables and the potential direction and pace of the transition needed. Scenarios are not intended to be predictions of likely future events or outcomes and, therefore, are not the basis for Shell's Operating Plans and financial statements.

We have been developing scenarios within Shell for almost 60 years, helping Shell leaders to explore ways forward and make better decisions. Shell scenarios are designed to stretch management's thinking when it comes to considering events that may be possible, even if remotely. Scenarios help management to consider options and make choices in times of uncertainty and transition as we grapple with tough energy and environmental issues. They are aligned to different energy transition pathways and help in decision-making by guiding the identification of a wide range of risks and opportunities.

Different socio-economic and technological parameters are used to construct these scenarios, such as:

- sectoral and regional energy demand;
- future trajectory of oil consumption and demand for natural gas;
- renewable electricity demand and the pace of the electrification of the global energy system;
- supply of solar and wind energy;
- pace of uptake of electric vehicles;
- demand for biofuels;
- growth of the hydrogen economy;
- level of CCS available;
- deployment of lower-carbon energy technologies; and
- global trade of oil and gas.

Management consideration of different climate change outcomes informs a range of areas, including, but not limited to, the setting of the long-term strategy, business planning, and investment and divestment decisions. The outcomes considered by management vary in relation to the extent and pace of the energy transition.

Carbon Management Framework (CMF)

Shell's CMF provides the structure and processes to drive delivery of Group carbon targets. The CMF seeks to manage and reduce emissions in a manner that is similar to how we use our financial framework. Carbon budgets are used as input and guidance for the annual business plan process. They act as an effective mechanism to maintain absolute emissions below a capped level and help drive a change in product mix. The carbon budgets are allocated to the businesses and enable trade-offs between emitting carbon and generating shareholder value to occur within those budgets. The CMF informs portfolio decisions and supports delivery of our decarbonisation targets.

For the 2024 Operating Plan cycle, our net carbon intensity (NCI) targets and 2030 oil products emissions ambition were translated into relevant budgets or targets for each business (see Greenhouse gas and energy management below). These budgets and targets were used by each business to optimise their operating plans. Performance against the annual NCI target, including the relative mix of products, is monitored and reviewed by the EC on a quarterly basis, facilitating corrective action if required.

Examples of how our decarbonisation targets are taken into account in fundamental decisions across the organisation include the use of carbon metrics (profitability per unit of carbon emitted), a key parameter considered in decision-making and when comparing different growth opportunities against each other within the various businesses.

Greenhouse gas and energy management

Each Shell entity and Shell-operated venture is responsible for the development of its Greenhouse Gas (GHG) Emissions and Energy Management Plan. Plans are in place for all significant assets.

Our Greenhouse Gas and Energy Management process sets out Shell's requirements for GHG reduction opportunities and portfolio choices to meet our carbon budgets and achieve our decarbonisation targets. These requirements allocate accountabilities for GHG and energy management within businesses, assets and projects, including responsibility for analysing our emissions, identifying improvement opportunities, and forecasting future performance. These requirements are applied to capital project delivery and through the asset-level annual business planning process, ensuring it is reflected in both opportunity realisation and strategic asset management planning.

A key aspect of the GHG and Energy Management process is the development of an energy efficiency and greenhouse gas reduction opportunity curve, economically assessed against the current and future costs of carbon. This information provides the basis for forecasts of absolute GHG emissions and associated intensities at the asset and project level. These forecasts are then aggregated to inform decisions on potential decarbonisation opportunities across our businesses.

The Shell Global Process Council for GHG and Energy Management, led by the Global Process Owner for GHG and including business and functional experts, meets regularly to evaluate opportunities for the ongoing improvement of processes, tools, communications, and capabilities needed within the businesses to achieve our decarbonisation aspirations.

Impact on strategic planning

The application of scenario analysis informs our assessment of the impact of a wide range of risks and opportunities, including climate-change-related issues, on our strategy and business planning at the Group and business levels. At the Group level, the potential impacts of the energy transition on our business model are discussed and assessed by the Board and the EC as part of the annual strategic and business planning cycle. This assessment allows us to challenge accepted ways of thinking, identify material risks and opportunities, and identify key dilemmas and trade-offs.

Key financial and non-financial components of business planning

The Board approves our annual business plan. The plan contains operational and financial metrics, and its objective is to drive the delivery of our strategy.

Decarbonisation targets are key to our business planning process. Each business owner offers viable Scope 1, 2 and 3 reduction opportunities as part of this process, in line with the CMF, see "Our approach to Sustainability" on page 127).

The business plan is underpinned by assumptions about internal and external parameters and includes:

- commodity prices;
- refining margins;
- production levels and product demand;
- exchange rates;
- future carbon costs;
- the schedules of capital investment programmes; and
- risks and opportunities that may have material impacts on free cash flow.

These assumptions are developed with input from our scenarios and internal estimates and outlooks. The level of uncertainty around these assumptions increases over longer time horizons.

Impact on business and financial planning

There is no single scenario that underpins Shell's business and financial planning. Our scenarios help develop our future oil and gas pricing outlooks. These outlooks take account of factors relating to the energy transition, such as potential changes in supply and demand (see details of scenario parameters above). The low-, mid- and high-pricing outlooks are prepared by a team of experts, reviewed by the EC and approved by the CEO and CFO. The mid-price outlook represents management's reasonable best estimate and is the basis for Shell's financial statements, Operating Plans and impairment testing.

Shell's Operating Plan reflects Shell's strategy. We will continue to update our Operating Plan, price outlooks and assumptions as we move towards net-zero emissions by 2050.

As described in "Climate-related risks and opportunities identified by Shell over the short, medium and long term" on page 80, the low-pricing outlooks could result in increased commercial, regulatory and societal risks. The prioritisation of these risks is described in "Risk management" on page 134. Given our net-zero target, the use of low-pricing outlooks is part of our resilience testing and resulting actions.

Our strategy and national net-zero commitments

In accordance with UK Listing Rule 6.6.12G, we have taken into account the extent to which country-level net-zero commitments have been considered in developing our energy transition plans.

Our strategy aims to deliver a net-zero emissions energy business by 2050. The pace of the energy transition will be heavily influenced by government policy, creating a strong country and regional dimension in seeking to deliver the goals of the Paris Agreement. Our commitment is a global one and, as such, we look to deliver our strategy through a global lens.

We seek to translate our energy transition plans into specific targets and plans at a business segment level. We also seek to take capital deployment and portfolio decisions in the context of the integrated nature of our global operations. However, we continue to recognise the importance of engagement and collaboration in delivering the fundamental changes to the energy system that are required. This includes supporting and advocating for policies that aim to reduce carbon emissions and working with governments and other stakeholders in the development of policies that support the transition to a low-carbon energy system. As national transition plans develop, consideration will be given to the impact on our operations and the associated implications for our energy transition plans.

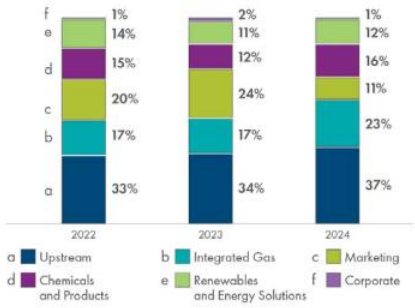
Resilience of Shell's strategy to different climate-related scenarios T

Shell's financial strength and access to capital give us the ability to reshape our portfolio as the energy system transforms. They also allow us to withstand volatility in oil and gas markets.

As we work towards net-zero emissions, we continue to exercise focus and discipline to optimise our capital allocation and operational expenditure, balancing energy security and demand, as well as internal and external transition considerations and opportunities. We will make disciplined choices about where we can create the most value for our investors and customers through the energy transition.

Investing in the energy transition

Cash capital expenditure evolution by segment [A]



[A] 2022 and 2023 for Marketing and Chemicals and Products revised to conform with reporting segment changes applicable from 2024.

Cash capital expenditure monitors investing activities on a cash basis, excluding items such as lease additions which do not necessarily result in cash outflows in the period. The measure comprises the following lines from the Consolidated Statement of Cash Flows: Capital expenditure, Investments in joint ventures and associates and Investments in equity securities. The reconciliation of "Capital expenditure" to "Cash capital expenditure" is presented in Note 7 to the "Consolidated Financial Statements" on pages 268-273.

Investing in the energy transition: Total cash capital expenditure

Total cash capital expenditure* of $21.1 billion in 2024

Non-energy products [A] **$2.2 billion**	Low-carbon energy solutions [B] **$2.4 billion**
LNG, gas and power marketing and trading [C] **$5.0 billion**	Oil, oil products and other [D] **$11.5 billion**

[A] Products for which usage does not cause Scope 3, Category 11 emissions: Lubricants, Chemicals, Convenience Retailing, Agriculture and Forestry, Construction and Road.
[B] E-Mobility and Electric Vehicle Charging Services, Low-Carbon Fuels, Renewable Power Generation, Environmental Solutions, Hydrogen, CCS. We define low-carbon energy products as those that have an average carbon intensity that is lower than conventional hydrocarbon products, assessed on a life-cycle basis.
[C] LNG Production & Trading, Gas and Power Trading, and Energy Marketing.
[D] Upstream segment, GTL, Refining and Trading, Marketing fuel and hydrocarbon sales, Shell Ventures, Corporate segment.

Total cash capital expenditure was lower in 2024 compared with 2023 driven by project prioritisation and cost optimisation. Movements by category in 2024 versus 2023 were driven by:

- Non-energy products: comparable year-on-year.
- Low-carbon energy solutions: decreased by $3.2 billion compared with 2023. This reflects lower spend on renewable power generation projects and lower spend in the Marketing business, when compared with the significant inorganic growth investments in 2023 (the acquisition of Nature Energy for nearly $2 billion and the roll-out of electric vehicle charging).
- LNG, gas and power marketing and trading: 25% higher spend in 2024 compared with 2023 due to investments in LNG infrastructure projects and Renewable and Energy Solutions (two-unit combined-cycle gas turbine power plant).
- Oil, oil products and other: 8% lower spend compared with 2023 due to reductions in Marketing and Upstream (in deep water assets, including in the Gulf of America, partly offset by higher spend in Nigeria and the UK).

Cash capital expenditure* by segment for 2025 is expected to be around $7 billion for Upstream ($7.9 billion in 2024), around $6 billion for Integrated Gas ($4.8 billion in 2024), in the range of $2-3 billion for Marketing ($2.4 billion in 2024), around $3 billion for Chemicals and Products ($3.3 billion in 2024), in the range of $2-3 billion for Renewables and Energy Solutions ($2.5 billion in 2024).

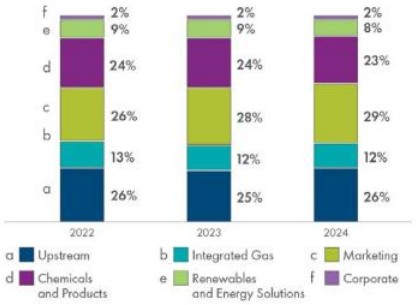
Energy transition: Total cash capital expenditure* by segment

$ billion

Classification [1]	Segment	2024		2023		2022	
Non-energy products [A]	Marketing	0.6	2.2	0.9	2.3	1.5	3.9
	Chemicals and Products	1.6		1.4		2.4	
Low-carbon energy solutions [B]	Marketing	0.8	2.4	3.3	5.6	1.4	4.3
	Renewables and Energy Solutions	1.6		2.3		2.9	
LNG, gas and power marketing and trading [C]	Integrated Gas	4.2	5.0	3.7	4.0	3.8	4.2
	Renewables and Energy Solutions	0.8		0.3		0.4	
Oil, oil products and other [D]	Integrated Gas	0.6	11.5	0.5	12.5	0.5	12.5
	Upstream	7.9		8.3		8.1	
	Marketing	1.0		1.6		2.1	
	Chemicals and Products	1.8		1.6		1.3	
	Renewables and Energy Solutions	0.1		0.1		0.2	
	Corporate	0.1		0.4		0.3	
Total		21.1	21.1	24.4	24.4	24.8	24.8

[1] See the corresponding footnotes under the table "Investing in the energy transition: Total cash capital expenditure" on page 87 for more details.
* Non-GAAP measure (see page 445).

Operating expenses evolution by segment [A]



[A] 2022 and 2023 for Marketing and Chemicals and Products revised to conform with reporting segment changes applicable from 2024.

Operating expenses is a measure of Shell's cost management performance, comprising the following items from the "Consolidated Statement of Income": production and manufacturing expenses; selling, distribution and administrative expenses; and research and development expenses. See Note 7 to the "Consolidated Financial Statements" for reconciliation of total operating expenses.

Total operating expenses* in 2024 were $36.9 billion with a focus on structural cost savings and improved operational efficiency, including lower maintenance cost.

Energy transition: Total operating expenses

Total operating expenses* of $36.9 billion in 2024

Non-energy products [A] **$7.4 billion**	Low-carbon energy solutions [B] **$1.9 billion**
LNG, gas and power marketing and trading [C] **$5.4 billion**	Oil, oil products and other [D] **$22.2 billion**

[A] Products for which usage does not cause Scope 3, Category 11 emissions: Lubricants, Chemicals, Convenience Retailing, Agriculture & Forestry, Construction & Road.
[B] E-Mobility and Electric Vehicle Charging Services, Low-Carbon Fuels, Renewable Power Generation, Environmental Solutions, Hydrogen, CCS. We define low-carbon energy products as those that have an average carbon intensity that is lower than conventional hydrocarbon products, assessed on a life-cycle basis.
[C] LNG Production & Trading, Gas & Power Trading, and Energy Marketing.
[D] Upstream segment, GTL, Refining & Trading, Marketing fuel and hydrocarbon sales, Shell Ventures, Corporate segment.

Total operating expenses* by segment for 2025 are expected to be approximately $9 billion for Upstream (2024: $9.8 billion), $5 billion for Integrated Gas (2024: $4.4billion), $11 billion for Marketing (2024: $10.7 billion), $8 billion for Chemicals and Products (2024: $8.4 billion), and $3 billion for Renewables and Energy Solutions (2024: 2.9 billion).

Energy transition: Total operating expenses* by segment

$ billion

Classification [1]	Segment	2024		2023		2022	
Non-energy products [A]	Marketing	3.9	7.4	4.1	8.1	3.9	7.5
	Chemicals and Products	3.5		4.0		3.6	
Low-carbon energy solutions [B]	Marketing	0.7	1.9	0.9	2.2	0.5	1.5
	Renewables and Energy Solutions	1.2		1.3		1.0	
LNG, gas and power marketing and trading [C]	Integrated Gas	3.7	5.4	4.0	6.5	4.4	6.9
	Renewables and Energy Solutions	1.7		2.5		2.5	
Oil, oil products and other [D]	Integrated Gas	0.8	22.2	0.8	23.2	0.8	23.6
	Upstream	9.8		9.8		10.3	
	Marketing	6.0		6.2		5.8	
	Chemicals and Products	4.9		5.6		6.0	
	Renewables and Energy Solutions	0.0		0.0		0.0	
	Corporate	0.7		0.8		0.7	
Total		36.9	36.9	40.0	40.0	39.5	39.5

[1] See the footnotes under the table "Energy transition: Total operating expenses" on page 88 for more details.
* Non-GAAP measure (see page 445).

Key aspects of Shell's financial resilience in the context of climate-related impacts are assessed and described in more detail in Note 4 to the "Consolidated Financial Statements". This describes how Shell has considered climate-related impacts in key areas of the financial statements and how this translates into the valuation of assets and measurement of liabilities. Shell's financial statements are based on reasonable and supportable assumptions that represent management's best estimate of the range of economic conditions that may exist in the foreseeable future.

Sensitivity analysis using external, and often normative, climate change scenarios has been performed for the period covering asset life cycles. If these different price outlooks were used, this would impact the recoverability of certain assets recognised in the "Consolidated Balance Sheet" as at December 31, 2024.

As there is no single scenario that underpins our Operating Plans, sensitivity analysis has been conducted using a range of key assumptions to test the resilience of our asset base. This includes (but is not limited to):

- sensitivity analysis on asset carrying values using commodity price outlooks from external, and often normative, climate change scenarios;
- carbon price sensitivities;
- chemical and refining margins price sensitivities; and
- discount rate sensitivities.

Commodity price sensitivities

Oil and gas prices are one of the key assumptions that underpin Shell's financial statements, with the mid-price outlook informed by Shell's scenario planning representing management's reasonable best estimate. Price outlooks reflect a broad range of factors, including, but not limited to, future supply and demand, and the pace of growth of low-carbon solutions. The scenarios have been selected to illustrate the resilience of the asset base under a range of possible outcomes, including the price implications arising from the ambitious IEA Net Zero Emissions scenario which provides a potential path for the global energy system (IEA NZE50) to achieve net-zero emissions by 2050. Sensitivities of asset carrying values to prices are under the assumption that all other factors in the models used to calculate impacts remain unchanged.

Sensitivity analysis has been performed using price outlooks from:

1. Average prices from three 1.5-2 °C external climate change scenarios: in view of the broad range of price outlooks across the various scenarios, the average of three external price outlooks was taken from IHS Markit/ACCS 2024; Woodmac WM AET-1.5 degree; and IEA NZE 2050 (IEA NZE50).

   Applying this priceline to Integrated Gas assets of $74 billion and Upstream assets of $77 billion as at December 31, 2024, shows recoverable amounts that are $11-15 billion and $1-3 billion lower, respectively, than the carrying values as at December 31, 2024.

2. Hybrid Shell Plan and IEA NZE50: for this Shell's mid-price outlook is applied for the next 10 years. Because of greater uncertainty, the IEA normative Net Zero Emissions scenario is applied for the period after 10 years. This gives less weight to the price-risk uncertainty in the first 10 years reflected in the Operating Plan period and applies more risk to the more uncertain subsequent periods.

   Applying this priceline to Integrated Gas assets of $74 billion and Upstream assets of $77 billion as at December 31, 2024, shows recoverable amounts that are $7–10 billion and up to $1 billion lower, respectively, than the carrying values as at December 31, 2024.

3. A 1.5 °C scenario, derived from IEA NZE50: this priceline applies the IEA normative Net Zero Emissions scenario over the whole period under review and reflects the sensitivity to a pure net-zero emissions scenario from the IEA.

   Applying this priceline to Integrated Gas assets of $74 billion and Upstream assets of $77 billion as at December 31, 2024, shows recoverable amounts that are $21-27 billion and $5-7 billion lower, respectively, than the carrying values as at December 31, 2024.

In addition, further sensitivities are provided of -10% or +10% to Shell's mid-price outlook, as an average percentage over the full period. A change of -10% or +10% to the mid-price outlook, as an average percentage over the full period, would result in around $5-9 billion impairment or some $2-5 billion impairment reversal, respectively, in Integrated Gas and Upstream as at December 31, 2024.

Carbon pricing

We consider the potential costs associated with operational GHG emissions when we assess the resilience of projects. For each region, we have developed short-, medium- and long-term estimates of future costs of carbon. These are reviewed and updated annually. See Note 4 to the "Consolidated Financial Statements" for further details on our regional cost of carbon estimates.

Up to 2030, costs for carbon emissions estimates are largely policy driven through emissions trading schemes or taxation which is levied by governments and which varies significantly on a country-by-country basis. Beyond 2030, where policy predictions are more challenging, the costs for carbon emissions are estimated based on the expected costs of abatement technologies required for 2050. The estimated cost is trending towards $50 to $230 per tonne (RT24), depending on the country, in 2050.

See "The resilience of Shell's strategy" on page 86 for more information on how carbon costs impact our resilience to climate-related risks, including sensitivity analysis.

See Shell's "Climate and Energy Transition Lobbying Report 2024", which will be published in May 2025, for more information on Shell's advocacy across a range of issues including carbon pricing.

Carbon pricing and discount rate sensitivities

The risk of stranded assets may increase in a higher-carbon-price scenario. Sensitivities of our asset carrying values to carbon prices have been based on the IEA NZE50 scenario to illustrate the resilience of asset carrying values to higher long-term carbon prices than those included in the Shell mid-price outlook.

Applying the IEA NZE50 carbon price scenario to Integrated Gas assets of $74 billion and Upstream assets of $77 billion, up to the end of life of these assets, shows recoverable amounts that are $1-2 billion and up to $1 billion lower, respectively, than the carrying values as at December 31, 2024.

Applying the IEA NZE50 carbon price scenario to Chemicals and Products assets of $38 billion shows recoverable amounts that are up to $1-2 billion lower than the carrying values as at December 31, 2024. For Chemicals and Products, increased carbon costs could potentially be recovered partially through increased product sales prices.

See "Carbon pricing" above for more information on our carbon price assumptions.

The discount rate applied for impairment testing is based on a nominal post-tax weighted average cost of capital (WACC) and is determined at 7.5%, except for power activities in the Renewables and Energy Solutions segment where 6% is applied. The discount rate includes generic systematic risk for energy transition risk. In addition, cash flow projections applied in individual assets include specific asset risks, including risk of transition. An increase in generic systematic energy transition risk could lead to a higher WACC and consequently to a higher discount rate to be applied in impairment testing. We have used a 1% shift in discount rate for sensitivity analysis purposes as an indicator of the resilience of our asset base to incremental increases in our cost of capital.

An increase of the WACC of 1% under the assumption that all other factors in the models used to calculate recoverability of carrying values remain unchanged would lead to a change in the carrying value of $1-3 billion for Integrated Gas and Upstream and no significant impairment in other segments.

See Note 4 to the "Consolidated Financial Statements" on pages 255-265 for further information on climate-related impacts in key areas of the financial statements.

Delivering progress in the energy transition

To ensure the resilience of our strategy, our responses to the risks and opportunities identified are:

- delivery through our integrated business model;
- decarbonisation of our energy value chains and operations; and
- a focus on demand-driven decarbonisation – recognising that we need to work with our customers to identify low-carbon energy solutions for their energy demands in the sectors where we have competitive advantages.

Our integrated approach allows us to withstand volatility in oil and gas markets. Our financial framework aims to enhance shareholder distributions, maintain discipline in capital allocation and targets a strong credit investment grade rating.

- In Integrated Gas, we are growing our world-leading liquefied natural gas (LNG) business. We plan to grow LNG sales by 4-5% a year through to 2030. LNG provides energy security and flexibility because it can be easily transported to places where it is needed most. Gas is a critical fuel in the energy transition and plays an important role as a lower-carbon alternative to coal for industry, and provides grid stability alongside wind and solar power in electricity generation.
- In Upstream, we continue to focus on more value and less emissions. The oil we are producing will increasingly come from our world-class deep-water business. Through innovative designs, our deep-water platforms are producing higher-margin and lower-carbon barrels. As we work towards net-zero emissions, we will continue to approach capital and carbon allocation with discipline and focus.
- In Downstream, Renewables and Energy Solutions, we are making clear choices and changes to enable this business to thrive through the energy transition. We are focusing on developing low-carbon energy and solutions where we have competitive advantages and are starting to see increasing demand. We are focusing on value over volume across all our businesses in Downstream, Renewables and Energy Solutions, while driving down our emissions and helping to drive down our customers' emissions.
- We are progressing the repurposing of our energy and chemical parks; these key focused assets allow us to underpin our hydrocarbon energy sales and the sales of lower carbon energy products. Our energy transition plans for this decade across our Downstream, Renewables and Energy Solutions business are focused on: growing our electric vehicle charging business; investing in biofuels; continuing to grow our integrated power positions, and developing technologies related to CCS and carbon removals.

See "Outlook" on page 16.

Our research and development (R&D) activities are an important contributor to achieving our net-zero emissions target. They are an important way to address the technology risk as mentioned in "Transition risks" on page 81 and "Transition opportunities" on page 84.

In 2024, our R&D expenditure on projects that contributed to decarbonisation was around $497 million, representing about 45% of our total R&D spend, compared with around 49% in 2023. This includes expenditure on reducing GHG emissions:

- from our own operations, for example, by improving energy efficiency and electrification;
- from the fuels and other products we sell to our customers - for example, biofuels, synthetic fuels and products made from low-carbon electricity, and hydrogen produced using renewable sources;
- by carbon capture, utilisation and storage applied to hydrogen production from natural gas and other carbon emissions;
- by researching nature-based solutions to offset emissions; and
- for our customers, through renewable power generation, storage, e-mobility and other electrification solutions.

Examples of R&D areas other than decarbonisation include safety, performance products, such as lubricants and polymers, automation and artificial intelligence.

Decarbonising our value chains and operations

We seek to base the decarbonisation of our value chains and operations on an understanding of the decarbonisation strategies and plans of our customers and users of our energy products. We are focused on decarbonising our own operations by:

- making portfolio changes such as acquisitions and investments in low-carbon intensity projects, decommissioning plants, divesting assets, while sustaining our oil production with increasingly lower carbon intensity;
- progressing the repurposing of our energy and chemicals parks;
- improving the energy efficiency of our operations;
- using more renewable electricity to power our operations; and
- developing CCS for some of our facilities.

If required, we may choose to use high-quality carbon credits to offset any remaining emissions from our operations, in line with the carbon mitigation hierarchy of avoid, reduce and compensate or to meet local regulatory requirements.

We have set an interim target to achieve a 50% reduction in absolute Scope 1 and 2 emissions under our operational control by 2030 on a net basis, when compared with 2016.

We set a target to eliminate routine flaring from our upstream-operated assets by 2025 [A]. With effect from January 1, 2025, SPDC has ceased routine flaring of associated gas, with the completion of essential gas capture projects and the shut-in of remaining facilities that do not yet meet the applicable emissions standards. We have therefore met our target to eliminate routine flaring from our upstream-operated assets by 2025 as of this date. We also aim to maintain methane emissions intensity for operated oil and gas assets below 0.2% and achieve near-zero methane emissions intensity by 2030.

[A] This target was subject to the completion of the sale of The Shell Petroleum Development Company of Nigeria Limited (SPDC). As detailed elsewhere in this report, on March 13, 2025, Shell completed the sale of SPDC to Renaissance.

See "Working to reduce our absolute Scope 1 and 2 emissions" on page 103.

Supporting our customers in achieving net-zero emissions

The transport sector is by far the largest market for our oil products. We are building on our customer relationships and expertise to help drive the decarbonisation of passenger cars, heavy-duty trucks, planes and ships. Changes to the supply of energy products and decarbonising the energy system require structural changes in the end-use of energy.

This requires energy users to improve, update or replace equipment so that they can use carbon-based energy more efficiently, or switch to low- and zero-carbon energy. For example, replacing internal combustion engine vehicles with electric vehicles, converting heavy-duty transport to biofuels such as renewable diesel, and, in the future, hydrogen and its derivatives.

Such structural changes are expected to help to trigger transitions along the supply chain of individual sectors and across sectors, including the production of energy and emissions over time. The IEA estimates that these changes in the end use of energy will require substantial investment.

The World Energy Outlook 2024 report by the IEA includes an estimate that by 2035 for every one US dollar spent on fossil fuels, a further $20 will need to be spent on clean energy (low-emissions fuels, and energy-efficient and low-emissions power) under the NZE50 Scenario.

We are seeking and will continue to seek to change the mix of energy products we sell to our customers as their needs for energy change. Emissions resulting from customer use of our energy products make up a large proportion of Shell's reported emissions. We believe we can make the greatest contribution to the energy transition by helping to enable our customers to switch to low-carbon energy products and services. We are working to:

- develop low- and zero-carbon alternatives to traditional fuel, including biofuels, and other low- and zero-carbon gases;
- provide more renewable power solutions to customers by growing our portfolio in select markets;
- work with customers across different sectors to help them decarbonise their use of energy, for example by substituting the use of coal with LNG; and
- address any remaining emissions from conventional fuels with solutions such as CCS and high-quality carbon credits.

Energy transition in action - selection of portfolio changes and actions in 2024

Reducing emissions from the products we sell

By the end of 2024, the number of Shell-branded electric vehicle charge points was almost 73,000 compared with 54,000 in 2023. We reached our goal of installing 70,000 public electric vehicle charge points globally by 2025 one year ahead of schedule.

Shell and our non-operated joint venture Raízen (Shell interest 44%) are, together, one of the world's largest blenders and distributors of biofuels. In 2024, Raízen commissioned the second and third of eight world-scale second-generation biofuel plants, which it aims to build in Brazil, and its first biomethane plant to produce RNG made from waste in sugar ethanol production.

In March 2024, Hollandse Kust Noord, our offshore wind park in the Netherlands (Shell interest 79.9%), achieved commercial operations.

In March 2024, we started operations at Shell Downstream Bovarius, which is one of two facilities at the Bettencourt Dairies in Wendell, Idaho, USA, where we are converting dairy manure to RNG. Bovarius is expected to produce around 400,000 MMBtu a year of RNG. The second facility, Shell Downstream Friesian, is expected to produce around 350,000 MMBtu a year of RNG and operations are expected to start in 2025.

In September 2024, our Northern Lights joint venture (Shell interest 33.3%) with Equinor and TotalEnergies completed the onshore and offshore facilities for the world's first carbon transport and storage project in Norway. The first shipments are expected in 2025. Northern Lights has the capacity to store around 1.5 million tonnes of CO_2 per year.

In April 2024, we opened our bioLNG liquefaction plant at the Shell Energy and Chemicals Park Rheinland. This can produce 100,000 tonnes of bioLNG per annum, which will help around 5,000 LNG trucks a year reduce their carbon emissions.

In July 2024, we announced that we had paused on-site construction work at the biofuels facility at the Shell Energy and Chemicals Park Rotterdam in the Netherlands to assess the most commercial way forward for the project.

Nature Energy is one of Europe's largest producers of RNG. In 2024, Nature Energy opened its first biogas plant in France. The Sécalia plant is operated in partnership with the Dijon Céréales consortium of 150 farmers. It is France's largest renewable gas plant with annual production of 230 GWh of biogas. Together with its partners, Nature Energy also owns and operates 13 biogas plants in Denmark and one in the Netherlands.

In October 2024, we announced the acquisition of RISEC Holdings, LLC (RISEC), which owns a 609-megawatt (MW) two-unit combined-cycle gas turbine power plant in Rhode Island, USA. RISEC's combined-cycle gas turbine power plant supplies power to the ISO New England power market, where demand is expected to increase due to growing decarbonisation efforts in sectors such as home heating and transport.

Rotterdam-Singapore Green and Digital Shipping Corridor (GDSC) partners conducted a successful pilot for the bunkering of mass-balanced liquefied bio-methane (LBM) at the Port of Rotterdam in October 2024. A total of 100 tonnes of mass-balanced LBM was supplied by Shell to CMA CGM's liquefied natural gas-powered.

In December 2024, a consortium led by Eku Energy and Shell Energy successfully completed the Rangebank Battery Energy Storage System (BESS) in Melbourne's Rangebank Business Park, marking the second-largest battery storage project in Victoria. With a capacity of 200 MW and 400 MWh of storage, the facility can power up to 80,000 homes.

Reducing emissions from our own operations

In January 2024, we announced our investment decision to convert the hydrocracker at our Energy and Chemicals Park Rheinland in Germany into a unit that will produce premium base oils. The hydrocracker at the Wesseling site near Cologne will stop processing crude oil into petrol, jet fuel and diesel in 2025. The planned changes are expected to reduce Shell's Scope 1 and 2 carbon emissions by around 620,000 tonnes a year.

In May 2024, the Petrobras-operated Atapu consortium (Shell interest 16.7%) announced a final investment decision (FID) for the Atapu-2 project. The new unit is expected to feature all-electric capability, aimed at lowering carbon intensity for production processes.

In June 2024, we took an FID for Polaris, a carbon capture project at the Shell Energy and Chemicals Park Scotford in Alberta, Canada. Polaris is designed to capture approximately 650,000 tonnes of CO_2 annually from the Shell-owned Scotford refinery and chemicals complex.

We also took an FID to proceed with the Atlas Carbon Storage Hub which will store CO_2 captured by the Polaris project. Polaris and Atlas will build on the success of the Quest carbon capture and storage (CCS) facility at Scotford, which has safely captured and stored more than nine million tonnes of CO_2 since 2015 that would otherwise have been released into the atmosphere.

In July 2024, we signed an agreement to invest in the Abu Dhabi National Oil Company's (ADNOC) Ruwais LNG project through a 10% participating interest. The deal is still subject to completion. The Ruwais LNG facility is set to have an electric-powered liquefaction system and will utilise access to a renewable power supply. This design supports lower operational emissions compared to traditional gas-powered LNG facilities.

In July 2024, we took the final investment decision to build REFHYNE II, a 100 MW electrolyser to produce renewable hydrogen, in Germany. We plan to use this hydrogen to partially decarbonise the Shell Energy and Chemicals Park Rheinland.

In October 2024, Shell NBS formed a joint venture with New Forests Company: Tausi Forests Limited. Operating in Tanzania and Uganda, Tausi is dedicated to establishing certified commercial plantations and to initiating afforestation projects, creating reforestation and restoration carbon credits, and enhancing climate resilience, community well-being, and biodiversity in the areas that it operates in.

Our climate-related metrics and targets

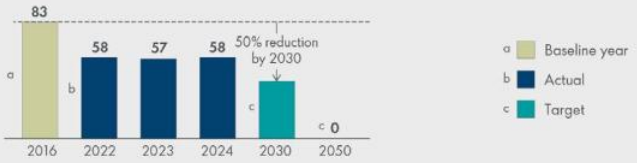
This section describes our performance against our climate-related targets and ambition, including those reflected in the remuneration of senior management and employees.

Carbon performance, targets and ambition at a glance

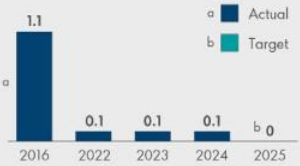
0% **Net-zero emissions by 2050** (Scope 1, 2 and 3)

Emissions from our own operations (Scope 1 and 2, operational control)

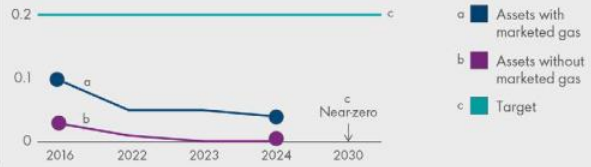
Halve Scope 1 and 2 emissions by 2030, on a net basis
(million tonnes CO_2e)



Eliminate routine flaring by 2025 [A]
(million tonnes of hydrocarbon flared)



Maintain methane emissions intensity below 0.2% and achieve near-zero methane emissions by 2030 [B]
(percentage)



Emissions from the products we sell (Scope 3, equity boundary)

Reduce net carbon intensity (NCI) [C]
(gCO_2e/MJ)

Reduce customer emissions from the use of our oil products [D]
(million tonnes CO_2e)

[A] This target was subject to the completion of the sale of The Shell Petroleum Development Company of Nigeria Limited (SPDC). With effect from January 1, 2025, SPDC ceased routine flaring. Our target is therefore met. As detailed elsewhere in this report, on March 13, 2025, Shell completed the sale of SPDC to Renaissance.

[B] On an intensity basis. Methane intensity is measured separately for oil and gas assets with marketed gas (gas, LNG and GTL available for sale) and assets without marketed gas (oil and gas assets where gas is reinjected).

[C] Average intensity, weighted by sales volume, of the energy products we sell, on an equity boundary, net of carbon credits. Estimated total GHG emissions included in NCI reflect well-to-wheel emissions associated with energy products sold by Shell. This includes the well-to-tank emissions associated with the manufacturing of energy products by others that are sold by Shell. In 2024, we revised the 2016 baseline NCI values and other historical NCI values. As a result, the percentage reduction achieved in 2023 was revised from 6.3% to 7.7%. (See "NCI baseline and restatement policy" on page 98).

[D] In March 2024, we set an ambition to reduce absolute emissions related to the use of our oil products by 15–20% by 2030, compared with 2021 (Scope 3 Category 11). Customer emissions from the use of our oil products (Scope 3, Category 11) were 517 million tonnes carbon dioxide equivalent (CO_2e) in 2023 and 569 million tonnes CO_2e in 2021.

Metrics used by Shell to assess climate-related risks and opportunities in line with our strategy and risk management process T

This section sets out the key metrics we use to track progress against our energy transition targets and ambition. These metrics are as follows.

- Metrics related to our own operations:
  - absolute Scope 1 and 2 emissions under operational control, with a 2016 baseline; and
  - routine flaring and methane emissions intensity under our operational control.
- Metrics related to emissions from the products we sell:
  - the NCI of the energy products we sell (equity basis), with a 2016 baseline; and
  - customer emissions from the use of our oil products (Scope 3, Category 11, equity basis), with a 2021 baseline.
- Performance indicators for the energy transition performance condition reflected in the remuneration of senior management and employees as set out in "Linking Shell's emissions targets to remuneration" on page 104.
- Additional metrics associated with the resilience of Shell's strategy to climate-related risks and opportunities, including information on capital allocation between our business segments and the sensitivity of our assets to carbon pricing, discount rate and commodity price assumptions as set out in "Resilience of Shell's strategy to different climate-related scenarios" on page 86.
- Metrics and targets in respect of climate-related environmental risks as set out in "Metrics and targets in respect of climate-related environmental risks" page 101.

Scope 1, 2 and 3 emissions and related risks T

In assessing progress against our target to be a net-zero emissions energy business by 2050, we report our performance against Scope 1, 2 and 3 emissions.

See "Climate-related risks and opportunities identified by Shell over the short, medium and long term" on pages 80-84.

Scope 1 and 2 emissions

In 2024, total combined Scope 1 and 2 GHG emissions (net) from assets and activities under Shell operational control were 58 million tonnes of carbon dioxide equivalent (CO_2e), reflecting a 30% reduction compared with 2016, the base year for our target to halve these emissions by 2030.

Total combined Scope 1 and 2 GHG emissions (net) were 2% higher compared with 2023 due to higher utilisation and production, offset by reductions from abatement projects.

Drivers of Scope 1 and 2 emissions

Gross direct GHG emissions (Scope 1, operational control boundary) were stable in 2024 compared with 2023, at 50 million tonnes of CO_2e, as the effect of higher Chemicals utilisation and Integrated Gas production was offset by reductions from GHG abatement projects and reduction activities.

Gross indirect GHG emissions (Scope 2, operational control boundary, using a market-based method) increased from 7 million tonnes of CO_2e in 2023 to 8 million tonnes CO_2e in 2024. This increase was driven by higher electricity consumption and reduced purchases of renewable electricity in Australia following regulatory changes for purchasing and reporting renewable energy. We present examples of our energy efficiency projects on page 108.

In 2024, carbon credits were used for compliance with the requirements of the Australian Safeguard Mechanism, resulting in an offset of 0.1 million tonnes CO_2e related to Scope 1 emissions under our operational control.

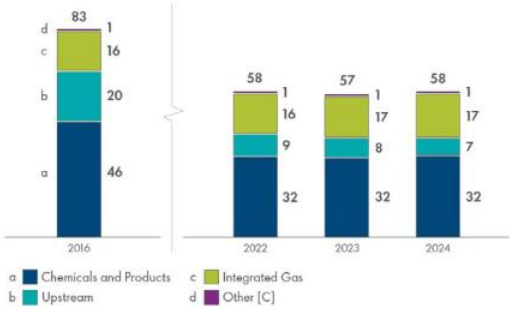
Scope 1 and 2 emissions [D, E]

				million tonnes of CO_2e
(operational control boundary)	2024	2023	2022	2016
Scope 1 emissions (gross) [A]	50	50	51	72
Scope 2 emissions (gross) [B]	8	7	7	11
Carbon credits [C]	0.1	–	–	–
Total Scope 1 and 2 emissions (net) [F]	58	57	58	83

[A] Total direct GHG emissions from assets and activities under our operational control. It includes emissions from production of energy and non-energy products. Scope 1 emissions are reported gross without the inclusion of carbon credits.
[B] Total indirect GHG emissions from imported energy from assets and activities under our operational control using a market-based method. It includes imported energy used for production of energy and non-energy products. Scope 2 emissions are reported gross without the inclusion of carbon credits.
[C] In 2024, carbon credits were used for compliance with the requirements of the Australian Safeguard Mechanism, resulting in an offset of 0.1 million tonnes CO_2e related to Scope 1 emissions under our operational control.
[D] Oil and gas industry guidelines from Ipieca indicate that several sources of uncertainty can contribute to the overall uncertainty in Scope 1 and 2 emissions inventories.
[E] Figures disclosed are rounded. Rounding differences can occur between the total combined Scope 1 and 2 absolute GHG emissions disclosed in this Report and the sum of components individually rounded to the nearest million tonnes.
[F] We measure total combined Scope 1 and 2 GHG emissions compared with a 2016 baseline, on a net basis. The 2016 baseline may be recalculated if an acquisition or a divestment has an impact of more than 10% on total Scope 1 and 2 emissions. There was no such event in 2024.

Scope 1 and 2 emissions (net) by business [A, B]

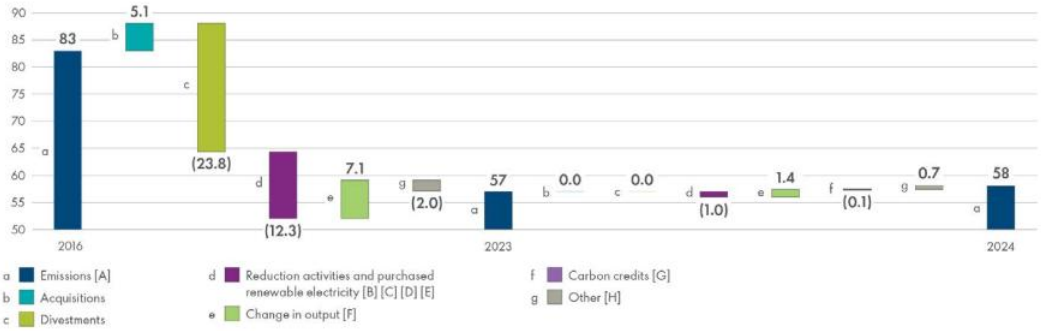
million tonnes carbon dioxide equivalent (CO_2e)



[A] Total direct (Scope 1) and energy indirect (Scope 2) GHG emissions from assets and activities under the operational control boundary, net of carbon credits. It includes emissions from production of energy and non-energy products. For Scope 2, we used a market-based method.
[B] Figures disclosed are rounded. The split between Scope 1 and 2 may not add up to the total due to rounding.
[C] Renewables and Energy Solutions, Marketing, P&T and Real Estate.

Drivers of absolute Scope 1 and 2 emissions change

Scope 1 and Scope 2 GHG emissions (net): Changes from 2016 to 2023 and from 2023 to 2024
million tonnes carbon dioxide equivalent (CO_2e)



[A] Total Scope 1 and Scope 2 emissions, rounded to the nearest million tonnes. Scope 2 emissions were calculated using a market-based method.
[B] In addition to reductions from GHG abatement and energy efficiency projects, this category includes reductions from permanent shutdowns and conversion of existing assets.
[C] Excludes 7.8 million tonnes of CO_2 captured and sequestered by the Shell-operated Quest CCS facility in Canada in 2016-2023.
[D] Excludes 1.0 million tonnes of CO_2 captured and sequestered by the Shell-operated Quest CCS facility in Canada in 2024.
[E] Of the 1,028 thousand tonnes of reduction activities and purchased renewable electricity in 2024, around 20 thousand tonnes related to purchased renewable electricity.
[F] Change in output relates to changes in production levels, including those resulting from shutdowns and turnarounds as well as production from new facilities.
[G] In 2024, carbon credits were used for compliance with the requirements of the Australian Safeguard Mechanism, resulting in an offset of 0.1 million tonnes CO_2e related to Scope 1 emissions under our operational control.
[H] In 2024, category Other represents the regulatory change for purchasing and reporting renewable energy in Australia and inclusion of emissions from Shell-owned, but third-party operated Mobility retail stations.

Routine flaring

Routine flaring of associated gas occurs during normal oil production where it is not possible to transport the gas to market, use it on-site or reinject it.

Routine flaring from The Shell Petroleum Development Company of Nigeria Limited (SPDC) was 0.1 million in 2024, comparable with 2023.

With effect from January 1, 2025, SPDC has ceased routine flaring of associated gas, with the completion of essential gas capture projects, such as the Forcados Yokri Gas Project, and the shut-in of remaining facilities from which gas cannot be transported to market. We have therefore met our target to eliminate routine flaring from our upstream-operated assets by 2025 as of this date.

Total routine and non-routine flaring at our Integrated Gas and Upstream facilities was 0.6 million tonnes in 2024, compared with 0.7 million tonnes in 2023. Around 50% of total flaring in 2024 occurred in assets operated by SPDC and SNEPCo.

On March 13, 2025, Shell completed the sale of SPDC to Renaissance, a consortium of five companies. SPDC will continue to operate the SPDC joint venture (SPDC JV [A]) on behalf of all the joint-venture partners, who together will continue to make decisions relating to work programmes for the SPDC JV's assets and infrastructure.

[A] The SPDC JV comprises SPDC (30%), the government-owned NNPC (55%), Total Exploration and Production Nigeria Ltd (10%) and Nigeria Agip Oil Company Ltd (5%).

Total routine flaring [A]

million tonnes

(operational control boundary)	2024	2023	2022	2016
Total hydrocarbons flared in routine flaring	0.1	0.1	0.1	1.1

[A] Routine flaring of associated gas occurs during normal oil production where it is not possible to transport the gas to market, use it on site or reinject it.

Methane intensity

In 2024, we continued to deliver methane emissions intensities well below our 0.2% target, with overall methane emissions intensity at 0.04% for Shell-operated oil and gas assets with marketed gas and 0.001% for Shell-operated oil and gas assets without marketed gas.

Total methane emissions from assets under Shell operational control (including Integrated Gas and Upstream, and Downstream, Renewables and Energy Solutions assets) were 33 thousand tonnes in 2024 compared with 41 thousand tonnes in 2023 due to lower venting (e.g. in 2023 venting occurred due to the maintenance of our Prelude floating LNG asset and operational issues in assets operated by Sarawak Shell Berhad).

We believe our methane emissions are quantified according to industry best practice. Methane emissions include those from unintentional leaks, venting and incomplete combustion, for example in flares and turbines.

Methane emissions intensity

%

(operational control boundary)	2024	2023	2022	2016
Methane emissions intensity - assets with marketed gas [A]	0.04%	0.05%	0.05%	0.10%
Methane emissions intensity - assets without marketed gas [B]	0.001%	0.001%	0.01%	0.03%

[A] Methane emissions intensity from all Shell-operated oil and gas assets that market their gas (including LNG and GTL assets), defined as the total volume of methane emissions in normal cubic metres (Nm^3) per total volume of gas available for sale in Nm^3.
[B] Methane emissions intensity from all Shell-operated oil and gas assets that do not market their gas (such as where gas is reinjected), defined as the total mass of methane emissions in tonnes per total mass of oil and condensate available for sale in tonnes.

Scope 3 and NCI

NCI performance

In 2024, Shell's NCI was 71 grams of carbon dioxide equivalent per megajoule of energy (gCO_2e/MJ), a 1.4% decrease from the previous year and a 9.0% reduction compared with the 2016 baseline. We therefore met our interim target to reduce our NCI by 9-12% in 2024. The decrease in our NCI in 2024 was mainly achieved through a reduction in sales of oil products, continued growth in power sales and a reduction in the average intensity of the oil products we sell.

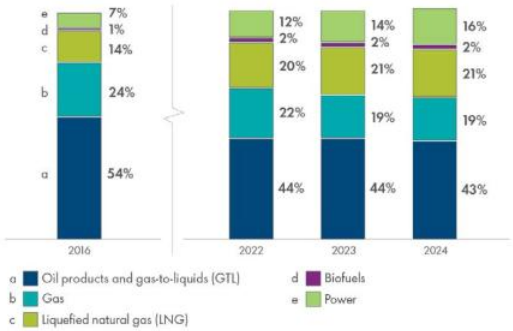
NCI performance

(equity boundary)		2024	2023	2022	2016
NCI [A] [B] [C]	gCO_2e/MJ	71	72	75	78
Estimated total energy delivered by Shell [D] [E]	trillion (10^12) MJ	15.85	16.13	16.34	20.80
Estimated total GHG emissions included in NCI (net) [F] [G]	million tonnes CO_2e	1,122	1,158	1,220	1,615
Carbon credits	million tonnes CO_2e	16.4	20.0	4.1	0
Estimated total GHG emissions (gross) [G] [H]	million tonnes CO_2e	1,139	1,178	1,225	1,615

[A] Rounded to the nearest gram of carbon dioxide equivalent per megajoule.
[B] We measure our NCI performance compared with a 2016 baseline. The NCI targets and baseline are not adjusted for the impact of acquisitions and divestments, which could have a material impact on meeting the NCI targets.
[C] In 2024, we revised the 2016 baseline NCI values from 79gCO_2e/MJ (g) to 78g. The 2022 and 2023 values were revised from 76g to 75g and from 74g to 72g respectively. (See "NCI baseline and restatement policy" on page 98.
[D] Volume of energy products sold, aggregated on an energy basis, with power represented as fossil equivalent. Energy products consist of energy oil products (gasoline, diesel, kerosene, fuel oil and LPG), GTL, biofuels, liquefied natural gas, pipeline gas and power.
[E] In 2024, consistent with revisions of NCI values, we revised the estimated total energy delivered by Shell from 16.07 trillion (10^12) MJ (t MJ) to 16.13t MJ for 2023, from 16.29t MJ to 16.34t MJ for 2022 and from 20.93t MJ to 20.80t MJ for 2016. (See "NCI baseline and restatement policy" on page 98).
[F] In 2024, consistent with revisions of NCI values, we revised the estimated total GHG emissions included in NCI (net) from 1,185 million tonnes CO_2e (mt) to 1,158mt for 2023, from 1,240mt to 1,220mt for 2022 and from 1,645 to 1,615mt for 2016. (See "NCI baseline and restatement policy" on page 98).
[G] Estimated total GHG emissions included in NCI (net) are the product of the NCI and the total energy delivered by Shell. Adding emissions offset using carbon credits gives the Estimated total GHG emissions included in NCI (gross).
[H] In 2024, consistent with revisions of NCI values, we revised the estimated total GHG emissions (gross) from 1,205 million tonnes CO_2e (mt) to 1,178mt for 2023, from 1,244mt to 1,225mt for 2022 and from 1,645mt to 1,615mt for 2016. (See "NCI baseline and restatement policy" on page 98).

As part of our strategy, we aim to increase the share of low-carbon products in our energy product sales, which is the biggest driver for reducing our NCI.

Share of estimated total energy delivered per energy product type [A, B, C]



[A] Percentage of delivered energy may not add up to 100% because of rounding.
[B] Total volume of energy products sold, aggregated on an energy basis (lower heating value) with power represented as fossil equivalents.
[C] In 2024, consistent with revisions of NCI values, the share of energy delivered through sales of biofuels was revised from 1% to 2% in 2023 and 2022. The share delivered through gas sales was revised from 20% to 19% for 2023. See "NCI baseline and restatement policy" on page 98.

Our ability to change the emissions intensity of each energy product varies, depending on the product type:

- Hydrocarbon fuels - emissions from end use by customers are by far the biggest contributors to the carbon intensity of the product. As a result, the emissions intensity of hydrocarbon fuels is expected to stay relatively unchanged over time. This is why we are focused on helping our customers decarbonise.
- Biofuels - can vary significantly in intensity depending on the feedstock and production process used.
- Power - the emissions intensity of power can be highly variable depending on how it has been generated. The proportion of our renewable power sales and the generation mix in countries where we sell power to the market both affect Shell's overall power mix and its resulting emissions intensity.

We sell more energy products than we produce ourselves. Therefore, when we calculate our emissions, we include emissions from energy products that we produce ourselves and from the products that we purchase from others for resale. This is reflected in the scope for calculation of our emissions shown in the chart on page 99.

Life-cycle carbon intensities for energy product categories included in the NCI calculation are summarised in the table below:

Carbon intensity of energy products [A]

				gCO_2e/MJ
	2024	2023	2022	2016
Oil products and gas-to-liquids [B]	86	87	87	87
Gas [C]	66	66	66	66
Liquefied natural gas (LNG) [D]	70	70	71	73
Biofuels [E]	34	34	37	38
Power [F, G]	48	49	57	60

[A] In 2024, consistent with NCI value revisions, we revised the intensities of individual products in this table. See "NCI baseline and restatement policy" on page 98.
[B] Revised from 91gCO_2e/MJ (g) to 87g for 2023, from 91g to 87g for 2022 and from 89g to 87g for 2016.
[C] Revised from 65gCO_2e/MJ(g) to 66g for 2022 and from 67g to 66g for 2016.
[D] Revised from 70gCO_2e/MJ(g) to 71g for 2022 and from 71g to 73g for 2016.
[E] Revised from 39gCO_2e/MJ(g) to 34g for 2023, from 39g to 37g for 2022 and from 40g to 38g for 2016.
[F] Revised from 58gCO_2e/MJ(g) to 57g for 2022 and from 59g to 60g for 2016.
[G] Emissions included in the carbon intensity of power have been calculated using a market-based method.

Drivers of absolute Scope 3 emissions change in 2024

Scope 3 emissions associated with our energy product sales were 1,084 million tonnes CO_2e, compared with 1,123 million tonnes CO_2e in 2023, driven by lower sales of oil products.

Emissions from Scope 3 categories 1, 3, 9 and 11, related to the sale of energy products, are the most significant categories for Shell. Emissions from the use of our energy products (Category 11) form the largest component of our indirect Scope 3 emissions. As we sell more products than we produce or refine ourselves, the emissions associated with the products we purchase from third parties are also material, as reported under Category 1 for hydrocarbon products such as oil products, gas and LNG, and Category 3 for power. Although quantitatively less significant, emissions reported under Category 9 are significant to Shell for consistency with the boundaries of our net carbon intensity measure. Other Scope 3 categories have been assessed to be quantitatively and qualitatively insignificant.

Scope 3 emissions by category [A], [B], [C]

million tonnes CO_2e

(equity boundary)	2024	2023	2022	2016
Scope 3, Category 1: purchased goods and services [D]	119	130	136	179
Scope 3, Category 3: fuel and energy-related activities	117	112	115	89
Scope 3, Category 9: downstream transport and distribution [E, F]	3	3	3	–
Scope 3, Category 11: use of sold products [G]	845	878	909	1,252
	1,084	1,123	1,163	1,520

[A] Categorised using the definitions from the GHG Protocol's Corporate Value Chain (Scope 3) Standard.
[B] Ipieca notes that due to the diversity of Scope 3 emissions, sources and the fact that these emissions occur outside the company's boundaries, the emissions estimates may be less accurate or may have a high uncertainty.
[C] In 2024, the total of Scope 3 Categories 1,3,9 and 11 was revised for 2023 (from 1,147 million tonnes CO_2e to 1,123 million tonnes CO_2e), for 2022 (from 1,174 million tonnes CO_2e to 1,163 million tonnes CO_2e) and for 2016 (from 1,545 million tonnes CO_2e to 1,520 million tonnes CO_2e). See "Basis of preparation – absolute Scope 1, 2 and 3 emissions" on page 100-101.
[D] In 2024, we revised Scope 3 Category 1 for 2023 (from 154 million tonnes CO_2e to 130 million tonnes CO_2e), for 2022 (from 144 million tonnes CO_2e to 136 million tonnes CO_2e) and for 2016 (from 172 million tonnes CO_2 to 179 million tonnes CO_2e). See "Basis of preparation – absolute Scope 1, 2 and 3 emissions" on page 100-101.
[E] In 2024, we revised Scope 3 Category 9 for 2022 (from 5 million tonnes CO_2e to 3 million tonnes CO_2e). See "Basis of preparation – absolute Scope 1, 2 and 3 emissions" on page 100-101.
[F] An estimate of Scope 3, Category 9 could not performed for 2016.
[G] In 2024, we revised Scope 3 Category 11 for 2022 (from 910 million tonnes CO_2e to 909 million tonnes CO_2e) and for 2016 (from 1,284 million tonnes CO_2e to 1,252 million tonnes CO_2e). See "Basis of preparation – absolute Scope 1, 2 and 3 emissions" on page 100-101.

Drivers of absolute Scope 3 Category 11 oil products emissions change in 2024

In 2024, Scope 3 Category 11 emissions from the use of our oil products were 491 million tonnes CO_2e, a reduction of 5.0% compared with 2023. This reduction was driven by lower sales in our Mobility and Products businesses.

At the end of 2024, we achieved a reduction of 13.7% compared with 2021, and are progressing towards our ambition to reduce customer emissions from the use of our oil products (Scope 3, Category 11) by 15-20% by 2030 compared with 2021.

Customer emissions from the use of our oil products

million tonnes CO_2e

(equity boundary)	2024	2023	2022	2021
Scope 3, Category 11: use of sold products (oil products)	491	517	527	569

Carbon credits

In 2024, Shell accounted for the retirement of 17.3 million carbon credits, of which 16.4 million were related to our NCI (including 2.4 million linked to the sale of energy products).

Of our total carbon credit retirements for 2024, 74% were certified by the Verra, Verified Carbon Standard Program (VCS), 10% by the ACR (formerly American Carbon registry), 15% by Gold Standard, and 1% via Australian Carbon Credit Units.

We carefully source and screen the credits we purchase and retire from the market.

Carbon credit retirements [A]

Million carbon credits [B]

(equity boundary)	2024	2023	2022	2016
Included in Shell's NCI metric [C]	16.4	20.0	4.1	0.0
Excluded from Shell's NCI metric [D]	0.9	1.8	1.7	0.0
	17.3	21.8	5.8	0.0

[A] Represent credits related to transactions occurring in the financial year irrespective of the actual retirement date. Retirements from registries may take place after the year-end. Excludes carbon credits transactions executed by Shell on behalf of/with third parties without a link to Shell activities.
[B] One carbon credit represents the avoidance or removal of one metric tonne of CO_2 equivalent.
[C] Carbon credits associated with the sale of energy products and carbon credits used to compensate for Shell Group emissions including operational emissions and emissions associated with the use of sold products.
[D] Carbon credits retired in relation to sales of non-energy products and Shell's internal activity like corporate travel.

Basis of preparation

NCI

Shell's NCI is the average intensity, weighted by sales volumes, of the energy products sold by Shell. It is tracked, measured and reported using Shell's Net Carbon Footprint (NCF) methodology.

NCI objective

Shell's NCI provides an annual measure of the life-cycle emissions intensity of the portfolio of energy products sold. The intended use of the NCI metric is to track progress in reducing the overall carbon intensity of the energy products sold by Shell. NCI measures emissions associated with each unit of energy we sell, compared with a 2016 baseline. It reflects changes in sales of oil and gas products, and changes in sales of low- and zero-carbon products such as biofuels and renewable electricity.

NCI definition

The NCI is calculated on a life-cycle basis and as such includes GHG emissions – on an equity basis – from several sources, including:

- direct GHG emissions from Shell operations;
- indirect GHG emissions from the generation of energy consumed by Shell; and
- indirect GHG emissions from the use of the products we sell.

The NCI is not a mathematical derivation of total emissions divided by total energy, nor is it an inventory of absolute emissions. It is a weighted average of the life-cycle CO_2 intensities of different energy products, normalising them to the same point relative to their final enduse. The use of a consistent functional unit, grams of carbon dioxide equivalent per megajoule (gCO_2e/MJ), allows like-for-like comparisons and the aggregation of individual life-cycle intensities for a range of energy products including renewable power.

Emissions from other parts of the product life cycle are also included, such as those from the extraction, transport and processing of crude oil, gas or other feedstocks and the distribution of products to our customers. Also included are emissions from parts of this life cycle not owned by Shell, such as the extraction of oil and gas processed by Shell but not produced by Shell; or from the production of oil products and electricity marketed by Shell that have not been processed or generated at a Shell facility.

We also take into account emissions offset through the use of carbon credits and mitigation actions such as the use of CCS technology.

See "Scope of NCI" on page 99 for details of the supply chains and steps in the product life cycles that are included in the Net Carbon Footprint methodology.

The following GHG emissions are not included in the NCI:

- emissions from production, processing, use and end-of-life treatment of non-energy products, such as chemicals and lubricants;
- emissions from third-party processing of sold intermediate products, such as the manufacture of plastics from feedstocks sold by Shell;
- emissions associated with the construction and decommissioning of production and manufacturing facilities;
- emissions associated with the production of fuels purchased to generate energy on-site at a Shell facility;
- other indirect emissions from waste generated in operations, business travel, employee commuting, transmission and distribution losses associated with imported electricity, franchises and investments; and
- emissions from capital goods, defined by the GHG Protocol as including fixed assets or property, plant and equipment, and other goods and services not related to purchased energy feedstocks sourced from third parties or energy products manufactured by third parties and sold by Shell.

The NCI calculation uses Shell's energy product sales volumes data, as disclosed in this Report. This excludes certain sales volumes such as:

- certain contracts held for trading purposes reported net rather than gross. Business-specific methodologies to net volumes have been applied in oil products and pipeline gas and power. Paper trades that do not result in physical product delivery are excluded; and
- retail sales volumes from markets where Shell operates under trademark licensing agreements.

The energy products included in the NCI calculation are oil products, (gasoline, diesel, kerosene, fuel oil and LPG), GTL, biofuels, LNG, pipeline gas and power.

We review the NCI methodology annually to ensure it reflects changing energy products, relevant data inputs and simplification opportunities. See our Net Carbon Footprint (NCF) methodology documentation on shell.com for further information.

NCI baseline and restatement policy

We measure our NCI performance compared with a 2016 baseline. The NCI targets and baseline are not adjusted for the impact of acquisitions and divestments, which could have a material impact on meeting the NCI targets. The 2016 baseline may be recalculated as a result of changes in estimates with a cumulative impact of 2% or more on the NCI value in any historically disclosed year.

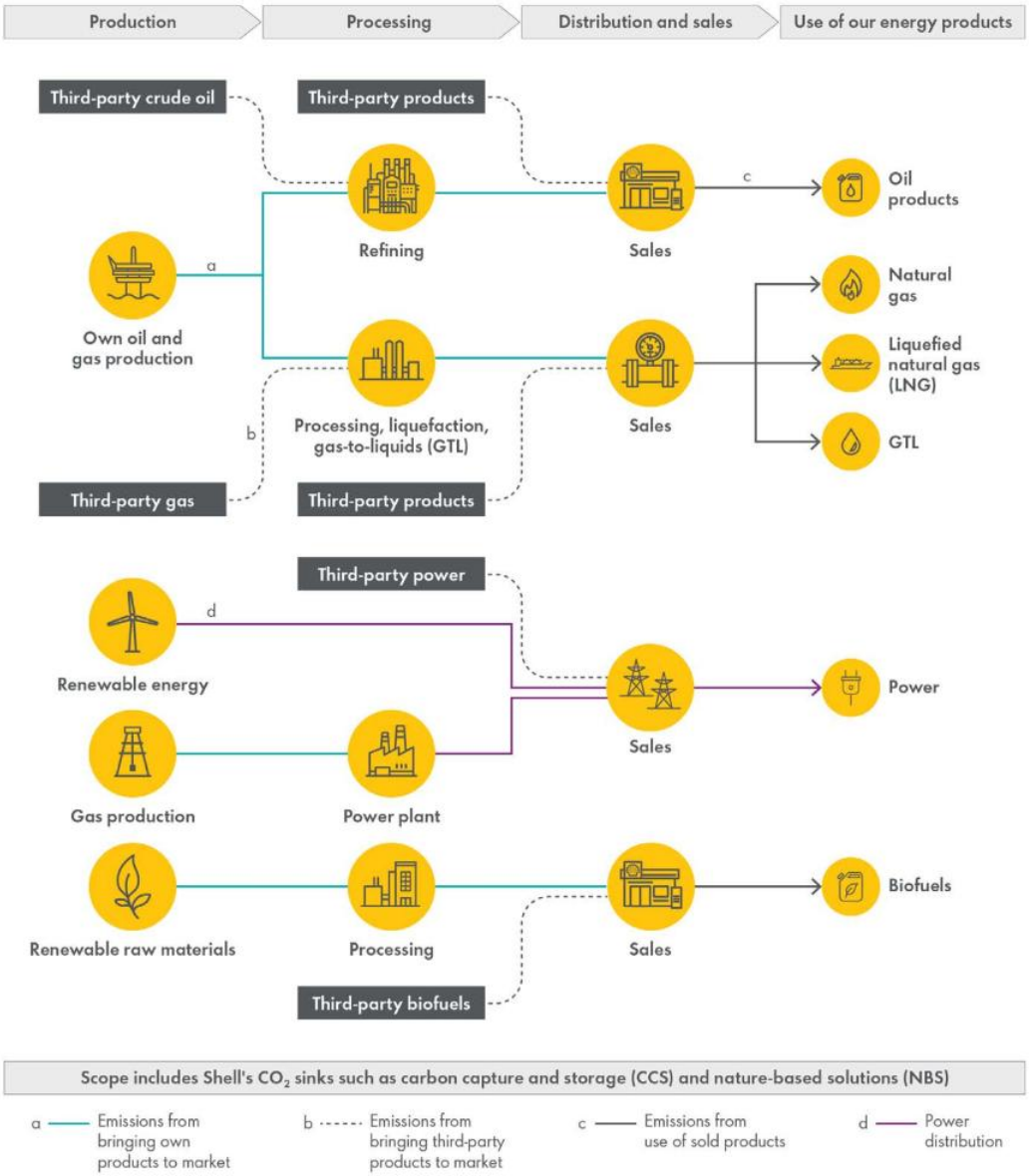
In 2024, the 2% cumulative restatement threshold was met, triggered by changes in external data sources for the third-party upstream and refining intensities used in our calculation of life-cycle product intensities.

Accordingly NCI values were revised for the following years:

- 2016: from 79g to 78gCO_2e/MJ (Baseline)
- 2017: from 79g to 78gCO_2e/MJ
- 2018: from 79g to 78gCO_2e/MJ
- 2019: from 78g to 77gCO_2e/MJ
- 2020: from 75g to 74gCO_2e/MJ
- 2021: from 77g to 76gCO_2e/MJ
- 2022: from 76g to 75gCO_2e/MJ
- 2023: from 74g to 72gCO_2e/MJ

These changes did not impact the NCI performance outcomes compared with interim reduction targets in 2022 and 2023 or preceding years. Compared with the revised 2016 baseline, the percentage reduction achieved in 2022 remains 3.8%, within the target of 3-4% for that year. The percentage reduction achieved in 2023 was revised from 6.3% to 7.7%, still within the target of 6–8% for that year.

Scope of NCI


Production
Processing
Distribution and sales
Use of our energy products
Third-party crude oil
Third-party products
Refining
Sales
c
Oil products
a
Own oil and gas production
Natural gas
Liquefied natural gas (LNG)
GTL
Processing, liquefaction, gas-to-liquids (GTL)
Sales
b
Third-party gas
Third-party products
Third-party power
d
Renewable energy
Power
Sales
Gas production
Power plant
Renewable raw materials
Processing
Sales
Biofuels
Third-party biofuels
Scope includes Shell's CO_2 sinks such as carbon capture and storage (CCS) and nature-based solutions (NBS)
a Emissions from bringing own products to market
b Emissions from bringing third-party products to market
c Emissions from use of sold products
d Power distribution

Basis of preparation – absolute Scope 1, 2 and 3 emissions

We follow the GHG Protocol's Corporate Accounting and Reporting Standard, which defines three scopes of GHG emissions:

- Scope 1: direct GHG emissions from sources under Shell's operational control.
- Scope 2: indirect GHG emissions from the generation of purchased energy consumed by Shell assets under operational control.
- Scope 3: other indirect GHG emissions, including emissions associated with the use of energy products sold by Shell.

GHG emissions comprise CO_2, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulphur hexafluoride and nitrogen trifluoride, with CO_2 and methane being the most significant contributors.

Scope 1 and 2 emissions

Our GHG inventory is prepared in line with the requirements outlined in the ISO 14064-1:2018 Specification with Guidance at the Organizational Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals and the GHG Protocol's Corporate Accounting and Reporting Standard.

In line with external standards, we aggregate GHG emissions into tonnes of CO_2 equivalent by applying global warming potential (GWP) factors to non-CO_2 GHGs. With effect from 2023, these factors are taken from the IPCC's Fifth Assessment Report (AR5) over a 100-year time period, as required by the UK Government GHG Conversion Factors for Company Reporting. GHG emissions are aggregated and consolidated from emission source. All operated assets are included in our GHG inventory.

Scope 1 emissions

All significant sources were included in our Scope 1 inventory. Sources included comprise:

- combustion of carbon-containing fuels in stationary equipment (e.g. boilers and gas turbines) for energy generation;
- combustion of carbon-containing fuels in mobile equipment (e.g. trucks, vessels and mobile rigs);
- flares;
- venting and emissions from industrial processes (e.g. hydrogen plants and catalytic cracking units); and
- fugitive emissions, including piping and equipment leaks and non-routine events.

Our Scope 1 emissions follow the GHG Protocol guidance. As a result, the following are not included in our reported Scope 1 emissions:

- CO_2 emissions from biogenic sources such as biofuels or biomass (however methane and nitrous oxide emissions from biogenic sources are included);
- captured CO_2 that was subsequently sold or otherwise transferred to third parties;
- CO_2 captured and sequestered using CCS technologies; and
- carbon credits.

Scope 2 emissions

All significant sources were included in our Scope 2 inventory. Sources included comprise indirect emissions from purchased and consumed electricity, steam and heat. We did not identify any assets with imported cooling or compressed air used for energy purposes.

Scope 2 emissions are calculated using the market- and location-based methods separately as defined by the GHG Protocol Scope 2 Guidance. Scope 2 emissions are presented on a gross basis.

Carbon credits

Our target to halve total Scope 1 and 2 GHG emissions by 2030 has been set on a net basis, including emissions offset by carbon credits.

In 2024, carbon credits were used for compliance with the requirements of the Australian Safeguard Mechanism, resulting in an offset of 0.1 million tonnes CO_2e related to Scope 1 emissions under our operational control.

Baseline and restatement policy

We measure our total combined Scope 1 and 2 GHG emissions performance compared with a 2016 baseline, on a net basis. The 2016 baseline may be recalculated if an acquisition or a divestment has an impact of more than 10% on total Scope 1 and 2 emissions. There was no such event in 2024.

Scope 3 emissions

This Report provides Scope 3 emissions associated with our energy product sales. Emissions were consolidated using the equity boundary approach. Under this approach, we reported the Shell share of emissions from energy products sold, including those sourced from third parties.

Emissions from Scope 3 categories 1, 3, 9 and 11, related to the sale of energy products, are the most significant categories for Shell. Emissions from the use of our energy products (Category 11) form the largest component of our indirect Scope 3 emissions. As we sell more products than we produce or refine ourselves, the emissions associated with the products we purchase from third parties are also material, as reported under Category 1 for hydrocarbon products such as oil products, gas and LNG, and Category 3 for power. Although quantitatively less significant, emissions reported under Category 9 are significant to Shell for consistency with the boundaries of our net carbon intensity measure. Other Scope 3 categories have been assessed to be quantitatively and qualitatively insignificant.

Consistent with our revisions of NCI historical data, we revised Scope 3 emissions under Categories 1, 9 and 11, as applicable, for years 2016, 2022 and 2023 in this Report. There was no change to previously published Scope 3 emissions Category 11 Oil products. See "NCI baseline and restatement policy" on page 98 for details.

The calculation of Scope 3 Category 11 emissions uses energy product sales volumes data, disclosed in this Report where relevant. These sales volumes exclude certain contracts held for trading purposes and reported net rather than gross. Business-specific methodologies have been applied to net volumes of oil products, pipeline gas and power. Paper trades that do not result in physical product delivery are excluded. Retail sales volumes from markets where Shell operates under trademark licensing agreements are not included in the sales volumes reported by Shell and are therefore excluded from Scope 3 emissions.

Scope 3, Category 1: purchased goods and services

This category includes well-to-tank emissions from purchased third-party unfinished and finished energy products excluding electricity (which is reported separately under Category 3: fuel and energy-related activities and not included in Scope 1 or Scope 2). Emissions from purchased non-energy products are not included.

Emissions in this category are estimated using well-to-tank emission factors for crude oil, natural gas, refined oil products (such as gasoline, and diesel), LNG and biofuels. Because the emission factors include transport, we do not estimate emissions from the transport of purchased third-party products separately.

In 2024, Category 1 emissions were revised for the following years:

- 2016: from 172 million tonnes CO_2e to 179 million tonnes CO_2e
- 2020: from 147 million tonnes CO_2e to 150 million tonnes CO_2e
- 2021: from 147 million tonnes CO_2e to 142 million tonnes CO_2e
- 2022: from 144 million tonnes CO_2e to 136 million tonnes CO_2e
- 2023: from 154 million tonnes CO_2e to 130 million tonnes CO_2e

Scope 3, Category 3: fuel and energy-related activities (not included in Scope 1 and 2)
This category includes well-to-wire emissions from purchased third-party electricity sold by Shell, calculated using a market-based method. Emissions are not adjusted for any potential double-counting of sold natural gas that may have been used for generating this electricity.

This category does not include:
- indirect emissions from the generation of imported energy (steam, heat or electricity consumed by our assets). These emissions are reported separately as Scope 2 emissions; and
- well-to-tank emissions from purchased electricity, steam and heat consumed by our assets (i.e. Scope 3 emissions from the extraction, refining and transport of primary fuels before their use in the generation of electricity or steam).

Following the NCI restatement in 2024, Scope 3, Category 3 emissions remained unchanged at:
- For 2016 at 89 million tonnes CO_2e
- For 2020 at 103 million tonnes CO_2e
- For 2021 at 136 million tonnes CO_2e
- For 2022 at 115 million tonnes CO_2e
- For 2023 at 112 million tonnes CO_2e

Scope 3, Category 9: downstream transport and distribution
This category includes estimated emissions from the transport and distribution of energy products produced or refined by Shell. It does not include the emissions associated with transporting third-party products, which are included in Scope 3, Category 1. To avoid double counting across emission scopes, emissions from transport activities which are already included in our Scope 1 and 2 equity emissions are excluded from this category.

In 2024, Category 9 emissions were revised for the year 2022, from 5 million tonnes CO_2e to 3 million tonnes CO_2e. Scope 3 Category 9 emissions remained unchanged for 2021 (at 6 million tonnes CO_2e) and for 2023 (at 3 million tonnes CO_2e). An estimate of Scope 3 Category 9 was not performed for 2016 and 2020.

Scope 3, Category 11: use of sold products
This category includes estimated emissions from the use of sold energy products, such as LNG, GTL, pipeline gas, refined oil products and biofuels. These emissions relate to products manufactured and sold by Shell and third-party products sold by Shell.

This category does not include non-energy products that may have been combusted during use (for example, lubricants).

In 2024, Category 11 emissions were revised for the following years:
- 2016: from 1,284 million tonnes CO_2e to 1,252 million tonnes CO_2e
- 2020: from 1,054 million tonnes CO_2e to 1,028 million tonnes CO_2e
- 2021: from 1,010 million tonnes CO_2e to 963 million tonnes CO_2e
- 2022: from 910 million tonnes CO_2e to 909 million tonnes CO_2e

For 2023, Scope 3 Category 11 remained unchanged at 878 million tonnes CO_2e.

Revisions did not impact Category 11 emissions from the use of oil products.

Biogenic emissions
CO_2 emissions from biogenic sources related to the combustion of sold biofuels are estimated but, in line with GHG Protocol guidance and ISO 14064-1:2018, not included in Scope 3, Category 11. Methane and nitrous oxide emissions from biogenic sources are included in Scope 3, Category 11.

It is assumed that the presence of biogenic emissions associated with other Scope 3 categories is negligible at present.

Customer emissions from the use of our oil products
Our ambition to reduce customer emissions from the use of our oil products is a subset of Scope 3, Category 11 emissions, focusing on the use of refined oil products.

We measure these emission reductions compared with a 2021 baseline. The 2021 baseline may be recalculated in the event of a revision of our sales of oil products, or in the event of other changes to emissions factors subject to a 2% cumulative threshold.

Metrics and targets in respect of climate-related environmental risks T
We monitor physical risk exposures, whether climate-related or not, water use, emissions to air and water, biodiversity, and waste generated from our operations. Where relevant, we may manage our environmental performance by establishing specific targets. See 'Respecting nature' on page 111 for more information.

See "Respecting nature" on pages 109-113.

Targets used by Shell to manage climate-related risks and opportunities and performance against targets T

Our response to the energy transition risk focuses on decarbonising our value chain. This section sets out our climate targets which are focused on reducing our NCI and our absolute emissions, as presented on pages 102-103. Shell's material climate-related risks and opportunities are set out in the "Climate-related risks and opportunities identified by Shell over the short, medium and long term" section on pages 80-84.

We have set intensity targets and absolute targets and an ambition over the short, medium and long term to track our performance over time (as summarised below). The targets are forward-looking targets based on management's current expectations and certain material assumptions and, accordingly, involve risks and uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied herein.

We believe our total net absolute emissions peaked in 2018 at 1.7 gigatonnes of carbon dioxide equivalent ($GtCO_2$).

Our net-zero target includes emissions from our operations, as well as from the end use of all the energy products we sell. We are seeking to reduce emissions from our own operations, including the production of oil and gas. More than 90% of the total emissions we include within our NCI boundary are indirect emissions associated with third-party products and end-use emissions of energy products we sell, so we are also working with our customers to support them in transitioning to low-carbon products and services.

In October 2021, in support of our 2050 net-zero emissions target, we set a target to reduce Scope 1 and 2 absolute emissions from assets and activities under our operational control (including divestments) by 50% by 2030 compared with the 2016 baseline, on a net basis.

We aim to maintain methane emissions intensity for operated oil and gas assets below 0.2% and achieve near-zero methane emissions by 2030. We were aiming to eliminate routine flaring from our upstream-operated assets by 2025 [A] and Shell has delivered this target.

[A] This target was subject to the completion of the sale of The Shell Petroleum Development Company of Nigeria Limited (SPDC). With effect from January 1, 2025, SPDC ceased routine flaring. As detailed elsewhere in this report, on March 13, 2025, Shell completed the sale of SPDC to Renaissance.

In March 2024, we set revised targets to reduce the NCI of the energy products we sell in 2024 by 9-13% by 2025, 15-20% by 2030 and 100% by 2050. In recognition of the uncertainty in the pace of change in the energy transition, we retired our 2035 target of a 45% reduction in NCI.

The NCI metric measures the pace of transition by tracking our progress in reducing the overall carbon intensity of the energy products sold by Shell. NCI measures emissions associated with each unit of energy we sell, compared with a 2016 baseline. It reflects changes in sales of oil and gas products, and changes in sales of low- and zero-carbon products – such as biofuels and renewable electricity. Unlike Scope 1 and 2 emissions, reducing the NCI of the products we sell requires action by both Shell and our customers, with the support of governments and policymakers to create the right conditions for change.

In March 2024, we set an ambition to reduce customer emissions from the use of our oil products (Scope 3, Category 11) by 15-20% by 2030 compared with 2021 [B]. This level of ambition is in line with the EU's climate goals in the transport sector, among the most progressive in the world. Achieving this ambition will mean reducing sales of oil products, such as gasoline and diesel, as we support customers as they move to electric mobility and lower-carbon fuels.

[B] Customer emissions from the use of our oil products (Scope 3, Category 11) were 517 million tonnes carbon dioxide equivalent (CO_2e) in 2023 and 569 million tonnes CO_2e in 2021.

In the short and medium term, we have set climate targets for emissions that we are able to control, namely our Scope 1 and 2 emissions, methane emissions and flaring. We have also set climate targets and an ambition for emissions that are outside our control. These include our ambition to reduce the Scope 3, Category 11 customer emissions from the use of our oil products, and our target to reduce the net carbon intensity of all the energy products we sell.

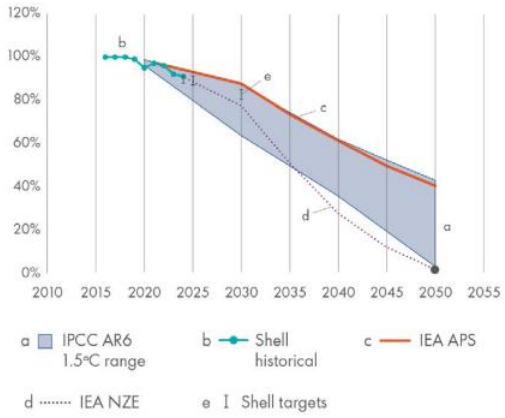
Setting targets for NCI

Shell's target is to become a net-zero emissions energy business by 2050. We also have short-, medium- and long-term targets to reduce the carbon intensity of the energy products we sell, measured using our NCI metric. We believe these targets are aligned with the more ambitious goal of the Paris Agreement, which is to limit the rise in global average temperature this century to 1.5°C above pre-industrial levels. There is no established standard for aligning an energy supplier's decarbonisation targets within the 1.5°C temperature goal of the Paris Agreement. For this reason, we have defined our NCI target using 1.5°C scenarios developed for the IPCC's AR6.

We start with the complete set of 1.5°C scenarios and then exclude scenarios which are too reliant on carbon removals or use of bioenergy before removing outliers. We then calculate an emissions intensity for each scenario which is comparable to our own NCI. Finally, we produce a 1.5°C pathway based on the reductions in emissions intensity over time. We have chosen to use a range instead of any individual scenario to better reflect the uncertainty of the energy transition.

We believe that using this pathway to set our targets demonstrates that they are aligned with the more ambitious 1.5°C goal of the Paris Agreement. This is illustrated in the chart below. We also believe that the pace of change will vary around the world by region and by sector, taking into consideration the time needed for energy users to invest in large-scale equipment and the energy infrastructure changes needed for Shell to deliver more low- and zero-carbon energy.

Shell's Paris-aligned targets



Progress towards our Scope 1 and 2 target

The chart below shows our progress since 2016 in reducing our Scope 1 and 2 emissions and gives an indication of how we expect to achieve our target in 2030. The actions we take to achieve our target will depend on the evolution of our asset portfolio and the continued development of technologies which reduce carbon emissions. We expect that, on a net portfolio basis, reductions predominantly from abatement projects including carbon capture and storage and electrification, may outweigh increases in our Scope 1 and 2 emissions from new investments between 2025 and 2030. Our investments in producing low-carbon energy will increase our Scope 1 and 2 emissions, while reducing the NCI of the products we sell. Subsequent reductions in our emissions are reflected in the mechanisms outlined below and reflect an expected path to meeting our target by 2030.

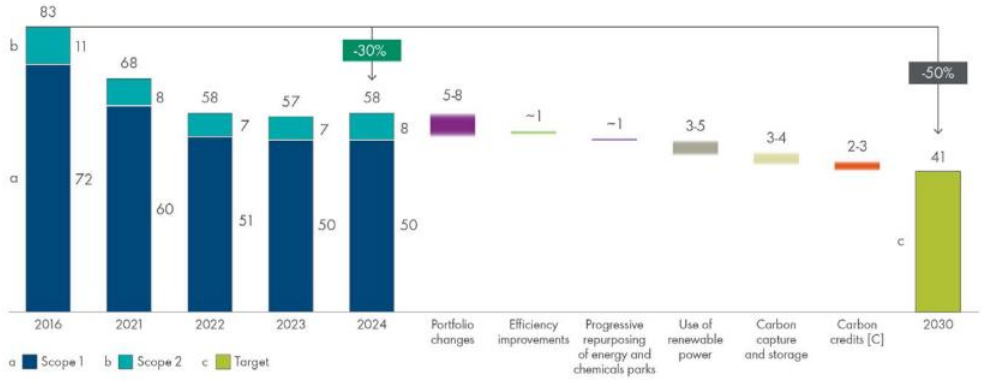
To decarbonise our operations, we are focusing on:

- making portfolio changes such as acquisitions and investments in low-carbon intensity projects, decommissioning plants, divesting assets, while sustaining our oil production with increasingly lower carbon intensity;
- progressing the repurposing of our energy and chemicals parks;
- improving the energy efficiency of our operations;
- using more renewable electricity to power our operations; and
- developing CCS for some of our facilities.

If required, we may choose to use high-quality carbon credits to offset any remaining emissions from our operations, in line with the carbon mitigation hierarchy of avoid, reduce and compensate.

Working to reduce our absolute Scope 1 and 2 emissions

Scope 1 and 2 emissions in million tonnes of CO_2e [A],[B]



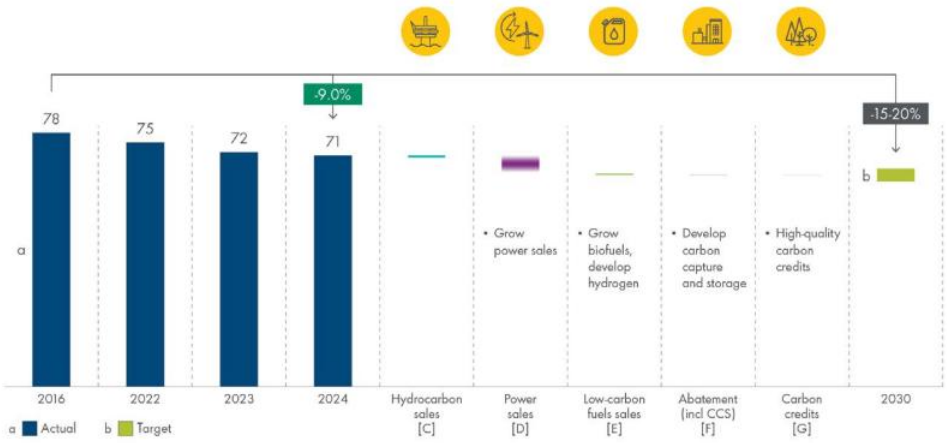
[A] The 2016 baseline may be recalculated if an acquisition or a divestment has an impact of more than 10% on total Scope 1 and 2 emissions. There was no such event in 2024.
[B] Operational control boundary and presented on a net basis (i.e. inclusive of any use of carbon credits).
[C] Including compliance and voluntary carbon credits as required.

Progress towards our NCI target

Unlike Scope 1 and 2 emissions, reducing the NCI of the products we sell requires action by both Shell and our customers, with the support of governments and policymakers to create the right conditions for change. The biggest driver for reducing our NCI is increasing the sales of and demand for low-carbon energy. The chart below illustrates how changes in the volume of products and services we sell could result in NCI reductions towards 2030. The change in our sales of these products and services will also reflect the development and adoption of new technologies and infrastructure, and the adoption of public policies designed to encourage the energy transition.

Working to reduce our NCI

NCI in gCO_2e/MJ [A], [B]



[A] Grams of carbon dioxide equivalent per megajoule.
[B] In 2024, we revised the 2016 baseline NCI value from 79gCO_2e/MJ (g) to 78g. The 2022 and 2023 values were respectively revised from 76g to 75g and from 74g to 72g.
[C] Hydrocarbon sales reflect the effect of lower sales of oil products, and higher sales of natural gas. Emissions associated with gas are lower than those of oil products.
[D] Power sales show the expected growth of our integrated power business and increasing sales of renewable power.
[E] Sales of low-carbon fuels reflect higher sales of biofuels and hydrogen, which are low- and zero-carbon products.
[F] CCS reduces carbon emissions by capturing them at source.
[G] High-quality carbon credits such as nature-based solutions can be used to offset remaining carbon emissions, particularly in hard-to-abate sectors such as aviation and industries including cement and steel.

Linking Shell's emissions targets to remuneration

We have established remuneration structures to support us in reducing our operational emissions and to support customers in reducing their emissions. The majority of employees participate in the annual bonus scheme which is linked to the Group scorecard. From 2025, the Long-Term Incentive Plan (LTIP) is referred to as the Performance Share Awards (PSA) and no further Performance Share Plan (PSP) awards will be made. Our annual bonus scorecard and PSA include "Shell's journey in the energy transition" performance metrics, which are designed to ensure that remuneration is aligned with Shell's Operating Plan and longer-term strategic ambitions.

PSA will be awarded to Executive Directors and around 120 senior executives. Circa 12,000 employees will receive PSA and/or Restricted Share Awards (RSA), which are time-based, based on seniority.

See "Directors' Remuneration Report" on pages 188-190.

Energy transition performance condition and the vesting of the 2022 LTIP and PSP awards

The following performance outcomes for the energy transition performance condition were considered in the vesting assessment of the 2022 LTIP and PSP awards, covering the performance cycle 2022-2024:

2022 LTIP energy transition performance condition: outcome

	Outcome
Net carbon intensity (NCI)	Performance indicator met
Growing the power business	Performance indicator met
Growing new lower-carbon product offerings	Performance indicator partially met
Develop emissions sinks	Performance indicator partially met

In addition to the above, a number of broader indicators of Shell's progress in the energy transition were considered. Overall, it was determined that the energy transition measure (accounting for 20% of the LTIP award and 10% of the PSP award) should vest at 130% of the target. See "Long-term Incentive Plan vesting: 2022 LTIP - 2022 LTIP energy transition performance conditions outcome" on pages 197-199 for more information.

See "Annual Report on Remuneration" on pages 191-207.

Energy transition performance condition in the 2024 LTIP and PSP awards

For LTIP and PSP awards granted in 2024, the energy transition performance condition had a weighting of 25% in the LTIP and 12.5% in the PSP. Determination of the extent to which awards will vest will be based on its holistic assessment of progress towards reducing emissions from our operations and supporting customers to reduce their emissions.

Energy transition performance condition for 2025 PSA

For the 2025 PSA, the "Shell's journey in the energy transition" performance condition retains the same weighting and performance assessment framework as for 2024. The determination of the extent to which awards will vest will be based on an holistic assessment of progress towards reducing emissions from our operations and supporting our customers to reduce their emissions. This will be based on climate-related targets for our own operations of:

- halving Scope 1 and 2 emissions by 2030 under operational control on a net basis (2016 baseline);
- eliminating routine flaring from upstream operations by 2025 [A]; and
- maintaining methane emissions intensity below 0.2% and achieving near-zero methane emissions by 2030 [B].

[A] This target was subject to the completion of the sale of The Shell Petroleum Development Company of Nigeria Limited (SPDC). With effect from January 1, 2025, SPDC ceased routine flaring. As detailed elsewhere in this report, on March 13, 2025, Shell completed the sale of SPDC to Renaissance.
[B] On an intensity basis.

It will also take into account progress in developments that support the energy transition to 2030 and beyond, such as the development of our Power business (including renewables), lower-carbon LNG, biofuels, electric vehicle charging, hydrogen and CCS.

Additionally, progress towards achieving a 15-20% reduction in NCI by 2030 (2016 baseline) and a 15-20% reduction in customer emissions from the use of our oil products by 2030 (2021 baseline) [C], as well as Shell's wider performance in helping to accelerate the energy transition, such as by demonstrating leadership and advocacy in standard-setting, alongside any other factors considered material will be taken into account.

[C] This ambition was set in March 2024. Customer emissions from the use of our oil products (Scope 3, Category 11) were 517 million tonnes CO_2e in 2023 and 569 million tonnes CO_2e in 2021.

See "Annual Report on Remuneration" on page 206 for more information on the proposed performance framework.

Energy transition targets in the annual bonus scorecard

Delivering on our net-zero emissions target is a part of the annual bonus scorecard, which helps determine annual performance bonus outcomes for senior management and the majority of Shell's employees.

The energy transition progress measures are shown in the table below.

2024 scorecard: Shell's journey in the energy transition

		2024 Target	2024 Performance	2024 Status
LNG volumes [A]	million tonnes per annum	28.7	29.1	Above target
Reducing operational emissions	thousand tonnes of CO_2	700	1,028	Outstanding [B]
Supporting customer decarbonisation	Number of EV charge points	70,000	72,800	Above target

[A] Equity liquefaction.
[B] Above the maximum target

Our score for LNG volumes in 2024 was above target, reflecting strong operational performance. This was driven mainly by volume increases in Australia and the Atlantic region, partly offset by feedgas constraints in Nigeria and Egypt.

The 2024 outcome for operational emissions reductions was outstanding with 1,028 thousand tonnes of GHG emissions reductions from abatement, renewable energy and permanent shutdowns or conversions ("right-sizing"). This was driven by catalyst improvements in Pearl, Forcados Yokri Gas Project in Nigeria and optimisation of liquefaction control system in QGC.

We have continued to grow our network of electric vehicle charge points, exceeding our 2024 target. In 2024, we added around 19,000 charge points, which brings the total number to around 73,000.

There is no change to the energy transition measure in our annual bonus scorecard for 2025.

See "Annual Report on Remuneration" on page 195.

Assurance of GHG emissions measures

Independent assurance report to the directors of Shell plc on Greenhouse Gas Emissions

We have been engaged by Shell plc ("Shell") to perform a 'limited assurance engagement', as defined by International Standards on Assurance Engagements, here after referred to as the engagement, to report on the accompanying GHG statement to be included within the "Our Journey to Net Zero" section within Shell's Annual Report & Accounts for the year ended 31 December 2024 (the "Report"), comprising of the following, hereafter the "Subject Matter". All Subject Matter relates to the year ended 31 December 2024 unless stated otherwise.

Scope 1 & 2 Greenhouse Gas Emissions ("GHG Subject Matter")

- Scope 1 & 2 Greenhouse Gas Emissions (Operational Control Boundary)

Net Carbon Intensity related KPI's ("NCI Subject Matter")

- Net Carbon Intensity
- Scope 3, Categories 1, 3, 9, 11 Greenhouse Gas Emissions (Equity Boundary)
- Revised Net Carbon Intensity for the years ended 31 December 2016 through 31 December 2023 (inclusive)
- Revised Scope 3, Categories 1, 3, 9, 11 Greenhouse Gas Emissions (Equity Boundary) for the years ended 31 December 2016, 31 December 2020 through 31 December 2023 (inclusive)

Other than as described in the preceding paragraph, which sets out the scope of our engagement, we did not perform assurance procedures on the remaining information included in the Report, and accordingly, we do not express a conclusion on this information.

Comparative information included in the Report has not been part of our limited assurance engagement other than KPI's set out within the Subject Matter. Consequently, we do not provide any assurance on the comparative information and thereto related disclosures in the Report. Our conclusion is not modified in respect of this matter.

Criteria applied by Shell

In preparing the GHG Subject Matter, Shell applied its internal performance monitoring and reporting requirements that incorporates ISO 14064-01 (2018) and the Greenhouse Gas Protocol (the "GHG Criteria").

In preparing the NCI Subject Matter, Shell applied the Shell Net Carbon Footprint: Methodology (the "NCI Criteria"). The NCI Criteria can be accessed on shell.com.

GHG and NCI Criteria were designed for the preparation of the Report. As a result, the Subject Matter information may not be suitable for another purpose.

Shell's responsibilities

Shell's management is responsible for selecting the Criteria, and for presenting the Subject Matter in accordance with that Criteria, in all material respects. This responsibility includes establishing and maintaining internal controls, maintaining adequate records and making estimates that are relevant to the preparation of the GHG statement, such that it is free from material misstatement, whether due to fraud or error.

EY's responsibilities

Our responsibility is to express a conclusion on the presentation of the Subject Matter based on the evidence we have obtained.

Our engagement was conducted in accordance with the International Standard for Assurance Engagements on Greenhouse Gas Statements ('ISAE 3410') and the International Standard for Assurance Engagements other than Audits or Reviews of Historical Financial Information ("ISAE 3000 (Revised)"), and the terms of reference for this engagement as agreed with Shell on August 8, 2024.Those standards require that we plan and perform our engagement to express a conclusion on whether we are aware of any material modifications that need to be made to the Subject Matter in order for it to be in accordance with the Criteria, and to issue a report. The nature, timing, and extent of the procedures selected depend on our judgment, including an assessment of the risk of material misstatement, whether due to fraud or error.

We believe that the evidence obtained is sufficient and appropriate to provide a basis for our limited assurance conclusion.

Our independence and quality management

We have maintained our independence and confirm that we have met the requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants and have the required competencies and experience to conduct this assurance review.

EY also applies International Standard on Quality Management 1, Quality Management for Firms that Perform Audits or Reviews of Financial Statements, or Other Assurance or Related Services engagements, which requires that we design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Description of procedures performed

Procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for a reasonable assurance engagement. Consequently the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed. Our procedures were designed to obtain a limited level of assurance on which to base our conclusion and do not provide all the evidence that would be required to provide a reasonable level of assurance.

Although we considered the effectiveness of management's internal controls when determining the nature and extent of our procedures, our assurance engagement was not designed to provide assurance on internal controls. Our procedures did not include testing controls or performing procedures relating to checking aggregation or calculation of data within IT systems. The Greenhouse Gas quantification process is subject to scientific uncertainty, which arises because of incomplete scientific knowledge about the measurement of GHGs. Additionally, GHG procedures are subject to estimation (or measurement) uncertainty resulting from the measurement and calculation processes used to quantify emissions within the bounds of existing scientific knowledge.

A limited assurance engagement consists of making enquiries, primarily of persons responsible for preparing the Subject Matter and related information, and applying analytical and other relevant procedures. Our procedures included:

- Making inquiries of the specialists responsible for managing the Subject Matter to obtain an understanding of the relevant reporting processes and control framework
- Obtaining an understanding of the Subject Matter and Criteria and considering the reasonableness of the methodology and associated assumptions
- Re-performing the underlying calculations applied in the Subject Matter
- Performing analytical review procedures over the Subject Matter
- Examining the disclosures within the Report for the appropriate presentation of the Subject Matter, including the discussion of limitations and assumptions relating to the data presented

We also performed such other procedures as we considered necessary in the circumstances.

Conclusion
Based on our procedures and the evidence obtained, we are not aware of any material modifications that should be made to the Subject Matter for the year ended 31 December 2024, in order for it to be in accordance with the Criteria.

Restricted use
We disclaim any assumption of responsibility for any reliance on this assurance report or its conclusions to any other persons, or for any purpose other than that for which it was prepared. Accordingly, we accept no liability whatsoever, whether in contract, tort or otherwise, to any third party for any consequences of the use or misuse of this assurance report or its conclusions.

/s/Ernst & Young LLP

Ernst & Young LLP
March 25, 2025
1 More London Place
London
SE1 2AF

Other regulatory disclosures

GHG emissions and energy consumption data - information provided in accordance with UK regulations

Data in this section are consolidated using the operational control approach. Under this approach, we account for 100% of the GHG emissions and energy consumption in respect of activities where we are the operator, irrespective of our ownership percentage.

Reporting on this operational control basis differs from that applied for financial reporting purposes in the "Consolidated Financial Statements".

See "Basis of preparation – absolute Scope 1, 2 and 3 emissions" on pages 100-101.

GHG emissions in million tonnes of CO_2 equivalent

(operational control boundary)	2024	2023	2022
Total global direct (Scope 1) [A]	50	50	51
UK including offshore area [B]	1.6	1.7	1.7
Market-based			
Total global energy indirect (Scope 2) [C]	8	7	7
UK including offshore area	–	–	–
Location-based			
Total global energy indirect (Scope 2) [D]	8	8	8
UK including offshore area	0.04	0.04	0.04
Shell GHG intensity in tonnes per tonne			
Shell GHG intensity [E]	0.27	0.27	0.27

[A] Emissions from the combustion of fuels and the operation of our facilities globally, calculated using global warming potential (GWP) factors from the IPCC's Fifth Assessment Report.
[B] Emissions from the combustion of fuels and the operation of our facilities in the UK and its offshore area, calculated using GWP factors from the IPCC's Fifth Assessment Report.
[C] Emissions from the purchase of electricity, heat, steam and cooling for our own use globally, calculated using a market-based method as defined by the GHG Protocol Corporate Accounting and Reporting Standard.
[D] Emissions from the purchase of electricity, heat, steam and cooling for our own use globally, calculated using a location-based method as defined by the GHG Protocol Corporate Accounting and Reporting Standard.
[E] In tonnes of total Scope 1 and Scope 2 gross emissions per tonne of crude oil and feedstocks processed and petrochemicals produced in downstream manufacturing and, oil and gas available for sale, LNG and GTL production in Integrated Gas and Upstream.

Data inputs used in the calculation of Shell's GHG intensity are as follows:

Inputs used for calculating Shell's GHG emissions intensity

(operational control boundary)		2024	2023	2022
A	Scope 1 emissions (gross) [A]	50	50	51
B	Scope 2 emissions (gross) [A]	8	7	7
C=A+B	**Total Scope 1 and 2 GHG emissions (gross) [A]**	58	57	58
D	Total oil and gas production available for sale [B]	114	111	111
E	Refinery crude and feedstock processed [B]	60	62	63
F	Chemicals total production [B]	25	21	23
G	LNG production [B]	12	10	9
H	GTL production [B]	6	6	6
I=D+E+F+G+H	**Total Upstream, Integrated Gas and Downstream activity [B]**	**217**	**210**	**212**
J=C/I	**Shell GHG intensity [C]**	**0.27**	**0.27**	**0.27**

[A] In million tonnes CO_2 equivalent.
[B] In million metric tonnes of production. The production data in this table (operational control basis) are not directly comparable with the production data reported elsewhere in this Report (reflecting the sum of production financial control and share of joint ventures and associates).
[C] In tonnes of CO_2 equivalent per tonne of production.

Energy use in our operations

The energy consumption data provided below comprises own energy, generated and consumed by our facilities, and energy purchased (electricity, steam and heat) by our facilities for our use.

Energy consumption data reflects primary (thermal) energy (including the energy content of fuels used to generate electricity, steam, heat, mechanical energy). This includes energy from renewable and non-renewable sources.

Own energy generated is calculated by multiplying the volumes of fuels consumed for energy purposes by their respective lower heating values. Own energy generated that is exported to third-party assets or to the power grid is excluded.

Thermal energy for purchased and consumed electricity is calculated using actual electricity purchased multiplied by country-specific electricity generation efficiency factors (from IEA statistics).

Thermal energy for purchased and consumed steam or heat is calculated from actual steam or heat purchased multiplied by a supplier-specific conversion efficiency, or a generic efficiency factor where supplier-specific data are not available.

Our energy consumption increased from 205 billion kilowatt-hours (kWh) in 2023 to 212 billion kWh in 2024, in line with the increase in our Scope 2 GHG emissions. Around 1% of the energy we used in 2024 for our operations came from renewable sources.

Energy consumption in billion kilowatt-hours

	2024	2023	2022
Own energy generated and consumed			
Total energy generated and consumed	179	174	177
UK including offshore area	6.2	6.1	6.1
Purchased and consumed energy			
Total purchased and consumed energy	33	31	32
UK including offshore area	0.2	0.2	0.2
Energy consumption			
Total energy consumed	212	205	209
UK including offshore area	6.4	6.3	6.3

In 2024, we implemented a variety of measures to reduce the energy use and increase the energy efficiency of our operations.

Examples of some of the principal measures taken in 2024 to reduce energy use and improve efficiency (with estimated total savings of around 1,233 million kWh in 2024) are:
- At our Rheinland site in Germany: replacement of liquid fuel fired boilers with gas fired boilers.
- At our QGC site in Australia: implementation of advanced process control for liquefaction at the QGC Midstream LNG facility and a reduction in required hydraulic power motor speed at well sites.
- At our Prelude site in Australia: optimisation of process resulting in reduced steam consumption and flaring and reduced fuel gas use.
- At our GTL asset in Qatar: reduction of minimum flow of fuel gas to the cogeneration system, allowing fuel gas to be used in other furnaces replacing natural gas usage.
- At our Sarawak Shell Berhad assets in Malaysia: upgrading a gas turbine air intake filter to a high efficiency particulate air (HEPA) filter.
- At our upstream operations in the UK: flare optimisation, which resulted in less fuel gas that needed to be mixed with flare gas to make it combustible.
- At our Gulf of America Mars site: savings of fuel gas combustion as a result of operating the gas compression system with only one field gas compressor.
- At our Gulf of America Perdido site: reduction of the electrical power demand through reduction of production separation pressure.

Examples of some of the principal measures that were taken in 2023 are listed below (with estimated total savings of around 999 million kWh in 2023):
- At our Geismar site in the USA: idling the furnace when not required.
- At our Rheinland site in Germany: optimising the amount of steam required depending on use and load.
- At our Sarnia site in Canada: replacing an existing reaction furnace with a new high-intensity burner.
- At our Scotford complex in Canada: optimisation which enables a reduction in electricity and excess hydrogen vented to flare.
- At our Prelude site in Australia: optimisation of the process and operating conditions to reduce flaring.
- At our Pearl site in Qatar: reducing steam generation requirements via steam balance optimisation.
- At our GTL asset in Malaysia: optimising fuel flows to the boiler unit.
- At our UK Upstream operations: reducing compression power requirements between our Shearwater platform and St Fergus gas terminal.
- At our Gulf of America operations in the USA: optimising power generation between platform and rig and upgrading existing equipment.
- At our Sarawak Shell Berhad assets in Malaysia: optimising the use of gas turbine generators from four to three units.

EU Taxonomy Regulation

The EU Taxonomy Regulation is a classification system for determining when an economic activity can be considered environmentally sustainable according to EU standards. It aims to encourage investment in a low-carbon economy by creating common definitions of sustainability and mandatory disclosures to help investors make informed decisions. In anticipation of the transposition by the Netherlands of the EU Corporate Sustainability Reporting Directive (CSRD) into national law, a key development for Shell in 2024 has been the voluntary implementation of the CSRD and the accompanying European Sustainability Reporting Standards (ESRS). This means Shell plc will come fully into scope of the EU Taxonomy Regulation upon the transposition of the CSRD by the Netherlands into law. The CSRD extends the EU Taxonomy Regulation's reporting obligation to third-country issuers that are listed on European exchanges.

See "EU Taxonomy disclosure" on pages 377-390.

Respecting nature

We seek to protect the environment, increase our reuse and recycling, make a positive contribution to biodiversity and use water and other resources efficiently.

We seek to protect the environment, increase our reuse and recycling, make a positive contribution to biodiversity and use water and other resources efficiently. Our activities can impact nature through discharges and emissions to the environment, and through changes to the use of land and water.

In 2024, we have:
- continued to embed our respect for nature into our activities, standards and business processes;
- expanded our data reporting capabilities to help meet regulatory requirements;
- continued to build employees' awareness, knowledge and skills to deepen their understanding of respecting nature; and
- continued to meet our commitments to reduce fresh-water consumption in water-stressed areas and to use packaging for our products that is designed to be reusable or recyclable.

Our approach is underpinned by the Shell Commitment and Policy on Health, Security, Safety, the Environment and Social Performance (HSSE & SP), and our Safety, Environment and Asset Management (SEAM) Standards, which are part of the Shell Performance Framework.

We require our operated assets to be certified to an independent and internationally recognised standard for environmental management systems, such as ISO 14001 or equivalent, if they have significant environmental risks.

We report data in this section on a 100% basis for companies and joint ventures in which Shell is the operator, unless stated otherwise.

See "Our approach to sustainability" on page 130.

Biodiversity and ecosystems

We aim to manage the impact of our activities on the environment and to make a positive contribution to biodiversity in our operations.
- Forest habitats: We are replanting forests and working to achieve net-zero deforestation from new activities while maintaining biodiversity and conservation value.
- Critical habitats: Our new projects in areas rich in biodiversity, known as critical habitats, are designed to achieve a net positive impact on biodiversity.
- World Heritage Sites: Since 2003, we do not explore for, or develop, oil and gas resources in natural and mixed World Heritage Sites.

When planning a project, our standards require us to assess the potential impact of projects on biodiversity and communities as part of our impact assessment process. We then apply the mitigation hierarchy, a decision-making framework that involves a sequence of four key actions: avoid, minimise, restore and offset.

Achieving a positive impact on biodiversity can take many years because complex ecosystems need time to develop after conservation efforts. We believe it is important to involve communities in conservation projects, so we often work in collaboration with local organisations.

Photo: Reforestation programme, Canada, 2024.

Forest habitats

Deforestation occurs when forests are converted to non-forest uses. We apply the definition of forest used by the UN's Food and Agriculture Organization (FAO). Our commitment to net-zero deforestation commenced in 2022.

Our aim is to avoid deforestation, in line with the mitigation hierarchy. Where avoidance is not achievable, we require our assets, projects and businesses to develop and implement reforestation plans. These plans include measures designed to achieve net-zero deforestation, while maintaining biodiversity and conservation value. We work with partners and stakeholders to develop robust and credible plans unique to each reforestation project.

There is typically a time lag between the deforestation of an area and the start of the replanting process, which can range from months to years. As a result, there is often a difference in the number of hectares deforested and the number of hectares replanted within a single year.

In 2024, around 214 hectares were deforested as a result of our activities. This occurred largely in Australia, Canada and Nigeria where we are preparing for or implementing reforestation programmes in line with local plans. We reforested 64 hectares in 2024 in Canada.

Critical habitats

Critical habitats are specific areas of high biodiversity value in which receptors are particularly sensitive to development.

When undertaking a project in a critical habitat, we aim to go beyond compensating for a residual adverse impact to deliver an overall conservation gain to or net positive impact on biodiversity.

If a project is located in a critical habitat, we develop and implement a biodiversity action plan. This sets out the actions needed to follow the mitigation hierarchy and includes measures to achieve a net positive impact on biodiversity.

At the end of 2024, 62 new projects for which the final investment decision had been taken after February 2021 were located in critical habitats. Of these, 61 have a biodiversity action plan in place to work towards a net positive impact.

Examples of activities in development or under way in 2024 include:
- in partnership with a local university, we are executing an ecological restoration programme on Browse Island, Australia, to help eradicate invasive alien species, improve reef health and promote the return of breeding seabirds to enhance regional resilience;
- on Príncipe Island, São Tomé and Príncipe, we helped implement a turtle conservation programme in partnership with a local conservation organisation; and
- in partnership with the Marine Alliance for Science and Technology for Scotland (MASTS), and its member institutions, including Scottish government stakeholders, we helped to set up a multi-year research programme to gain insights into the ecology of skates and sharks in Scottish waters to help develop effective conservation strategies.

Photo: Turtle conservation, São Tomé and Príncipe, 2024.

Resource use and circular economy

We aim to use water and other resources efficiently, and to increase our reuse and recycling.
- Waste and circularity: Our businesses are deepening their efforts to better understand the types of waste we generate and identify options to increase circular approaches.
- Water: We are implementing water stewardship principles across our businesses and developing water stewardship management plans. This includes focusing on the sustainable management of fresh water resources, particularly in water-stressed areas.
- Packaging: We have a priority to increase the amount of recycled plastic in Shell-branded packaging to 30% by 2030, based on the reference year of 2022, and to ensure that the packaging we use for our products is reusable or recyclable by design. These priorities apply to Shell-branded Mobility and Lubricants products.

Waste and circularity

In 2024, we introduced a new requirement within our SEAM Standards for our assets, projects or businesses to develop strategies to identify circularity-related risks and opportunities. Through this, we aim to encourage the development of fit-for-purpose objectives and strategies based on the principles of rethink, refuse, reduce, reuse, recycle and repair.

Since 2021, we have completed 26 detailed assessments across our businesses to better understand the types of waste we generate and identify options to increase circular approaches. Using these results, our assets are improving local waste management practices by prioritising waste prevention, reuse and recycling over energy recovery and disposal.

Key developments related to waste and circularity in 2024 include:
- at the Pearl gas-to-liquids facility in Qatar, we have diverted waste to local cement kilns for use as clinker in cement production, thereby reducing use of raw materials and the amount of waste sent to landfill;
- our Gulf of America operations are finding ways to reduce disposal of unused chemicals, for example, by testing and treating them so that they can be returned to the supplier for reuse; and
- at our Brazos wind farm upgrade in Texas, we sent decommissioned turbine blades to be recycled for use as a component in construction materials.

We are working to reduce waste and increase circularity in those parts of our business where it is possible to do so. In 2024, we concluded our aim for zero waste is technically unfeasible. We continue to improve waste and circularity plans at the asset level to drive fit-for-purpose waste reduction and optimise local circular economies.

In 2024, we disposed of 1,933 thousand tonnes of waste, compared with 2,251 thousand tonnes in 2023.

Water

We require our assets, projects or businesses to manage sourcing, use, treatment and disposal of water based on recognised water stewardship principles and to implement this through a water stewardship management plan. These plans help us to move away from a traditional inside-out approach focusing on our impact on the environment to an outside-in approach that considers how we impact, and are impacted by, the environment. They also help us to reduce consumption in water-stressed areas.

Since 2021, we have conducted water stewardship assessments at 18 assets across different businesses and regions, with a priority on operations in areas of high water stress and those that use significant quantities of fresh water. The insights gained from these assessments have moved us towards a more holistic stewardship approach. This goes beyond only focusing on water use to also considering factors such as water footprint, regional water stress, water quality, catchments, governance and stakeholder engagement. Building on these efforts, our Mobility and US Midstream businesses developed water stewardship plans in 2024.

In 2021, we set a voluntary commitment to reduce our consumption of fresh water by 15% by 2025 compared with 2018 levels in areas where there is high fresh-water stress. We achieved this commitment ahead of time in 2022. In 2024, our consumption of fresh water in areas of high water stress was 16 million cubic metres compared with 25 million cubic metres in the base year of 2018, a 36% reduction over the period.

Discharges to water

We track pollutants in water returned to the environment from the day-to-day running of our facilities (referred to as "discharges to surface water"). We work to minimise these discharges according to local regulatory requirements and our SEAM Standards.

Plastics

Shell supports the need for improved circularity of the global plastics market. We encourage reduction, reuse and recycling of plastics and are a founding member of the Alliance to End Plastic Waste, which helps governments to assess and improve waste collection and waste management. We are working with partners across the plastic waste value chain, such as the waste management industry and pyrolysis oil producers, to encourage the development of a more circular value chain.

Since 2019, Shell has been processing pyrolysis oil made from mixed plastic waste at the Shell Norco Energy and Chemicals Park in the USA. In 2024, we began production at our new pyrolysis oil upgrader at the Shell Chemicals Park Moerdijk in the Netherlands. The upgrader improves the quality of pyrolysis oil, a liquid made from hard-to-recycle plastic waste, and turns it into chemical feedstock. The plant has the capacity to process up to 50,000 tonnes of pyrolysis oil per year.

Packaging

Shell has a priority to increase the amount of recycled plastic in Shell-branded packaging to 30% by 2030 based on the reference year of 2022 and to use packaging for our products that is reusable or recyclable by design. These priorities apply to Shell-branded Mobility and Lubricants products.

- Packaging classified as reusable or recyclable: In 2024, we continued to meet our priority to use packaging for our products that is reusable or recyclable by design. We maintained 99% total Shell-branded product packaging classified as reusable or recyclable in our Lubricants business and achieved 92% in our Mobility business, compared with 79% in the base year of 2022.
- Recycled plastic content in packaging: By the end of 2024, we had achieved a level of 17% recycled plastic content by weight in Shell-branded plastic packaging compared with 10% in the base year of 2022.

Air quality

We follow the most stringent of either the SEAM Standards or local regulations to manage airborne pollutants in our operations, including emissions of nitrogen oxides (NOx), sulphur oxides (SOx) and volatile organic compounds (VOCs).

There are often synergies to be achieved between greenhouse gas improvement opportunities and reducing emissions of other air pollutants. For example, operational efficiencies that reduce site power generation can also reduce emissions of VOCs, SOx and NOx. In 2024, we continued to implement leak detection and repair programmes to reduce emissions of volatile organic compounds, with a focus on sources exceeding 100 tonnes per year.

We are developing a range of choices for customers to help people and companies reduce their transport emissions. This includes building our electric vehicle charging business. For heavy-duty road transport, LNG as a fuel and GTL fuel and motor oils help reduce sulphur emissions, particulates and nitrogen oxide compared with oil-based products.

Our key metrics in 2024 include:

- SOx emissions in 2024 decreased to 21 thousand tonnes, compared with 31 thousand tonnes in 2023.
- NOx emissions in 2024 increased to 92 thousand tonnes compared with 88 thousand tonnes in 2023.
- VOC emissions in 2024 were 32 thousand tonnes compared with 32 thousand tonnes in 2023 (restated from 36 thousand tonnes following a review of the performance data).

See "Our journey to net zero" on page 76.

Spills

Our assets are designed to avoid discharges to soil or groundwater. However, spills can occur due to operational failure, accidents, unusual corrosion, or theft and sabotage. Large spills of crude oil, oil products and chemicals can harm the environment. They can also result in major clean-up costs, fines and other damages. Spills can affect our licence to operate and harm our reputation.

Spill prevention and response

Our policies on asset integrity and process safety are in place to prevent losses of containment from happening. We design, operate and maintain our facilities with the intention of preventing spills, by identifying potential hazards and implementing controls that can prevent them from occurring. This is integral to our Goal Zero ambition of doing no harm to people and to have no leaks across our operations. If a spill or a leak occurs, we use barriers that operate independently of each other to reduce the likelihood of a release becoming catastrophic. Such barriers are designed so that, if the failure of one occurs, it does not lead to the failure of others. Our policies on soil and groundwater are designed to manage the potential health and environmental impacts should spills occur.

Our business units are responsible for organising and executing spill responses in line with the SEAM Standards and relevant legal and regulatory requirements. Our assets have spill response plans, based on worst-case spill scenarios, should an incident occur. We also continue to be involved in industry groups to improve well-containment capabilities. These include the Marine Well Containment Company in the Gulf of America and Oil Spill Response Limited, a global industry group. For oil spills, we have a global response network that enables us to deal more effectively with oil spills, supplementing local response capability.

See "Safety" on page 123.

In 2024, there were 69 operational spills of more than 100 kilograms compared with 71 in 2023 (restated from 70 operational spills of more than 100 kilograms following a review of the performance data). The volume of operational spills of oil and oil products in 2024 was 1.23 thousand tonnes, compared with 0.37 thousand tonnes in 2023. The increase in operational spill volumes is partly attributable to a spill that occurred during severe weather in the Gulf of America, as well as incidents in Singapore, Canada and Nigeria.

Spills in Nigeria

SPDC JV - Nigeria: operational spills

In 2024, The Shell Petroleum Development Company of Nigeria Limited (SPDC) [A], as operator of the SPDC joint venture (SPDC JV, Shell interest 30%), reported 20 operational spill incidents of more than 100 kilograms of crude oil, compared with 9 reported in 2023. The increase in the number of operational spill incidents was largely because of a rise in cases of failure due to factory defects in a locally manufactured clamp used in pipeline repairs following the removal of illegal connections. The company that manufactured the clamps has recalled the affected batch, and SPDC has commenced the replacement of the clamps.

In 2024, the volume of operational spills of oil and oil products was 0.37 thousand tonnes compared with 0.005 thousand tonnes reported in 2023. The majority (89%) of the 2024 volume relates to two significant incidents, one onshore on the Trans Niger Pipeline and the other offshore at a terminal loading buoy.

[A] Unless otherwise stated, all activities reported for or as relating to The Shell Petroleum Development Company of Nigeria Limited (SPDC) in this section should be understood as SPDC acting as the operator of the SPDC joint venture (SPDC JV). SPDC, as the corporate entity, owns 30% of the joint venture.

SPDC JV has an ongoing work programme to appraise, maintain and replace key sections of pipelines and flow lines to reduce the number of operational spills.

On March 13, 2025, Shell completed the sale of SPDC to Renaissance. By preserving the full range of SPDC's operating capabilities, the transaction has been designed to ensure that the company can continue to perform its role as operator and to meet its share of commitments within the joint venture, including those relating to health, safety, security and environment.

See "Upstream" on page 43.

SPDC JV - Nigeria: spills caused by crude theft and sabotage

In 2024, about 81% of crude oil spill incidents of more than 100 kilograms from SPDC JV facilities were caused by the illegal activities of third parties. In 2024, the volume of crude oil spills of more than 100 kilograms caused by crude theft and sabotage was 2.0 thousand tonnes (84 incidents), compared with 1.4 thousand tonnes (139 incidents) in 2023. The decrease in the number of incidents in 2024 shows an increased effectiveness of anti-theft protection mechanisms.

Prevention

In 2024, SPDC JV continued on-ground surveillance of its areas of operation, including its pipeline network, to mitigate third-party interference and ensure that spills are detected and responded to as quickly as possible.

Regular surveillance flights and drones are used to inspect the most vulnerable segments of the pipeline network, monitor security and identify any new spills or illegal activity. SPDC JV continued to install and improve anti-theft protection mechanisms for key infrastructure, such as wellheads and manifolds. These include protective measures such as cages, anti-theft nuts and improved CCTV and networking capabilities. These measures continue to help deter theft and improve response.

SPDC JV continued to work with the government security agencies in 2024 to maintain surveillance and address illegal activities of third parties, primarily along the SPDC JV pipelines and their operational areas.

Response and remediation

Regardless of the cause, SPDC JV cleans up and remediates areas affected by spills originating from its facilities. Clean-up activities include bio-remediation which stimulates micro-organisms that naturally break down and use carbon-rich oil, effectively removing it. Once clean-up and soil remediation operations are completed, the work is inspected and, if satisfactory, approved and certified by the Nigerian regulators. In the event of operational spills, SPDC JV also pays compensation to affected people and communities.

SPDC JV works with a range of stakeholders in the Niger Delta to monitor biodiversity recovery at remediated sites and to build greater trust in spill response and clean-up processes.

The clean-up programme established following the 2011 United Nations Environment Programme (UNEP) report on Ogoniland is executed by the Hydrocarbon Pollution Remediation Project (HYPREP), an agency of the Nigerian government. Completion of remediation under this programme is verified and certified by the National Oil Spill Detection and Response Agency (NOSDRA). HYPREP has reported progress of the execution of its programme during 2024 with clean-up efforts for 18 sites continuing, and remediation plans being developed for the remaining 15 sites. SPDC has fully funded its share of the HYPREP programme.

In 2015, SPDC JV and the Bodo community in Ogoniland signed a memorandum of understanding, granting the remediation team access to begin cleaning up areas affected by two operational spills that occurred in 2008. Phase 1 of an agreed three-phase clean-up and remediation programme, which involved removal of oil from shoreline surfaces and mud flatbeds, was completed in 2018. In 2024, SPDC JV remediated soil and sediments in an additional 106 hectares, bringing Phase 2 to 99% completion. SPDC JV also planted about 1.7 million mangrove seedlings in 2024 as part of Phase 3, achieving 85% of the project's revegetation goal, up from 17% in 2023. SPDC JV is seeking certification of remediated areas from NOSDRA.

SPDC JV continues to raise awareness of and counter the negative effects of crude oil theft and illegal oil refining.

Powering lives

We power lives through our products and activities, and by supporting an inclusive society.

Shell strives to make a positive impact on people around the world and this includes providing the energy people need, contributing to local economies and communities, championing inclusion and respecting human rights.

We help ensure energy security in our key markets and invest in businesses that supply energy access in emerging markets. Through our social investments, we also provide funds, expertise and resources to increase energy access outside of our commercial business. The supply of affordable and secure energy is crucial for addressing global challenges, including those related to poverty and inequality.

Our activities contribute to economies and communities around the world through job creation, spending on goods and services, and through the payment of taxes and royalties to governments. Across more than 70 countries, we employ thousands of people and provide them with opportunities to develop their careers.

As we transform into a net-zero emissions energy business, we work with governments and society to support positive economic and social impacts of the transition on our workforce, communities, suppliers and customers.

Our core values of honesty, integrity and respect for people underpin everything we do. We aim to become one of the world's most diverse and inclusive organisations, a place where everyone feels valued, respected and has a strong sense of belonging.

The importance of respecting people also extends to our suppliers. Shell's Supplier Principles outline our expectations for business integrity, health, safety, security, labour and human rights, and environmental and social performance.

Many of our operations are located close to communities and we aim to be a good neighbour. This includes strong community engagement, managing the negative social impacts of our operations and delivering a range of benefits through jobs, local business opportunities and social investment programmes. This engagement enables us to identify and manage impacts from our activities and provide access to remedy.

Our people

Our people are essential to our purpose of powering progress together. They are key to delivering our strategy and we believe in helping them to develop their skills.

All metrics throughout this section exclude employees in portfolio companies [A], except for the metrics reflecting total employee number by gender and region, percentage of women employees, and certain mandatory training courses.

[A] Portfolio companies are non-integrated entities within the Shell Group. To give these companies the flexibility they need, they operate as subsidiaries while generally retaining their own processes and systems. Portfolio companies comply with Shell's minimum requirements for controls and compliance. This includes the Shell Performance Framework and mandatory requirements for ethics and compliance, risk management and safety.

Photo: Staff at Karachaganak, Kazakhstan.

Employee overview

We employed 96,000 people on a full- or part-time basis as of December 31, 2024. This compares with 103,000 at the end of 2023 and 93,000 at the end of 2022.

The reduced number of employees in 2024 compared with 2023 reflects our focus on performance, discipline and simplification as we implement our strategy. We improved efficiencies, and divested and ended some activities in our Downstream, Renewables and Energy Solutions business. We also improved efficiencies in our Projects & Technology, Human Resources, Legal and Corporate Relations functions.

Employee overview figures include people working for Shell companies and Shell-operated joint ventures, as well as those seconded to non-operated joint ventures, but exclude contingent workers, otherwise referred to as contractors. Contractors are external workers who are engaged directly or through third parties to provide services to Shell. They work alongside Shell employees in divisions such as Information and Digital Technology.

Changes in headcount

We employed 81,000 people in Shell, excluding portfolio companies, at the end of December 2024. This is fewer than the 84,000 at the end of 2023. Shell's portfolio companies, which generally maintain their own HR systems, employed 15,000 at the end of 2024 compared with 19,000 at the end of 2023.

See Note 33 to the "Consolidated Financial Statements" on page 311 for the average number of employees by business segment.

Employees
96,000
employees

Countries and territories
>70
countries in which we operate

Directors
42%
women on the Board of Directors

Executive Committee
57%
women on the Executive Committee

Senior leaders
33%
women in senior leadership positions

Women employees
35%
women employees

Training
264,000
training days for employees and joint-venture partners

Experienced hires
3,156
people joined Shell (37% women, 63% men)

Graduate hires
334
people joined Shell (57% women, 43% men)

[A] Numbers presented are as of December 31, 2024.

The table below presents the total employee number by gender and region as of December 31, 2024.

Number of employees by gender and region

Thousand

	2024			2023	2022
	Men	Women	Total	Total	Total
Number of employees	63	33	96	103	93
Breakdown by region					
Africa	2.5	0.9	3	4	4
Asia	21.7	14.0	36	38	32
Europe	19.1	10.7	30	31	30
North America	16.7	6.2	23	24	23
Oceania	1.9	0.9	3	4	3
South America	0.9	0.6	2	2	1

The table below presents the distribution of employee contract type, by gender and region as of December 31, 2024.

Employee contract type by gender and region [A]

	Permanent contract/ Employment at-will [B]		Fixed-term contract	
	Men	Women	Men	Women
Number of employees	52,000	28,000	763	344
Breakdown by region				
Africa	4%	3%	7%	15%
Asia	38%	44%	36%	40%
Europe	31%	34%	50%	40%
North America	22%	15%	1%	1%
Oceania	3%	2%	6%	4%
South America	2%	2%	–	–

[A] Excludes employees in portfolio companies.
[B] Employment at-will is used in the USA to describe employment contracts.

The table below presents the number of employees by age group.

Employees by age group [A] [B]

Thousand

	% of employees	2024	2023	2022
Under 30 years old	13%	10	12	11
Between 30 and 50 years old	64%	52	54	51
Above 50 years old	23%	19	18	17
Total employees	100%	81	84	79

[A] Excludes employees in portfolio companies.
[B] Includes employees seconded to joint ventures.

Shell aims to be an attractive employer to its existing and prospective employees. We offer employees the opportunity to develop their careers within Shell, including rotations across different parts of the business to grow their skills and progress.

People development remains a priority for our organisation. We proactively identify skill and capability gaps for traditional and emerging businesses; offer training to address these gaps; and if needed recruit talent externally to add to the skills and experiences of our workforce. To enable our leaders to lead this change, we support them through targeted interventions including leadership development and coaching. Our mindset and behaviours, which emphasise psychological safety, are at the heart of our leadership programmes. Training courses are accessible to all employees, either online or in person. In 2024, 264,000 formal training days were delivered to employees and joint-venture partners. This compares with 295,000 training days in 2023 and reflects staff reductions in 2024.

Shell's employee turnover as of December 31, 2024 was 7.6%; 6,227 employees left Shell of which 2,931 resigned voluntarily. This compares with 5.7% in 2023, during which 4,685 employees left Shell of which 2,669 voluntarily.

Employee engagement

Insight into employee needs and perspectives enables Shell to continually learn and improve our policies, processes and practices.

Management regularly engages with employees through elected employee representatives and a range of local formal and informal channels. These channels include webcasts and all-employee messages from our CEO and other senior leaders, as well as town halls, team meetings and site visits by the Board and EC.

In 2024, members of the Board and EC visited Shell sites in the Netherlands where they engaged with employees on our strategy and the energy transition. Board members and Chair, Sir Andrew Mackenzie, also met with employees in Qatar, Oman and Brazil.

See "Workforce engagement" on pages 167-168.

We seek to comply with applicable local laws and regulations, including those on working hours. Shell is committed to respecting human rights. This includes, but is not limited to, the elimination of forced and child labour, respect for freedom of association and the effective recognition of the right to collective bargaining. Where appropriate, engagements take place with union and employee representatives at asset and country level, as well as with the Shell European Works Council. Employees have access to senior leaders, local employee forums and employee resource groups. We believe these engagements enable Shell to maintain a constructive employee and industrial relations environment.

Photo: In June 2024, Shell's Board of Directors visited Holland Hydrogen 1, one of Europe's largest renewable hydrogen plants, which is under construction in the Netherlands.

The Shell People Survey

The Shell People Survey is one of the key tools we use to measure employee engagement, motivation, affiliation and commitment to Shell. External and internal research shows that increased employee engagement can result in better business performance and improved safety. In 2024, the response rate to the survey was 86%, compared with 88% in 2023 which indicates our people's desire to provide feedback. The overall employee engagement score decreased to 75 (compared with the top quartile 80 points) from 79 points in 2023, which we believe reflects the level of changes introduced in the organisation as we transform our business to deliver more value with less emissions.

Pay, benefits and well-being

Our Fair Pay Principles are designed to manage pay at Shell and help us ensure that employees are valued, respected and recognised for the work they do. Shell's pay is designed to be market competitive and free from bias. The basis for paying fairly is equal pay for equal work, taking into account factors such as performance and experience. Through regular benchmarking, Shell's compensation is typically higher than the minimum wage level observed locally, including in countries without legislation on minimum wage. Pay adjustment at Shell is linked to performance and we share this information with employees to help them understand how their pay adjustments are made. We continue to engage employees transparently and openly about our pay policies to help build understanding, trust and confidence in our approach.

Shell provides a range of benefits, such as global minimum standards for life, accident and disability cover, as well as maternity and parental leave, except in certain cases where we are precluded from offering this. Our benefit packages are tailored to each country to meet the requirements of local laws and regulations.

Flexible work

We seek to build a sense of community and collaboration within Shell's sites where we want employees to feel welcome and valued. By enabling people to balance their work and personal lives, we can help them perform at their best. Our Future of Work guide advises employees and team leaders on hybrid working options.

Employee well-being

Our goal is to empower our employees to feel their best and perform at their best. We do this by promoting mindsets and behaviours that support good health, by protecting our people from illness by mitigating known risk factors. We use evidence-based tools and provide access to timely support and care for those who are injured, ill or struggling.

Interventions to promote mental, physical and social well-being are delivered via a mix of measures. For example, through the design of our workspaces, through local benefit offerings such as gyms and health checks, and through our country-based employee networks, group activities and events. Our global campaigns such as I'm Not OK and World Mental Health Day, help develop individual and team well-being skill sets, to create healthy and psychologically safe working environments, and to nurture a culture of care.

Mental well-being

We work to reduce the stigma associated with mental ill health through open conversations, global and country-level campaigns, senior leader communications, engagements with elected employee representatives, and through our experience-sharing portal for employees. This commitment is underscored by our CEO signing a leadership pledge with MindForward Alliance and the launch of our Global Mental Well-being Programme in 2023. The programme's interventions focus on developing a workplace culture that supports good mental health and offers employees the opportunity to complete an anonymous and voluntary survey in which they can voice their experience of well-being at Shell. We monitor the survey results to identify opportunities to improve employee well-being. In 2024, we continued to improve the programme, introducing new resources such as those that address financial well-being.

Diversity, equity and inclusion

We have ambitions around diversity, equity and inclusion and monitor these on a regular basis. We also continually assess our culture and employee engagement through tools such as the annual Shell People Survey.

We promote equal opportunity and aim to create an environment where people feel included. Our approach seeks to reinforce respect for people and seeks to provide psychological safety for all our employees.

Shell employees and contractors are required to complete training courses that reinforce expected behaviours for a respectful, inclusive workplace, and build our stance against discrimination and harassment, including bullying and sexual harassment. Employees and contractors are required to take these courses every two years.

In 2024, our Shell People Survey showed a result of 81 points out of 100 for all questions relating to DE&I. This is a decrease of two points from 2023 and puts us below the top quartile (85 points). We will continue to focus on improving these efforts in the workplace.

As of 2024, Shell is able to provide 93% of employees where legally permissible with the option to voluntarily declare their gender identity, sexual orientation, race and ethnicity, and disability, via the HR system. Data from this self-identification initiative allow us to monitor progress against our DE&I aspirations.

Gender

We strive to achieve gender equality. We have signed the World Economic Forum declaration on closing the gender gap in the oil and gas sector and have endorsed the Catalyst CEO Champions for Change initiative for the advancement of women, especially those from ethnic minorities, into senior leadership and board positions.

In line with the UK Listing Rules, the Board of Shell plc aims for gender balance on the Board, with at least one senior Board position [A] held by a woman. To provide flexibility for periods of change, we aim to maintain the representation of both men and women at, or above, a minimum of 40%. As of December 31, 2024, women made up 42% of the Board and the position of CFO was held by a woman.

[A] Senior Board position means Chair, CEO, Senior Independent Director, or CFO.

Over the years, Shell has progressively increased the representation of women on the EC and in senior leadership roles. As of January 1, 2024, we had 57% women and 43% men on our EC. We aim to achieve 35% representation of women in our senior leadership positions by 2025, and 40% by 2030. The table below shows the representation of women as of December 31, 2024.

Gender diversity at Board and management level [A]

	Men		Women	
Level	2024	2023	2024	2023
Board	58%	58%	42%	42%
Executive Committee	43%	57%	57%	43%
Senior Leadership roles [A]	67%	68%	33%	32%

[A] Senior Leadership is a Shell measure based on compensation grade levels. This measure is distinct from "senior manager" as per statutory disclosure requirements set out in the table below.

Gender diversity data (at December 31, 2024)

	Men		Women	
Gender diversity data	Number	%	Number	%
Directors of the Company	7	58%	5	42%
Senior managers [A]	774	65%	413	35%
Employees (thousand)	63	65%	33	35%

[A] Senior manager is defined in section 414C(9) of the Companies Act 2006 and, accordingly, the number disclosed comprises the Executive Committee members who were not Directors of the Company, and other directors of Shell subsidiaries (excluding Directors of portfolio companies).

As of December 31, 2024, 35% of Shell employees were women. Of the experienced hires who joined Shell as of December 31, 2024, 37% were women compared with 38% in 2023. Of the graduate hires who joined Shell as of December 31, 2024, 57% were women compared with 40% in 2023.

A crucial element of achieving gender balance is addressing any pay gap [A] and we continue to work towards improvements in this area. The basis for paying fairly is equal pay for equal work, taking into account factors such as performance and experience. At Shell, we monitor pay equity [B] through regular analysis to be confident that we have pay equity between genders for performing the same jobs. We address any unexplained pay differences related to gender through rigorous internal processes and apply our Fair Pay Principles. We continue to make progress in our gender ambitions at Shell, but a gender pay gap exists for several reasons, including fewer women in senior leadership positions and fewer women in higher-paid specialist roles.

[A] Shell seeks to comply with applicable requirements and regulation on pay gap reporting.
[B] Men and women who are paid the same for doing similar jobs, at similar level, responsibility, tenure and performance.

Race and ethnicity

Through racial and ethnic representation across our workforce we aim to reflect the communities in which we work. Shell's Global Council for Race is supported by an Employee Advisory Board which aims to advance diversity in our workforce.

Shell aims to maintain or exceed having at least one Board member from an ethnic minority background, while acknowledging that in periods of Board change this may not be achieved. As of December 31, 2024, the Board had three members who identify as being from an ethnic minority group and one EC member who identifies as being from an ethnic minority group [A].

In support of the Parker Review recommendations, Shell aims to achieve 15% ethnic minority group representation in its Senior Management [B] by 2027. As of the end of 2024, 15% of Shell's Senior Management identifies as being from an ethnic minority group.

[A] Ethnic minority refers to an individual who self-identifies as Asian, Black, Mixed/multiple, or other ethnic minority group, in line with UK Office for National Statistics classifications.
[B] As per Parker Review recommendations, Senior Management refers to senior leadership based in the UK and is a Shell measure based on compensation grades. We have moved to this Shell definition of Senior Management for 2024 onwards to align with our self-identification data collection and processes.

See "Nomination and Succession Committee" on pages 171-174 for our current talent management and succession process.

In some countries, there are local restrictions on collecting and reporting race and ethnicity data. Shell offers employees the option to voluntarily declare their race and ethnicity via our self-identification initiative.

See shell.com for more information on our DE&I progress in the UK, the USA and the Netherlands.

LGBT+
We are working to advance lesbian, gay, bisexual and transgender plus (LGBT+) inclusion within Shell and the communities where we work. Most of our work around LGBT+ inclusion happens at a country level, in line with local policies, laws and regulations.

Disability inclusion and accessibility
We are working to advance an inclusive, psychologically safe and accessible environment where people with disabilities can excel. We provide support and adjustments for people with disabilities during the recruitment process. For example, candidates with a disability or long-term health condition can indicate whether they require adjustments to our facilities or our job application process. Our support teams and systems are equipped to make these adjustments if required. We also support employees throughout their careers with Shell, including access to educational resources, training programmes and personal and professional development. Our Disability, Accessibility and Inclusion portal provides comprehensive guidance and tools for line managers, leaders, people with disabilities and employees to be active allies. Shell's enABLE employee resource groups provide expertise and advice to Shell leaders and our businesses on accessibility and disability inclusion. We also offer a workplace accessibility service which covers 68 locations in 33 countries. The team is supported by functions such as Shell Health, Human Resources, Real Estate and IT.

Shell is part of the Valuable 500, which comprises 500 of the world's largest companies and organisations that are working collectively to progress disability inclusion. We are also an active member of the Business Disability Forum and PurpleSpace.

Employee share plans

Our share plans align employees' interests with our performance through share ownership.

See the "Directors' Remuneration Report" on pages 188-207.

Discretionary share awards
For 2024, Long-term Incentive Plan (LTIP) awards were made to Executive Directors and Senior Management, and Performance Share Plan (PSP) awards to nominated employees on a highly selective basis. These plans were designed to ensure that remuneration is clearly aligned with Shell's Operating Plan and/or longer-term strategic ambitions. Half of the performance conditions applied to the PSP are the same as those applied to the LTIP, and performance is measured over three years under both plans.

* Non-GAAP measure (see page 445).

For the 2024 LTIP, 25% of the award is linked to organic free cash flow and 25% to the energy transition, with the remaining 50% linked to comparative performance conditions. For the 2024 PSP, 50% of the award is linked to certain indicators described in "Performance indicators" on pages 18-19, averaged over the performance period, with the remaining 50% linked to the same performance conditions as for the LTIP.

See the "Directors' Remuneration Report" on pages 188-207.

For 2025, Restricted Share Awards (RSA) and/or Performance Share Awards (PSA) may be awarded to nominated employees on a highly selective basis. RSAs support employee retention over a three-year period and provide a stake in the Company's future. PSAs ensure that remuneration is clearly aligned with Shell's strategic ambitions and are measured over a three-year performance period.

See "Annual Report on Remuneration" on page 206 for further information on the performance conditions.

Separately, following the BG acquisition, certain employee share awards made in 2015 under BG's Long-term Incentive Plan were automatically exchanged for equivalent awards of shares in the Company. The outstanding awards take the form of nil-cost options.

Under all plans, vesting shares are increased by notional dividends accrued during the period from award to vesting. In certain circumstances, awards may be adjusted before delivery or be subject to clawback after delivery. None of the awards result in beneficial ownership until the shares vest.

See Note 28 to the "Consolidated Financial Statements" on page 305.

Global Employee Share Purchase Plan
Eligible employees in participating countries may participate in the Global Employee Share Purchase Plan. This plan enables them to make contributions from net pay towards the purchase of the Company's shares at a discount to the market price.

UK Shell All Employee Share Ownership Plan
Eligible employees of participating Shell companies in the UK may participate in the Shell All Employee Share Ownership Plan, under which monthly contributions from gross pay are made towards the purchase of the Company's shares with a matching element.

Contribution to society

People's lives are better with energy. We help to power lives by providing vital energy for homes, businesses and transport, including for cooking, heating and lighting. Energy is also used to provide essential services, such as health care, and manufactured products which society consumes daily. Shell delivers energy for millions of people around the world every day and is working to help provide energy to those who do not yet have it.

For example, in November 2024, we joined forces with bp, Equinor and TotalEnergies to announce a $500 million joint investment commitment to help address the challenges of energy access. This joint investment seeks to support promising, high-impact projects, primarily in Sub-Saharan Africa, and South and South-east Asia, that are working to bring access to electricity and improved cooking conditions to underserved communities.

We want to help communities benefit from having us as their neighbour. Some of the ways in which we make a meaningful contribution are by generating jobs and supporting start-ups and local businesses. In 2024, our operated and non-operated ventures spent around $42 billion on goods and services* from suppliers around the world, compared with $49 billion in 2023. This reduction is mainly driven by structural cost reductions and discipline and focus in cash capital expenditure as we implement our strategy.

Photo: For more than 40 years, Shell LiveWire has helped entrepreneurs start and/or grow their businesses. Its biennial Top Ten Innovators awards selects young businesses that excel in social impact, environmental sustainability and business innovation. Camila de Araujo Reveles Barreira of Brazil was a Top Ten winner in 2023.

Our activities also generate revenues for governments through the taxes and royalties we pay, which can help governments to fund health care, education and other essential services. We publish an annual Tax Contribution Report which sets out the corporate income tax that Shell companies paid in the countries and locations where we have a taxable presence. In 2024, Shell paid $18 billion in taxes* to governments, of which $12 billion was paid in corporate income taxes and $6 billion in government royalties.

See shell.com for the Tax Contribution Report.

* Non-GAAP measure (see page 445).

Supply chain

Our business activities depend on a competitive and resilient supply chain. Suppliers play an important role in helping to deliver our strategy and helping to create value for our stakeholders.

As part of Shell's responsible sourcing approach, we aim to work with suppliers that behave in an economically, environmentally and socially responsible manner. Shell partners with suppliers who adhere to our Shell General Business Principles and Shell Supplier Principles. The Shell Supplier Principles set out our expectations of suppliers with respect to business integrity; health, safety, security, environment and social performance (HSSE & SP); and labour and human rights. Our standard contract terms require adherence to these or equivalent principles.

Worker welfare

Our approach to worker welfare focuses on the well-being of supplier staff on Shell sites and dedicated supplier staff on non-Shell sites, where we have the most ability to influence safety, working conditions and labour rights. We also work with our partners and peers to include worker welfare in industry standards, guidance and best practice. This helps raise expectations and levels of consistency across the industry. Our approach is based on the principles established by Building Responsibly, an alliance of companies that seeks to promote the rights and welfare of workers in the engineering and construction industry.

In 2024, we continued to collaborate with peers and suppliers to drive consistency across the industry on worker welfare.

See shell.com for more information about how we engage with contractors and suppliers.

Working with communities

We engage with communities to help us understand their needs and expectations. This engagement enables us to identify and manage impacts from our activities and provide access to remedy. Engagement is a continuous process that helps us improve our decision-making and performance. Shell's Safety, Environment and Asset Management (SEAM) Standards are designed to help us to operate responsibly and avoid or minimise any potentially negative environmental and social impacts that may result from our operations.

Communities can raise concerns in a number of ways. At large projects and assets, community engagement practitioners act as a bridge between local communities and our operations. Community feedback mechanisms allow us to receive, track and respond to questions and complaints. In 2024, we improved our internal tools to make it easier to track community satisfaction with the remedy offered by the process. Communities can also raise concerns anonymously through the Shell Global Helpline.

Our SEAM Standards require us to apply special procedures in situations involving involuntary resettlement, cultural heritage, Indigenous Peoples or operations in environments with high or unusual social risks. In 2024, we engaged with communities who were impacted by our business activities through involuntary resettlement which restricted their access to some areas on which they depend for their livelihoods. This occurred in Albania, Norway, South Korea, Trinidad and Tobago, and the UK. Our engagement involved plans to manage these impacts. We also provided support to help avoid or manage involuntary resettlement impacts in our non-operated ventures.

See "Our approach to sustainability" on page 130.
See shell.com for more information about our work with communities.

Social investment

Our activities contribute to economies through taxes, jobs and business opportunities. We also make social investments in areas determined by local community needs and priorities. These investments are sometimes voluntary, sometimes required by governments, or part of a contractual agreement. Shell has three priority areas for social investment: access to energy; skills and enterprise development; and science, technology, engineering and mathematics (STEM) education.

In 2024, we spent $165 million on social investment, of which $87 million (53%) was required by government regulations or contractual agreements. We spent the remaining $78 million (47%) on voluntary social investment.

See shell.com for more information about our social investment.

Human rights

Human rights are fundamental to Shell's core values of honesty, integrity and respect for people. Respect for human rights is embedded in the Shell General Business Principles and our Code of Conduct. Shell is committed to respecting human rights, as set out in the United Nations Universal Declaration of Human Rights and the International Labour Organization's Declaration on Fundamental Principles and Rights at Work. Our approach is informed by the UN Guiding Principles on Business and Human Rights. We work closely with various organisations to improve how we apply these UN guiding principles.

In 2024, we continued to work on salient human rights issues (salient human rights are those that are most at risk from our operations). We prioritise four focus areas where respect for human rights is critical to how we operate: at the workplace including labour rights, in supply chains, communities and security. For each of these areas, we have systems to identify potential impacts and to avoid and mitigate them. Shell employees working in these focus areas need to complete mandatory human rights training. In addition, we encourage all employees to complete the course regardless of their role, to build greater understanding of human rights across Shell.

Human rights focus areas

	At the workplace	In supply chains	In communities	In security
Salient issues	• Health and safety • Discrimination • Decent living conditions in worker accommodation • Access to adequate and readily available channels to voice concerns	• Labour rights in our supply chains, e.g. prevention of forced labour, access to remedy • Safe and healthy working conditions • Decent living conditions in worker accommodation	• Social impact management • Vulnerable persons/ communities • Land access, livelihoods and cultural heritage • Engagement and access to remedy	• Human rights impact on communities by private security and/or government security forces we rely on • Security of employees and contract staff in high-risk environments where we work

See "Safety" on pages 122-124.
See shell.com for more information about our approach to human rights.

Safety

Safety, along with our core values, underpins our strategy. We aim to do no harm to people and to have no leaks across our operations. We call this our Goal Zero ambition.

The nature of our operations exposes us to a wide range of safety risks. We plan and execute our work with the aim of preventing harm to people or leaks to the environment and to be prepared to respond if something goes wrong.

We seek to improve safety by focusing on the three areas where the safety risks associated with our activities are highest: personal safety, process safety and transport safety. We strive to reduce risks and to minimise the potential impact of any incident. We place a particular emphasis on the risks that could lead to the most serious consequences if they materialised.

We continue our multi-year process of refreshing our approach to safety for all employees and contractors. This approach is rooted in a consistent focus on human performance. We ask people at Shell to apply a learner mindset, by which we mean the belief that we can always improve, enhance individual capabilities, learn from mistakes and successes, and speak up freely without repercussions.

In practice, our refreshed approach to safety is about enhancing how we prepare for and conduct high-risk activities by:
- improving our preparation and execution of frontline work, building an environment of trust and learning;
- moving to industry-wide tools so that Shell and contractors work on the same basis to manage risks; and
- using technology to reduce exposure and identify conditions that could lead to serious incidents.

It is also about capturing more insights by:
- focusing on serious injuries, illness and fatalities (SIF) and the lessons we can derive from high-potential incidents where the most serious consequences that could have led to SIF did not materialise;
- focusing on learning from losses or potential losses of containment, and on any degradation of barriers designed to prevent or minimise the consequences of leaks;
- capturing underlying causes through incident investigations; and
- embedding lessons learned in our training and instructions for future work.

Our approach is governed by our Safety, Environment and Asset Management (SEAM) Standards, which set out our detailed requirements for personal, process and transport safety.

See "Our approach to sustainability" on page 130.

Assurance activities play a key role for Shell in providing real-time feedback about our assets, businesses and functions regarding the health of critical human and technical safeguards that help prevent a safety incident. Our assurance activities aim to verify the design and functioning of controls, validate the overall efficiency of risk management, and highlight areas for improvement.

We report data in this section on a 100% basis for companies and joint ventures in which Shell is the operator, unless stated otherwise.

Technology and safety

We are using digitalisation and artificial intelligence to gather and process data from our equipment and improve analysis and reporting. This enables remote support and allows us to take action quickly in unsafe situations.

For example, we have installed T-Pulse, an AI-automated safety monitoring solution developed by Detect Technologies, at 26 sites. T-Pulse uses CCTV to identify and report real-time safety issues and unsafe behaviours. Since we began using T-Pulse in 2020, it has generated alerts for more than 20,000 potential safety issues. In more than 1,300 of those cases, interventions helped prevent significant harm to people or leaks into the environment.

We are installing active fatigue and distraction detection (AFDD) devices in vehicles operated by Shell employees or our contractors in countries where road transport risks are highest. These devices help us intervene earlier to prevent accidents by detecting the conditions that can lead to them.

Personal safety

We continue to strengthen the safety culture and leadership among our employees and contractors. This aligns with our focus on caring for people.

Our SEAM Standards establish requirements for occupational health and safety hazards that have the potential to result in harm to people. When our employees and contractors perform tasks, we expect them to consider the hazards that could potentially cause harm and the effectiveness of the barriers in place to prevent incidents and manage the consequences should an event occur. We establish and maintain competence management systems to help ensure people are competent to perform their roles and responsibilities.

We run safety awareness programmes and hold an annual global Safety Day to give employees and contractors time to discuss safety culture on the frontline, reflect on how to prevent incidents, and how to improve performance. In 2024, the focus was on "Before I start work", which means pausing to reflect on what needs to be in place before we start work, for that work to be done safely.

Process safety

Process safety management is about keeping hazardous substances inside pipes, tanks and vessels, and ensuring that well fluids are contained during construction, interventions (such as maintenance) and incidents. Our SEAM Standards establish requirements from project design and construction throughout the life cycle of the asset to keep sites, employees, contractors and communities safe.

Our SEAM Standards set the steps we take to manage process safety risks, from identifying potential safety hazards to designing the controls that prevent them from occurring. Our standards require the use of barriers that operate independently of each other to reduce the likelihood of a release becoming catastrophic. Such barriers are designed so that if one fails, this does not lead to the failure of others.

We are focusing on standardising our risk assessment tools, improving human performance, working to mitigate process safety risks and moving from lagging indicators (measuring past outcomes) to leading indicators (predicting future performance). With the implementation of the SEAM Standards, our assurance methodologies for process safety have been updated to provide more insight on the health of barriers designed to reduce the likelihood of leaks and mitigate any potential consequences should a leak occur.

We continue to learn from investigations into industry incidents and embed this knowledge into our process safety standards and training programmes.

Preparing for emergencies

We prepare and practise our emergency response to incidents, such as a spill or a fire. This involves working closely with local emergency services and regulatory agencies to jointly test our plans and procedures. Shell requires key operating facilities to test their emergency response preparedness as per regulatory requirements and aligned to industry best practices. In 2024, we held large-scale emergency response exercises at Shell Energy and Chemicals Park Rotterdam in the Netherlands and in Perth, Australia for offshore exploration to support our Prelude floating LNG facility.

We manage three regional Emergency Response Leadership Councils for the Americas; Asia-Pacific; and Europe, the Middle East and Africa. The councils bring together experts from different teams that need to be able to work together seamlessly in case of emergencies. In 2024, the councils' annual regional conferences covered a variety of topics such as lessons learned, dynamic risk assessments, new response technology, non-fluorinated firefighting foam tactics and response preparedness.

Transport safety

Transporting large numbers of people, products and equipment poses safety risks. We seek to reduce these risks by developing best-practice standards within Shell. We also work with specialist contractors, industry bodies, non-governmental organisations and governments to find ways of reducing transport safety risks.

Road safety

In 2024, we continued to focus on strengthening our controls and implementing technologies that help us to better detect the conditions which can lead to incidents. Our SEAM Standards require Shell employees and contractors who are identified as driving on work-related business to receive defensive driver training.

In 2024, Shell employees and contractors drove around 424 million kilometres on company business, equivalent to around 10,580 times around the world. Commercial road transport accounts for most of the kilometres driven. There were 17 severe motor vehicle incidents (SMVIs). An SMVI is defined as a motor vehicle incident resulting in a fatality, serious injury or a rollover of a vehicle. There were no road transport-related fatalities in 2024.

Maritime safety

At the end of 2024, we managed and operated a global fleet of 22 tankers, liquefied natural gas carriers and the world's first liquefied hydrogen carrier. We are one of the world's largest charterers of oil and gas vessels. We work with our global maritime partners through our Maritime Partners in Safety Programme to improve the safety performance of the shipping industry.

Air safety

In 2024, for Shell-operated ventures, our owned and contracted aircraft flew around 37,000 hours and carried around 292,000 Shell and contractor passengers to destinations across the world. In addition, remotely piloted aircraft completed flights on surveys, inspections, emissions surveillance, and security and incident response.

See shell.com for more information on transport safety.

Working with others

We work with contractors and suppliers to help them understand our safety requirements. We strive to improve the energy industry's safety performance by sharing safety standards and experience with other operators, joint-venture partners, contractors and professional organisations.

Executives from Shell and our major contractor companies have collaborated on Shell's contractor safety leadership programme since 2014. The programme seeks to identify strategies and practical ways to improve a shared safety culture and achieve our Goal Zero ambition of no harm and no leaks.

Photo: A safety briefing for a maintenance and operations crew at the 731.5 megawatt Borssele III and IV offshore wind farm, the Netherlands, which is owned and operated by the Blauwwind joint venture (Shell interest 20%).

Safety performance

Tragically, two of our contractor colleagues in Shell-operated ventures lost their lives in incidents which happened in 2024 while working for us. One contractor colleague in the Netherlands lost his life in an accident at Shell Energy and Chemicals Park Moerdijk in June 2024. Another contractor colleague in India was bitten by a snake in May 2024 and subsequently passed away in January 2025.

We sadly note that a contractor who sustained burn injuries in a flash fire at our EcoOils facility in Malaysia in February 2025 passed away later that month. The investigation into the incident remained under way at the time of publishing this report.

The death in February 2024 of a contractor colleague in Nigeria, who was injured in a fire incident in December 2023, was reported in our 2023 Annual Report.

Shell is profoundly impacted by these losses. We are resolutely committed to learn from these incidents and we aim to take all necessary measures to prevent anything similar from happening again. We continue to work closely with our contractors to help build a strong safety culture at the frontline.

We use serious injury, illness and fatality (SIF) and serious injury, illness and fatality frequency (SIF-F) to measure our safety performance. SIF is defined as a serious work-related injury or illness that resulted in a fatality or a permanent impairment, which is defined as a long-term or permanent injury or illness with a significant impact on daily activities. SIF-F is calculated by dividing the number of employee and contractor SIF by 100 million working hours. SIF-F enables us to focus our investigations on the most serious incidents. The aim is to collect and analyse relevant, high-quality data that can help us improve our efforts to prevent serious injuries and fatalities.

In 2024, the number of serious work-related injuries or illnesses, including those that resulted in fatality or permanent impairment, decreased to 7 from 12 in 2023. The SIF-F was 1.5 cases per 100 million working hours compared with 2.6 in 2023.

For reporting on process safety, we combine Tier 1 and 2 events. A Tier 1 process safety event is an unplanned or uncontrolled release of any material from a process, including non-toxic and non-flammable materials, with the greatest actual consequence resulting in harm to employees, contract staff or a neighbouring community, damage to equipment, or exceeding a defined threshold quantity. A Tier 2 process safety event is a release of lesser consequence.

The number of Tier 1 and 2 operational process safety events in 2024 increased compared with 2023. There were 90 events reported during the year compared with 63 in 2023. The increase in process safety tiered events was driven by our Downstream, Renewables and Energy Solutions business. We are actively addressing these challenges by refining our operational strategies, renewing our focus on fundamentals and leveraging new technologies to return to the downward trend of previous years.

A well control incident is defined as a well set-up with fewer than two barriers in place to protect it against a release through any potential path. In 2024, there were no Level 1 or Level 2 well control incidents in Shell-operated ventures. There were also no events in 2023.

As part of our learner mindset approach, we investigate serious incidents so we can understand the underlying causes, including technical, behavioural, organisational and human factors. We share what we learn, including with contractors. We implement mitigations at the site and in the country and business where the incident occurred. We seek to turn incident findings into improved standards or better ways of working that can be applied widely across similar facilities.

Security

Our operations expose us to criminality, civil unrest, activism, terrorism, cyber disruption and acts of war that could have a material adverse effect on our business. Our security risk mitigations follow the principles of "deter, detect, delay and respond". We strengthen the security of our assets, people and operations to reduce our exposure as appropriate, for example, by conducting site security risk assessments, using journey management plans and performing travel risk assessments. We also invest in information risk management capabilities and crisis management and business continuity measures.

Shell is a member of the Voluntary Principles on Security and Human Rights (VPSHR), a multi-stakeholder initiative that gives guidance on how to respect human rights while providing security for business operations. We implement this guidance within our own operations, concentrating on countries where the risks of working with government and private security providers are identified as greatest.

Living by our values

Our core values of honesty, integrity and respect for people, as well as our focus on safety and sustainability are critical to our strategy. We are committed to doing business in an ethical and transparent way.

Ethics and transparency

Our core values underpin our work with employees, customers, investors, contractors, suppliers, non-governmental organisations, the communities where we operate and others. The Shell General Business Principles (SGBP), Code of Conduct, and Ethics and Compliance Manual are designed to help everyone at Shell to act in line with our values. The Chief Ethics and Compliance Officer (CECO) reports to the Shell Legal Director. The CECO is the custodian of Shell's Code of Conduct, and oversees ethics and compliance activities.

Shell General Business Principles

The SGBP set out our responsibilities to shareholders, customers, employees, business partners and society. They set the standards for how we conduct business with integrity, care and respect for people. As part of these principles, we commit to contribute to sustainable development. All Shell employees and contractors, and those working at joint ventures we operate, are expected to behave in line with these principles. We undertake a range of activities to help embed the SGBP and the Code of Conduct throughout the organisation. This includes training and encouraging people to discuss the dilemmas they face in their work.

Code of Conduct

Our Code of Conduct explains how employees, contractors and anyone else acting on Shell's behalf must behave to live up to our business principles. It addresses key topics including safety, anti-bribery and corruption, fair competition and human rights.

Shell employees, contractors and third parties with whom Shell has a business relationship can report any potential breaches of the Code of Conduct confidentially through several channels, including anonymously through a global helpline operated by an independent provider. We maintain a stringent no retaliation policy to protect any person making an allegation in good faith. This protection extends to those who participate in or conduct an investigation. We investigate allegations of potential violations of the Code of Conduct or applicable laws promptly and independently of the management line concerned.

In 2024, there were 2,025 reports to the Shell Global Helpline. We confirmed 343 breaches of the Code of Conduct, 367 employees or contractors were subject to disciplinary action, and of those 110 people were dismissed. Confirmed breaches include cases in which an allegation received in 2024 or a prior year was substantiated and closed.

Ethics and compliance

Shell's Ethics and Compliance Manual defines the detailed requirements for our businesses and functions to comply with laws on anti-bribery and corruption, anti-money laundering, preventing the facilitation of tax evasion, antitrust, data privacy and trade compliance.

Our employees receive guidance on the requirements listed in our Ethics and Compliance Manual – including via a dedicated website, and training modules where completion is monitored – which is reinforced by messages from Shell leaders on these requirements. This manual also includes the Protect Shell Policy, which explains Shell's position on managing antitrust risks in engagements with parties external to Shell. In response to fast-moving external antitrust developments and trends, internal guidance is continually being monitored to ensure that it remains relevant.

The type and depth of training is dependent on the level of risk. Training is repeated every three years, or more frequently for positions where the risk exposure is higher. Those considered to be higher risk for exposure to bribery include, but are not limited to, persons involved in procurement and contracting, new business development and engaging with government officials. Shell Internal Audit and Investigations (SIAI) conducts risk-based audits of potential ethics and compliance issues across its operations in support of our Group-wide ethics and compliance programme.

To help manage antitrust, competition, anti-bribery, tax evasion, anti-money laundering and trade compliance risks with adequate resources we maintain risk-based compliance programmes, a comprehensive governance structure, established reporting lines and policies and procedures, including mandatory due diligence, counterparty-screening and regular risk assessments.

Compliance in our Trading and Supply business

We maintain a Trading Compliance function managed by a Chief Compliance Officer, as regulated by the UK Financial Conduct Authority, the US Commodities Futures Trading Commission and the Securities Commission of The Bahamas, with adequate resources, including employees and a budget; a comprehensive governance structure, controls, policies and procedures and established reporting lines. Employees in Shell's trading organisation receive clear guidance through the Code of Conduct; the organisation's Trading and Supply Compliance Manual, supplemented with specific policies; a specific compliance website; mandatory training modules where completion is monitored; and other relevant training.

Shell leaders reinforce the importance of managing compliance and conduct risk in the trading organisation through monitoring risk metrics, reporting to compliance risk management and governance committees, setting clear expectations via townhall meetings and other channels, and enforcing consequences for non-compliance.

Shell's Trading Compliance function has systems for trade surveillance and monitoring communication, in addition to a dedicated conduct and ethics investigation function to assess breaches of non-compliance and thematic trends.

Data protection

With regard to the protection of personal data, we continue to invest in and develop a mature and robust privacy compliance programme based on our Binding Corporate Rules (BCRs). Every Shell company is required to manage personal data in a professional, ethical and lawful manner. We have a robust "privacy by design" process, which includes the monitoring of data privacy regulations, to help ensure that necessary controls are built into our IT systems and solutions to protect personal data.

Shell's Chief Privacy Officer serves as the Data Protection Officer (DPO) under the EU's General Data Protection Regulation (GDPR) and other applicable data privacy laws, except where there is a requirement to have a locally based DPO, such as in China and the Philippines.

We monitor new data privacy legislation and seek to ensure we have a robust impact assessment process in place for the relevant businesses. We design our operations and processes based on relevant data privacy requirements and we build controls into our processes and practices which cover the handling of personal data.

We maintain a Group-wide incident management process designed to identify and remediate data privacy breaches. The process also helps us to comply with country-level requirements for reporting breaches. Some of our acquired companies are not yet in full compliance with our BCRs. Following assessments for each of those companies, specific actions are planned and put in place to achieve compliance, with regular updates made on their progress to management.

Reputation and brand

We continually assess and monitor the external environment for potential risks to our reputation. We engage in dialogue with our key stakeholders, such as investors, industry and trade groups, academics, governments and non-governmental organisations to gain greater insights into societal expectations of the Shell Group. We make efforts to explain to our stakeholders what the Company is doing and why, the validity of our energy transition targets and our progress towards meeting them. We take proactive steps when appropriate through legal means to protect our reputation from unwarranted accusations.

Our approach to sustainability

Our commitment to contribute to sustainable development has been part of the Shell General Business Principles since 1997. We have embedded this sustainability commitment into our strategy, business processes and decision-making, supported by comprehensive governance structures, policies and standards.

Our approach to sustainability takes into account the impacts, risks and opportunities related to climate, nature, safety, ethics, people and communities – from the global to the local level. For 2024 progress in each of these areas, refer to the Our journey to net zero, Respecting nature, Powering lives, Safety, and Living by our values sections.

In anticipation of the transposition by the Netherlands of the EU Corporate Sustainability Reporting Directive (CSRD) into national law, a key development for Shell in 2024 has been the voluntary implementation of the CSRD and the accompanying European Sustainability Reporting Standards (ESRS). The CSRD requires certain European and non-European companies (including Shell plc due to its listing on Euronext Amsterdam) to make disclosures on environmental, social and governance topics in accordance with reporting standards set out in the ESRS.

For the first time, in the Annual Report and Accounts 2024, Shell includes a Sustainability Statements section (pages 341-440), prepared on a voluntary basis in accordance with the CSRD and ESRS. The Sustainability Statements incorporates Shell's EU Taxonomy disclosure, which we have published on voluntary basis since 2021. The Sustainability Statements section forms an integral part of the consolidated management report [A]. With the introduction of the Sustainability Statements, we have retired our voluntary Sustainability Report after 27 years.

[A] The consolidated management report, as referenced in the CSRD, includes the Strategic Report and Governance sections of the Annual Report and Accounts.

Photo: Shell's Board of Directors visited Raizen facilities in Brazil in April 2024.

Governance

Board oversight of sustainability including climate-related impacts, risks and opportunities T

Our governance framework is designed to effectively deliver our strategy, which is to deliver more value with less emissions, while powering lives and respecting nature.

See "Our strategy" on pages 10-13.

We describe Shell's overall governance framework on pages 159-160 and provide information on the roles of the Board of Directors, Board Committees and the Executive Committee (EC).

See "Sustainability including climate governance" on page 129.

The Board has primary oversight of the delivery of Shell's strategy and monitors performance against our longer-term business targets. This includes the management of sustainability-related impacts, risks and opportunities.

The Board periodically reviews our energy transition plans and oversees their implementation and delivery. In March 2024, Shell published the updated Energy Transition Strategy 2024, as endorsed by the Board, which included our four climate targets and ambition. The progress on these longer-term climate-related targets and ambition can be found in "Climate-related metrics and targets" on pages 93-106.

In 2024, the Board considered sustainability-related matters throughout the year, such as the assessment of sustainability-related risks and the effectiveness of corresponding risk management activities. The Board also challenged and endorsed business plans, with consideration of major capital expenditures, acquisitions and divestments. In 2024, the Board convened nine times and continued to oversee our strategy and sustainability initiatives, including at the Board off-site days in June 2024.

The nature of topics discussed by the Board in 2024 can be found in "Board activities" on pages 161-164. A full description of sustainability-related principal risks can be found in the "Risk factors" on pages 134-144.

Board committees

The Board is supported by four standing committees: the Sustainability Committee (SUSCO), the Remuneration Committee (REMCO), the Audit and Risk Committee (ARC), and the Nomination and Succession Committee (NOMCO). Sustainability-related matters are considered by the Board or the relevant committee, as appropriate. Committees, comprising Non-executive Directors, provide regular updates to the Board, including from committee meetings and stakeholder engagements.

The SUSCO reviews the performance of Shell with respect to sustainability and the non-financial elements of Shell's strategy, with a focus on nature and social elements. The SUSCO also reviews selected sustainability topics and matters of public concern. The SUSCO met four times in 2024 with sustainability-related matters discussed at each meeting. Details on focus areas and meetings in 2024 can be found in the SUSCO report on page 175.

The REMCO develops the remuneration policy and schemes for Executive Directors, EC members and the majority of Shell's employees, and sets performance conditions designed to challenge and support the EC in meeting our strategy of more value with less emissions, while respecting nature and powering lives. The REMCO met five times during 2024, with sustainability-related matters relevant to remuneration being regularly addressed. Details of the REMCO's focus areas and meetings in 2024 can be found in the Directors' Remuneration Report on pages 188-190.

The NOMCO leads the process for appointments to the Board and Senior Management and oversees the development of a diverse succession line of candidates. The NOMCO also reviews the Company's policy, targets and strategy on diversity, equity and inclusion (DE&I), and monitors the effectiveness of these initiatives. The NOMCO met four times, with sustainability-related matters regularly addressed. Details on the NOMCO's focus areas and meetings in 2024 can be found in the NOMCO report on pages 171-174.

The ARC assists the Board in fulfilling its oversight responsibilities in areas such as the effectiveness of our risk management and internal controls. The ARC also provides oversight in respect of material non-financial reporting disclosures with respect to corporate sustainability as applicable to the Company's annual reports, half-yearly reports and quarterly results releases. Significant issues identified by the business or functional owners are escalated to and reviewed by the ARC as required. The ARC met six times in 2024, with sustainability-related matters regularly addressed. Details on the ARC's focus areas and meetings in 2024 can be found in the ARC report on pages 176-187.

Performance and remuneration

Our remuneration schemes, including the annual bonus and long-term incentive awards, are designed to support Shell in achieving our strategy. Almost all employees participate in the annual bonus scheme. Executive Directors, senior executives and certain key employees participate in the long-term incentive awards, which aim to retain and ensure recipients have a greater investment in Shell's future.

In respect of 2024 outcomes, Shell's safety and energy transition-related performance metrics each form 15% of the annual bonus scorecard. A metric for "Shell's journey in the energy transition" forms 20% of the long-term incentive awards for Executive Directors and senior executives and 10% for all other employees.

The remuneration schemes are all linked to sustainability elements, including climate and safety. The Directors' Remuneration Report provides further details on key sustainability-related performance indicators.

Supporting governance committees

There are three key supporting management committees, with representatives from across Shell, which play a critical role in driving sustainability-related elements of our strategy. These committees each have direct lines of reporting to the Board and its committees.

- The Capital Investment Committee (CIC) facilitates portfolio management and capital allocation decisions, and reviews each investment opportunity that is, due to its size or risk profile, subject to approval by the CEO or the Board. These reviews ensure that risk-reward trade-offs and other defined criteria (including carbon emissions impacts) are embedded in investment decision-making. The CIC is sponsored by the CEO and is accountable to the Board. This committee is made up of senior executives, including the CEO, CFO and individual business directors.
- The Carbon Reporting Committee (CRC) is sponsored by the CFO and includes senior management representatives focusing on climate-related matters from across the businesses, Projects & Technology climate-related disciplines, and functions including Finance, Legal and Strategy. The CRC is responsible at the Group level for the Carbon Reporting Control Framework, the calculation methodologies and reporting of GHG emissions metrics, and the review and approval of external GHG-related disclosures to ensure compliance.
- The Sustainability Management Committee (SMC), established in October 2024, is sponsored by the CFO and includes senior management representatives with exposure to material sustainability areas from the businesses and functions, including Supply Chain, Finance, Legal and Human Resources. The SMC aims to provide an integrated approach to sustainability by addressing cross-directorate risks and dilemmas, and driving the co-ordination, simplification and performance improvement of nature and social sustainability topics, focusing on regulatory compliance and value protection and creation. The SMC will also maintain a forward view on emerging themes to ensure Shell's future competitiveness and resilience through the energy transition.

In addition to these committees, our network of country chairs supports the overall governance, development and deployment of sustainability-related initiatives. They facilitate the setting of each country's plans and their engagement with external stakeholders in support of our strategy.

Business assurance

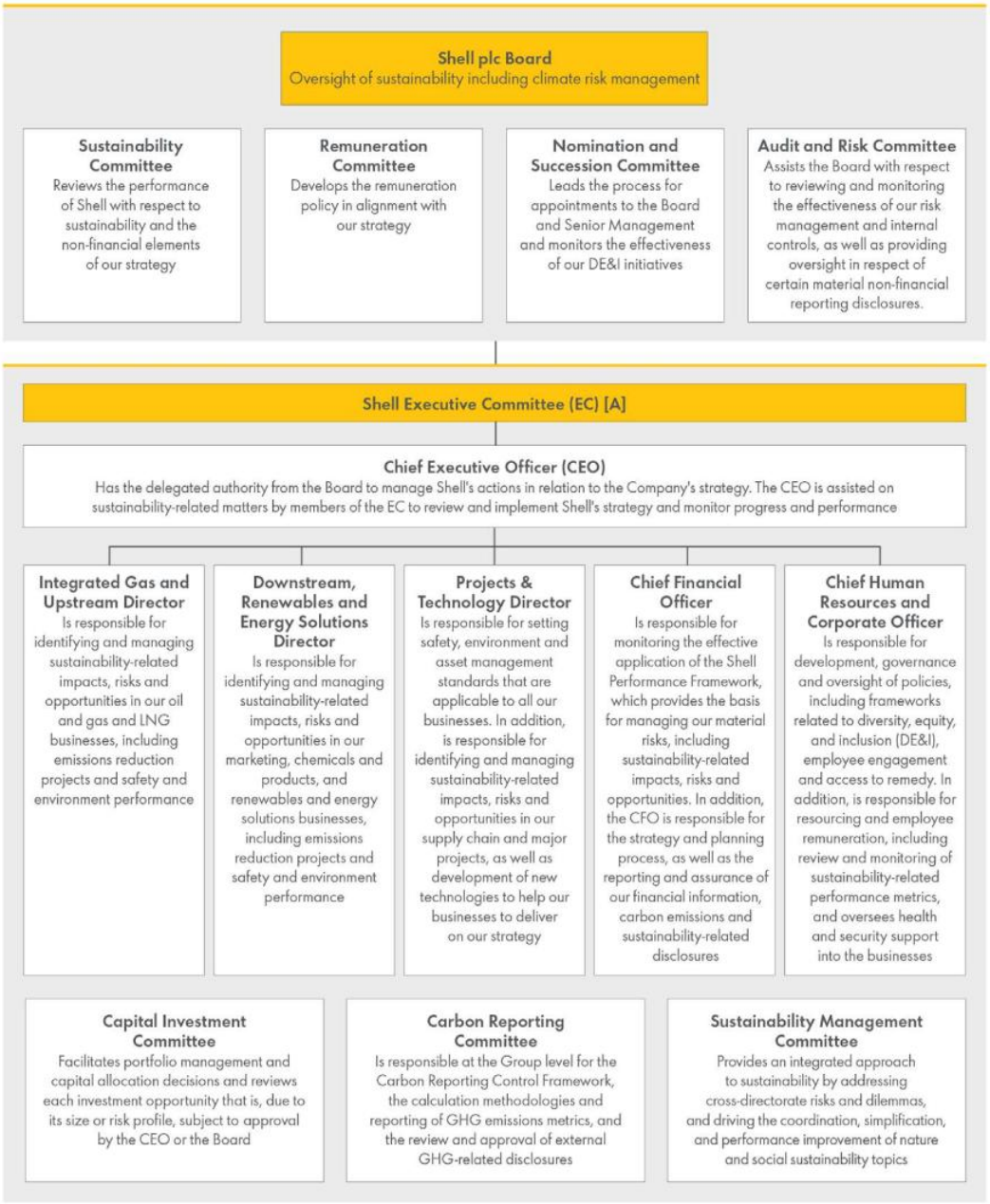
Each EC member must submit an annual assurance letter to the CEO that their business or function's activities have been conducted in accordance with the requirements set out in our Commitment and Policy on Health, Safety, Security, Environment & Social Performance (HSSE & SP) and our Safety, Environment and Asset Management (SEAM) Standards. This assurance includes an assessment of the effectiveness of our internal controls in managing sustainability-related risks.

Independent assurance

Shell Internal Audit and Investigations (SIAI) provides independent assurance of sustainability-related risks as part of its broader mandate and advises management and the Board on the effectiveness of internal controls. For further information, see "Internal Audit" on page 184.

Management's role in assessing and managing sustainability including climate-related impacts, risks and opportunities T

Sustainability including climate governance



[A] See pages 157-158 for details of changes to the Executive Committee.

Processes by which management is informed about sustainability including climate-related issues
We have several processes to help ensure that management teams can effectively monitor and manage sustainability matters. Our response to the evolving risk outlook requires transparency and clarity around our plans and actions to achieve our sustainability targets.

We have established a number of policies, standards, frameworks, internal forums and capability development programmes related to sustainability, climate change and the energy transition. These are employed at all levels of the organisation and seek to monitor, manage and review sustainability issues.

Each business and function regularly reviews its risk profile, risk responses and assurance activities throughout the year to ensure sustainability-related risks are effectively addressed and managed. These reviews and insights are also used to provide management with regular updates on the operational management of sustainability and to help us to update our plans and guide our day-to-day operational decisions and our risk response plans.

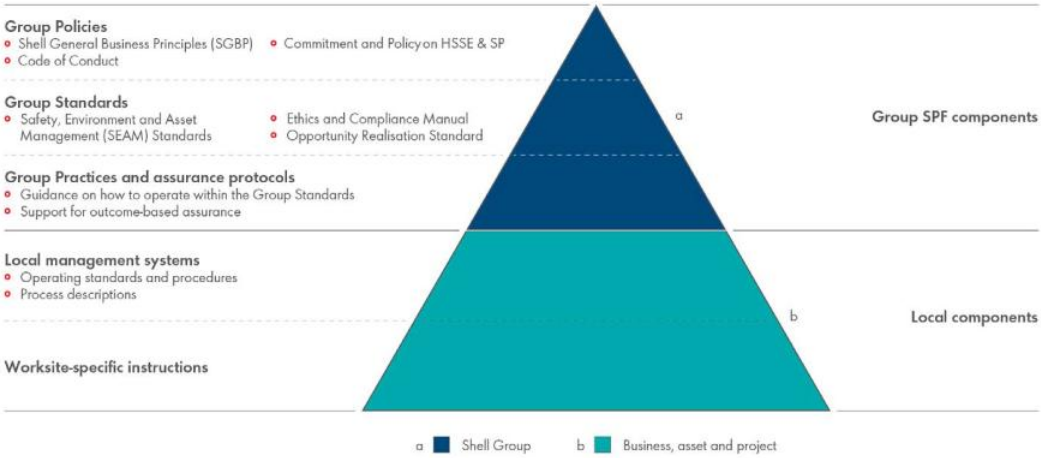
Policies and standards

Our commitment to contribute to sustainable development has been part of the Shell General Business Principles (SGBP) since 1997. These principles are supported by our Code of Conduct, which describe the behaviours expected of our employees with regard to sustainability-related matters including health, safety, security, environment and social performance (HSSE & SP), human rights and equal opportunities.

The Shell Performance Framework (SPF) is the overarching framework adopted by Shell to deliver on its strategy and business objectives. It applies to all Shell companies and provides a consistent approach for how each company in Shell operates. This framework includes our risk management and internal control procedures to support adherence to the SGBP and Code of Conduct.

See "Living by our values" on pages 125-126 and "Shell Performance Framework" on page 221.

Shell's policies and standards aligned with the Shell Performance Framework (SPF)



Commitment and Policy on HSSE & SP
The Shell Commitment and Policy on HSSE & SP is a set of core principles intended to ensure the health and safety of our workforce, minimise environmental impact, respect our neighbours and contribute to sustainable development.

SEAM Standards
We have implemented the Commitment and Policy on HSSE & SP into a set of five standards under the SPF collectively referred to as the Safety, Environment and Asset Management (SEAM) Standards. The SEAM Standards require the businesses, projects and assets we operate to identify and manage impacts, risks and opportunities so their activities can be carried out in a safe, environmentally responsible and consistent way.

We seek to avoid HSSE impacts and risks where we are able to. We follow requirements set out in our SEAM Standards to develop suitable governance structures and mitigation strategies aimed at ensuring that if an HSSE risk materialises, we avoid the worst possible consequences and have ways to remediate any environmental damage. For example, requirements in the SEAM Standards describe the key controls to be implemented to ensure safe production and equipment care, and the type of skills and training that are required for relevant staff.

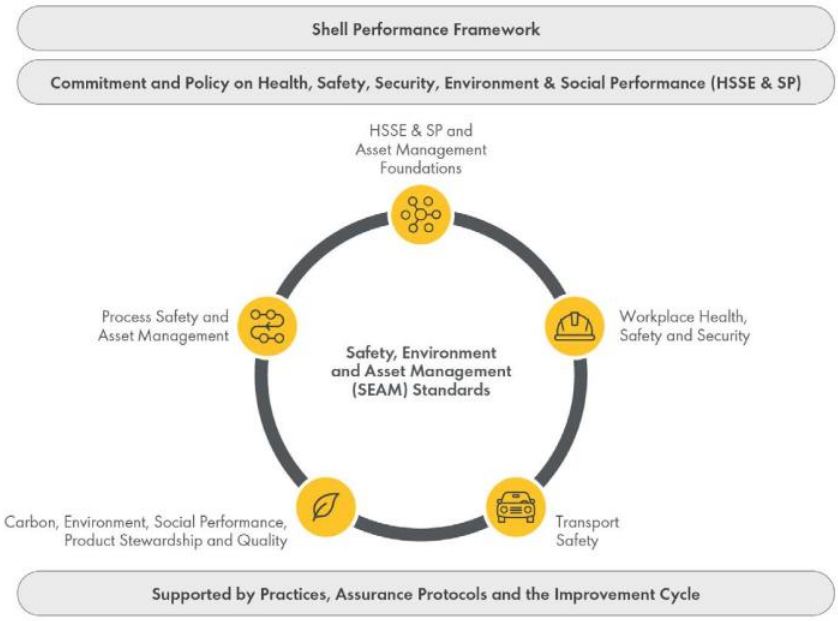
Each project, asset or business is accountable to assess which mandatory requirements are relevant based on their objectives, risk profile and activities, and apply these via their local management system. The requirements are designed to be outcome-based – meaning they define the desired results and allow the business to determine a fit-for-purpose process to achieve them. They are supported by practice documents, which share best practices for implementation, as well as assurance protocols to assist in testing the health of controls.

The requirements align with industry standards where practicable. Where applicable, we follow the most stringent of either our SEAM Standards or local regulations. In some cases, where no local regulation exists, our standards set mandatory requirements based on internationally accepted standards or practices.

Requests for exceptions from the SEAM Standards must be reviewed and advised on by subject matter experts and authorised by a senior executive for the relevant business, asset or function. Permanent exceptions are reviewed on an annual basis and are subject to conditions.

The SEAM Standards came into effect in July 2024, replacing the former HSSE & SP Control Framework and Asset Management System (AMS). The five SEAM Standards are described below.

SEAM Standards



HSSE & SP and Asset Management Foundations

This standard includes requirements intended to manage the common elements of our processes and management systems. This includes our assurance processes, HSSE & SP risk management practices, impact assessments, contractor HSSE management, performance monitoring and reporting, and learning and improvement, among others.

Carbon, Environment, Social Performance, Product Stewardship and Quality

This standard includes managing our decarbonisation targets, protecting biodiversity, preserving water quality, improving air quality and increasing circularity. It also covers the mitigation of social impacts arising from our business activities and management of any adverse effects of the products we make, buy, sell or handle.

See "Our journey to net zero" on page 80, "Respecting nature" on page 109 and "Powering lives" on page 114.

Workplace Health, Safety, and Security

This standard is about protecting workers involved in our activities from potential health and safety hazards that may cause harm to them or others. It includes worker welfare and labour rights, and contains requirements intended to protect our people and assets from adversarial activities.

Process Safety and Asset Management

This standard is about keeping hazardous substances contained in wells, pipes, tanks and vessels. In the SEAM Standards, we have integrated Asset Management work processes with Asset Integrity-Process Safety Management, which streamlines requirements and recognises the alignment of operating safely and optimising production in our assets.

Transport Safety

This standard is about reducing the safety risks posed during transport of people, products and materials by road, rail, sea or air.

See "Safety" on pages 122-124.

Sustainability impact, risk and opportunity management
We use two key processes for assessing and managing sustainability including climate-related impacts, risks and opportunities – Impact Assessments and the Hazards and Effects Management Process (HEMP). These are covered in the HSSE & SP and Asset Management Foundations Standard in alignment with our broader risk management practice in the SPF. For more information on our risk management processes, see "Risk management" on page 134.

When planning projects, we conduct impact assessments, which help us to identify and assess a project's potential impact on the environment, people and communities. Once identified, we apply a mitigation hierarchy, which is a sequence of actions to manage potential impacts and risks. For example, in a biodiversity context we seek to avoid, minimise, restore and offset.

HEMP is applied to identify, assess and manage HSSE & SP risks in our projects and operations. This systemic approach starts with the identification of potential hazards (such as working at heights) and evaluation of their likelihood and potential impact. We then implement controls (such as fall protection) to reduce the risks to as low as reasonably practicable (ALARP). In doing this, we apply the hierarchy of controls, which prioritises the elimination, substitution and isolation of hazards, before implementing engineered safeguards, administrative controls and personal protective equipment. We monitor the effectiveness of these controls via regular assurance activities.

Non-operated ventures
More than half of Shell's joint ventures are not operated by Shell. As per our SGBP, Commitment and Policy on HSSE & SP and our joint venture requirements in the HSSE & SP and Asset Management Foundations Standard, we request non-operated ventures (NOVs) to apply policies and principles materially equivalent to our own and, in relation to particular (higher impact) risks implement materially equivalent standards or standards acceptable to us. We do not have direct control over how these ventures embed sustainability in their operations, but we do seek to influence and offer support. We periodically evaluate the sustainability including climate-related impacts, risks and opportunities within our NOVs, and if an NOV does not meet our expectations, we seek to influence them to implement performance improvement plans.

Sustainability including climate through the life cycle
Our principles, policies and standards regarding sustainability, including climate, extend across the entire lifespan of a project or the facility – from initial design and construction or acquisition to operation over many years and, finally, divestment or decommissioning.

Acquisitions and divestments
Shell considers new business investment opportunities and divesting from existing opportunities in all relevant contexts including regulations, sustainability and alignment with our strategy. Sustainability considerations, including emissions, are considered during the due diligence process and in negotiations for material acquisitions and divestments. Comprehensive stakeholder engagement plans are developed, as appropriate, in parallel to the negotiations.

We take care to invest and divest responsibly and screen our transactions against multiple criteria. Before acquiring or divesting a business, we assess the counterparty's financial strength; operating culture; policies governing HSSE & SP; ethics and compliance; and, where relevant, the effectiveness of its social performance programmes.

Within each divestment proposal, we consider if the potential purchaser has the capability to manage the assets and surrounding environment. When we divest assets or exit areas, we apply well-established processes to guide our risk assessment and the transition of sustainability-related responsibilities and commitments, including those relating to health, safety, security and environment. Where applicable, we also share our emissions reduction plans with the purchaser in relation to compliance with regulations and commitments, for the purchaser's consideration.

Decommissioning and restoration
Decommissioning is part of the normal life cycle of every asset or operation. We aim to abandon wells and decommission installations in a safe, efficient, cost effective and environmentally responsible manner while meeting regulatory requirements. This includes restoring the surroundings of these installations in line with relevant legislation, while taking our own environmental standards into account. We seek to reuse, repurpose and recycle materials in decommissioning. Current and non-current decommissioning liabilities and other provisions are accounted for on our balance sheet.

See Note 25 to the "Consolidated Financial Statements" on page 297.

Working with others

Shell understands the need to work with others to achieve our commercial, environmental and social goals. We engage with local communities and other stakeholders in all our activities. We listen to their ideas and the concerns they might have so these can be addressed in the design and operation of our assets.

Shell participates in external collaborations, industry associations and partnerships. We do this in compliance with antitrust rules and regulations. These engagements are a proven way to learn and share best practices, achieve specific objectives and build trust with the many different stakeholders who have an interest in Shell. Our key sustainability, including climate, partnerships include the International Union for the Conservation of Nature (IUCN), Ipieca (the global oil and gas industry association for advancing environmental and social performance across the energy transition), the Energy Transitions Commission (ETC), Business for Social Responsibility (BSR) and World Business Council for Sustainable Development (WBCSD). These organisations, and many others, help inform our thinking on sustainability including climate-related risks, opportunities and good practices.

Non-Financial and Sustainability Information Statement

The table below constitutes Shell's Non-Financial and Sustainability Information Statement, produced to comply with sections 414CA and 414CB of the Companies Act 2006 (as amended by The Companies (Strategic Report) (Climate-related Financial Disclosure) Regulations 2022).

Non-Financial and Sustainability Information Statement

Reporting requirement	Where to read more in this Report	Page
Business model	Our strategy	10
Non-financial KPIs	Performance indicators	18
Environmental matters	Our journey to net zero Respecting nature	76 109
Sustainability and climate change and TCFD disclosures	Our journey to net zero	76
Employees	Powering lives Directors' Remuneration Report	114 188
Social matters	Powering lives	114
Respect for human rights	Powering lives	114
Anti-corruption and anti-bribery matters	Living by our values	125
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Task Force on Climate-related Financial Disclosures (TCFD)

Shell supports the recommendations of the TCFD. In accordance with the UK Listing Rule 6.6.6R, and set out below, we report our climate-related financial disclosures consistent with all the TCFD Recommendations and Recommended Disclosures [A]. We also consider relevant supplemental guidance including, for example, the TCFD's additional guidance "Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures" (also known as the 2021 TCFD Annex) published in October 2021 by the TCFD. We continue to align and enhance our climate-related disclosures.

TCFD disclosures index

TCFD Pillars	TCFD Recommendations	Reference
Governance	Describe the board's oversight of climate-related risks and opportunities	Board oversight of sustainability including climate-related risks and opportunities is described on page 149.
	Describe management's role in assessing and managing climate-related risks and opportunities	Management's role in assessing and managing sustainability including climate-related risks and opportunities is described on page 129.
Strategy	Describe the climate-related risks and opportunities the organisation has identified over the short, medium and long term	See page 80.
	Describe the impact of climate-related risks and opportunities on the organisation's business, strategy, and financial planning	See page 85.
	Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario	See page 86.
Risk Management	Describe the organisation's processes for identifying and assessing climate-related risks	Descriptions of the company's processes used to identify and assess risks, including climate-related risks, can be found on page 134 under the paragraphs "Risk identification" and "Risk assessment".
	Describe the organisation's processes for managing climate-related risks	Descriptions of the company's processes used to manage risks, including climate-related risks, are described on page 134 under the paragraphs "Risk Response" and "Management and Board risk reviews".
	Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management	Our climate-related risk management process follows the approach set out by the Shell Performance Framework, ensuring that it is integrated into the Company's overall risk management processes, and is described on page 134 in the section "Risk Management".
Metrics and Targets	Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk-management process	See page 94.
	Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks	See page 94.
	Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets	See page 101.

Information that supports TCFD disclosures is indicated with T.

[A] By this we mean the four recommendations and the 11 recommended disclosures set out in Figure 4 of Section C of the report entitled "Recommendations of the Task Force on Climate-related Financial Disclosures" published in June 2017 by the TCFD.

Risk management and risk factors

Risk management

How we manage risks

The Board is responsible for establishing and maintaining procedures to manage risk, overseeing the internal control framework, and determining the nature and extent of the principal risks that Shell is willing to take to achieve its long-term strategic objectives.

Our approach to managing risk sits at the heart of the Shell Performance Framework and is embedded in the Improvement Cycle which integrates performance management, risk management, learning and improvement. This approach is designed to manage rather than eliminate the risk of failure to achieve our business objectives and covers the areas below.

See Shell Performance Framework on page 220.

Risk identification

We employ different methods to identify risks. These include monitoring external developments, such as policy changes and new regulations. We also assess changes in the internal operating context, such as monitoring incidents that have occurred across our activities to determine if these could give rise to new risks.

We seek to identify and define risks across the spectrum of strategic, operational, conduct and culture risks. With strategic risks, we consider the current and future portfolio, examining parameters such as country concentration or exposure to higher-risk countries. We consider long-range developments to test key assumptions or beliefs in relation to energy markets. When assessing operational risks, we consider exposures across our value chain. Through conduct and culture risks, we consider how our policies and practices align with our purpose, core values and desired mindset and behaviours.

These perspectives help us to maintain a comprehensive view of the different types of risks we face and the different time horizons during which they may affect us.

Risk assessment

To further understand the risks we face, we evaluate the impact and likelihood of each risk occurring.

When assessing the potential impact of a risk, we consider its materiality in terms of the possible financial consequences. We also consider the impacts on people, the environment and the community where we operate, our reputation and our ability to comply with external regulations. For example, the technical complexity of our operations gives rise to safety risks, which could result in injuries, loss of life, environmental harm and financial losses.

When assessing the likelihood of a risk occurring, we consider several factors, such as the level of risk exposure, our ability to prevent the risk happening and whether the risk has occurred in the past.

To support risk assessments, we also seek to establish and articulate our risk appetite, which is the level of risk that we are willing to accept in pursuit of Shell's strategy and objectives. We consider the resources available – such as financial resources, people, processes, systems and controls – that we are willing and able to allocate to manage each risk in pursuit of our objectives and the impact on Shell's overall risk profile. The financial framework, which shapes Shell's financial resilience, sets an overarching boundary condition for risk appetite. The impact and likelihood assessments, combined with risk appetite, determine the type of risk responses, such as controls and assurance activities, that may be required to manage each risk. The impact and likelihood assessments also help us to prioritise risks by understanding their significance to our strategy and objectives, individually and relative to other risks.

Risk response

Risk responses are developed based on the assessment of impact, likelihood and risk appetite.

Possible responses include:

- taking the risk while using appropriate processes and controls to maintain the risk within risk appetite. These processes and controls include, for example, the requirements and guidance in the Shell General Business Principles, Code of Conduct and our Group Standards, which establish the mandatory rules that are to be applied in all Shell companies and operations;
- transferring the risk, for example to insurance providers where appropriate; and
- avoiding the risk, by stopping or exiting the activity that gives rise to the risk or doing the activity differently.

We use assurance activities to objectively assess the effectiveness of our risk management activities and to improve them.

Emerging risks

Management and the Board also consider emerging risks. These are defined as risks where the scope, impact and likelihood are still uncertain, but which may have a significant effect on achieving Shell's strategy and objectives in the future. These are identified through the monitoring of external developments, the status of risk indicators, learnings from incidents and assurance findings, and the appraisal of Shell's forward-looking plans. Once identified, we undertake activities to monitor, prepare for and plan appropriate responses, should such emerging risks occur.

In 2024, management and the Board considered the pace and evolution of technological developments in areas such as artificial intelligence and quantum computing as emerging risks, given their potential impacts, for example, on cyber security and data protection. The Board also considered the risks of the evolving landscape of geopolitical tensions for the Group.

Management and Board risk reviews

Throughout the year, each business and function regularly reviews its risk profile, risk responses and assurance activities to ensure that significant risks are managed effectively.

The Board, Board committees and management also regularly review Shell's principal risks or risk factors, conducting deeper dives on individual risks, as appropriate. These reviews also support management in assessing the effectiveness of existing risk management activities, and whether changes may be needed.

See "Other regulatory and statutory information" on pages 216-223 for other Board and Board committee responsibilities on risk management.

Risk factors

The risks discussed below could have a material adverse effect separately, or in combination, on our earnings, cash flows and financial condition. Accordingly, investors should carefully consider these risks.

Further background on each risk is set out in the relevant sections of this Report, indicated by way of cross references.

1. Portfolio risks

Risk type: ☑ Strategic risk ☐ Operational risk ☐ Conduct and culture risk

We are exposed to risks that could adversely affect the resilience of our overall portfolio of businesses. These include external risks such as macroeconomic risks, including fluctuating commodity prices and competitive forces. Our future performance depends on the successful development and deployment of new technologies that provide new products and solutions. In addition, our future hydrocarbon production depends on the delivery of integrated projects and our ability to replace proved oil and gas reserves. Many of our major projects and operations are conducted in joint arrangements or with associates. This could reduce our degree of control and our ability to identify and manage risks.

Risk description

We are exposed to various external risks, such as macroeconomic and competitive risks, and internal risks associated with growing and maturing our business opportunities through our portfolio of businesses and joint arrangements, as follows:

Macroeconomic risks:

- The prices of crude oil, natural gas, oil products and chemicals can be volatile and are affected by supply and demand, both globally and regionally. Factors that influence supply and demand include operational issues; natural disasters; pandemics; political instability; conflicts, such as the Russia-Ukraine war and the conflict in the Middle East; economic conditions, including inflation; and actions by major oil and gas producing countries. These have in the past resulted in, and similar events could in the future result in, material price fluctuations. In addition, macroeconomic, geopolitical and technological uncertainties have affected, and could affect in the future, production costs and demand for our products. Government actions may affect the prices of crude oil, natural gas, oil products and chemicals. These include price caps on gas, tariffs, the promotion of electric vehicle sales or the phasing-out of future sales of new diesel or petrol vehicles. Oil and gas prices have moved independently of each other and could do so in the future.
- Under high oil and gas prices, our entitlement to proved reserves under some production-sharing contracts has been, and could be in the future, reduced. Higher prices could also reduce demand for our products which could result in lower profitability in certain businesses in the Group, particularly in our Chemicals and Products, and Marketing businesses. Some of the reduction in demand could be permanent. Higher prices can also lead to more capacity being built, potentially resulting in an oversupplied market which would negatively affect our businesses. In the past, a high oil and gas price environment has generally led to sharp increases in costs and this could happen in the future.
- In a low oil and gas price environment, we have generated, and could in the future again generate, less revenue from our Upstream and Integrated Gas businesses, and parts of those businesses could become less profitable or incur losses. Low oil and gas prices have also resulted, and could result in the future, in the debooking of proved oil or gas reserves, if they become uneconomic in this type of price environment. Prolonged periods of low oil and gas prices, or rising costs, have resulted, and could result in the future, in projects being delayed or cancelled. Assets have been impaired in the past, and there could be impairments in the future. Low oil and gas prices have affected, and could affect in the future, our ability to maintain our long-term capital investment and shareholder distribution programmes.
- We use a range of commodity price and margin assumptions to evaluate the robustness of our capital allocation across our different projects and commercial opportunities. Due to volatility in macroeconomic conditions, our assumptions have proven to be incorrect in the past, yielding returns that are less than what we planned, and could prove incorrect in the future.

Competitive risks:

- We face competition in all our businesses. We seek to differentiate our services and products, though many of our products are competing in commodity-type markets. Accordingly, a failure to manage our costs and our operational performance could result in a material adverse effect on our earnings, cash flows and financial condition. We also compete with state-owned hydrocarbon entities and state-backed utility entities with access to financial resources and local markets. Such entities could be motivated by political or other factors in making their business decisions and may not require competitive returns. Accordingly, when bidding on new leases or projects, we could find ourselves at a competitive disadvantage or unable to obtain competitive returns.

Technology risks:

- Technology and innovation are essential to our efforts to help meet the world's energy demands competitively. If we fail to effectively develop and/or deploy new technology, products and solutions, there could be a material adverse effect on the delivery of our strategy. We operate in environments where advanced technologies are used. In developing new technologies, products and solutions, unknown or unforeseeable technological failures or environmental and health effects could harm our reputation and licence to operate or expose us to litigation or sanctions. The associated costs of new technology are sometimes underestimated. We have faced delays in developing new technology in the past, and such delays could happen again in the future. If we are unable to develop our technology and products in a timely and cost-effective manner, we may fail to realise commercially viable products.

Delivery of capital projects and our ability to replace proved oil and gas reserves:

- We face numerous challenges in developing capital projects, especially those which are integrated. Challenges include: uncertain geology; frontier conditions; drilling at significant depths, the existence and availability of necessary technology and engineering resources; supply chain constraints; the availability of skilled labour; the existence of transport infrastructure; the expiration of licences; project delays, including delays in obtaining required permits; potential cost overruns; and technical, fiscal, regulatory, political and other conditions. We may fail to assess or manage these and other risks properly. Such potential obstacles have impaired, and could in the future impair, our delivery of these projects, our ability to realise the full potential value of the project as assessed when the investment was approved, and our ability to fulfil related contractual commitments. This has led, and could in the future lead, to impairments.
- Our future oil and gas production depends on our access to new proved reserves through exploration, negotiations with governments and other owners of proved reserves and acquisitions, and through developing and applying new technologies and recovery processes to existing fields. A failure to replace proved reserves would result in an accelerated decrease of future production.

Oil and gas production available for sale

Million boe [A]

	2024	2023	2022
Shell subsidiaries	956	937	938
Shell share of joint ventures and associates	82	82	108
Total	**1,038**	**1,019**	**1,046**

[A] Natural gas volumes are converted into oil equivalent using a factor of 5,800 scf per barrel.

Proved developed and undeveloped oil and gas reserves [A][B]

Million boe [C]

	Dec 31, 2024	Dec 31, 2023	Dec 31, 2022
Shell subsidiaries	8,156	8,283	8,317
Shell share of joint ventures and associates	1,464	1,504	1,261
Total [D] [E] [F]	**9,620**	**9,787**	**9,578**
Attributable to non-controlling interest of Shell subsidiaries	370	378	365

[A] We manage our total proved reserves base without distinguishing between proved reserves from subsidiaries and those from joint ventures and associates.
[B] Includes proved reserves associated with future production that will be consumed in operations.
[C] Natural gas volumes are converted into oil equivalent using a factor of 5,800 scf per barrel.
[D] On March 13, 2025, Shell completed the sale of its Nigerian onshore subsidiary The Shell Petroleum Development Company of Nigeria Limited (SPDC) which holds a 30% interest in the SPDC JV to Renaissance. As of December 31, 2024, Shell had proved reserves of 453 million boe in SPDC.
[E] Pursuant to Shell's 2017 agreement with Canadian Natural Resources Limited, its remaining mining interest and associated synthetic crude oil reserves will be swapped for an additional 10% interest in the Scotford Upgrader and Quest CCS project. The transaction is expected to close by the end of the first half of 2025, subject to regulatory approvals. The associated proved reserves as of December 31, 2024 were 741 million barrels (of which 50% attributable to non-controlling interest).
[F] On December 5, 2024, Shell and Equinor ASA, announced the combination of their UK offshore oil and gas assets and expertise to form a new company which will be the UK North Sea's biggest independent producer. On deal completion, the new independent producer will be jointly owned by Equinor (50%) and Shell (50%) and 157 million boe (as of December 31, 2024) of Shell's proved reserves will be contributed to the new joint venture alongside proved reserves contributed by Equinor. Subsequently, Shell will report 50% of the proved reserves of the new joint venture as part of Shell's share of proved reserves from joint ventures and associates.

- The estimation of proved oil and gas reserves involves subjective judgements and determinations based on available geological, technical, contractual and economic information. Estimates can change over time because of new information from production or drilling activities, changes in economic factors, such as oil and gas prices, alterations in the regulatory policies of host governments, or other events. Estimates also change to reflect acquisitions, divestments, new discoveries, extensions of existing fields and mines, and improved recovery techniques. Published proved oil and gas reserves estimates could also be subject to correction because of errors in the application of rules and changes in regulatory guidance. Downward adjustments could indicate lower future production volumes and could also lead to impairment of assets.

Joint arrangements:

- When we are not the operator, we have less influence and control over the behaviour, performance and operating costs of joint arrangements or associates. Despite having less control, we could still be exposed to the risks associated with these operations, including environmental, reputational, legal (where joint and several liability could apply) and government sanction risks. For example, our partners or members of a joint arrangement or an associate (particularly local partners in developing countries) may be unable to meet their financial or other obligations to projects, threatening the viability of a given project. Where we are the operator of a joint arrangement, the other partner(s) could still be able to veto or block certain decisions, which could be detrimental to the joint arrangement.

If any of the risks above materialise, it could have a material adverse effect on our earnings, cash flows and financial condition.

How this risk is managed

- We maintain a diversified portfolio to manage the impact of macroeconomic volatility. We prepare an annual financial plan that tests different scenarios, and their impact on prices, on our businesses and organisation as a whole. These scenarios help us determine which issues could affect our operating environment and have implications for our strategy. They also help us to identify potential interventions to preserve our cash levels.
- We continually assess the external environment – the markets and the underlying economic, political, social and environmental drivers that shape them – to evaluate changes in competitive forces. We define multiple potential future scenarios and business environments by identifying drivers, uncertainties, enablers and constraints to our competitiveness.

- We also continually screen for new opportunities globally through our opportunity identification process. We test the resilience of our opportunities against a range of prices and costs for crude oil, natural gas, oil products and chemicals. These tests are based on short-, medium- and long-term market drivers, such as the extent and pace of the energy transition. Our opportunities are then ranked, prioritised and tested for strategic fit and value return expectations before being included in our growth funnel. We use our integrated exploration, development and project commercial and technical expertise to mature these opportunities and actively manage non-technical risks. We benchmark our projects internally and externally to make sure our proposals are competitive. We review the maturation progress of our various opportunities and perform post-investment reviews to extract learnings for implementation in future opportunities.
- Shell's Projects & Technology organisation and our businesses work together to determine the content, scope and budget for developing new technology that supports our activities. This includes partnering with start-ups and small- to medium-sized enterprises that are in the early stages of developing new technologies through our Shell Ventures and Shell GameChanger programme. New technology is developed using a maturation process, to systematically mitigate technical and commercial risks, while staying aligned with Shell's strategic ambitions and deployment commitments.
- A central group of reserves experts undertakes the primary assurance of the proved reserves bookings. A multidisciplinary committee reviews and endorses all major proved reserves bookings. Shell's Audit and Risk Committee reviews all proved reserves bookings and our CEO provides final approval. Our Internal Audit and Investigations function also provides further assurance through audits of the control framework, from which information disclosed in "Supplementary information – oil and gas (unaudited)" is obtained.
- For every major project and operation where we share control, or where we do not have control or do not operate, Shell appoints a Shell Shareholder representative, whose responsibility is to manage performance, create and protect value for Shell. The representative seeks to influence operators and other partners to adapt their practices in order to drive value appropriately and to mitigate identified risks. We perform regular risk assessments of our joint ventures, including how our joint ventures' standards align with those of Shell and seek to influence to close any gaps identified.

See "Market overview" on pages 28-30, "Other central activities" on pages 74-75, "Oil and gas information" on pages 47-54 and "Supplementary information - oil and gas (unaudited)" on pages 313-332.

2. Climate change and the energy transition

Risk type: ☑ Strategic risk ☑ Operational risk ☑ Conduct and culture risk

Rising concerns about climate change and the effects of the energy transition pose multiple risks to Shell, including declines in the demand for and prices of our products, commercial risks from growing our low-carbon business, and adverse litigation and regulatory developments. The physical impacts of climate change could also adversely affect our assets and supply chains.

Risk description

Societal demand for urgent action on climate change has increased, especially since the Intergovernmental Panel on Climate Change (IPCC) Special Report on Global Warming of 1.5 °C in 2018 effectively made the more ambitious goal of the Paris Agreement to limit the rise in global average temperature this century to 1.5 °C the default target for the parties to the agreement. Society's increasing focus on climate change and drive for an energy transition is contributing to a rapidly changing risk environment and a wide range of stakeholder actions against our organisation. The risks and impacts include the following:

Commercial risks:

- Changing customer sentiment favouring the use of renewable and sustainable energy products may reduce demand for our oil and gas products. An excess of fossil fuel supply over demand could in the future result in reduced fossil fuel prices. This could result in lower earnings, cancelled projects and the potential impairment of certain assets.
- If we fail to stay in step with the pace and extent of change or customers' and other stakeholders' demand for low-carbon products, this could adversely affect our reputation and future earnings. If we move much faster than society, we risk investing in technologies, markets or low-carbon products for which there may be insufficient demand. Therefore, we cannot transition too quickly, or we may offer products that customers do not want. If we are slower than society, customers may prefer a different supplier, which would reduce demand for our products adversely affecting our reputation and materially affect our financial results.
- Low-carbon technology and innovation are essential to our efforts to help meet the world's energy demands competitively. If we are unable to develop the right technologies and products in a timely and cost-effective manner, there could be an adverse effect on our future earnings. The operating margins for our low-carbon products and services have been, and could be in the future, lower than the margins we have experienced historically in our oil and gas operations.
- Certain investors have decided to divest their interest in fossil fuel companies and, if this were in to increase significantly, this could have a material adverse effect on the price of our securities and our ability to access capital markets. Some financial institutions have been aligning their portfolios to low-carbon and net-zero opportunities, driven by both regulatory and broader stakeholder pressures. A failure to decarbonise our business portfolios in line with investor and lender expectations could have a material adverse effect on our ability to access financing for certain types of projects. This could also adversely affect our partners' ability to finance their portion of costs, either through equity or debt.

Regulatory risks:

- The transition to a low-carbon economy has increased, and is likely to continue to increase the cost of compliance for our assets and/or products. Shell's annual carbon cost exposure is expected to increase over the next decade because of evolving carbon regulations. Governments may set regulatory frameworks in the future that could further restrict our exploration and production of hydrocarbons and introduce controls to limit the use of such products, which could also affect the timing and standards associated with the decommissioning of our exploration assets.
- The lack of net-zero-aligned global and national policies and frameworks increases the uncertainty around how carbon pricing and other regulatory mechanisms will be implemented in the future. This makes it harder to determine the appropriate assumptions to be taken into account in our financial planning and investment decision processes which could impair our ability to evaluate the robustness of our plans and opportunities. Changing net-zero policies and regulations could also lead to impairments of our existing oil and gas assets.

Societal risks, including litigation:

- In some countries, governments, regulators, non-governmental organisations (NGOs) and individuals have filed lawsuits seeking to hold fossil fuel companies liable for costs associated with climate change. If successful, these claims may have wide-ranging consequences, including forcing entities to hand over strategic autonomy in part to regulators, or to divest from hydrocarbon assets and technologies. We have also been subjected to climate activism that has caused disruptions to our operations and such disruptions could happen again in the future. Climate change lawsuits that have been filed against us could have a material adverse effect on our reputation. In the Netherlands, in a case against Shell brought by a group of environmental NGOs and individual claimants (referred to herein as "Milieudefensie"), the Hague District Court in 2021 found that while Shell was not acting unlawfully, Shell had the obligation to reduce the aggregate annual volume of CO_2 emissions of Shell operations and energy-carrying products sold across Scope 1, 2 and 3 by 45% (net) by the end of 2030 relative to its 2019 emissions levels. For Scope 2 and 3, this was a significant best-efforts obligation. Shell appealed that ruling. On November 12, 2024, the Hague Court of Appeal upheld Shell's appeal and dismissed the claim against Shell. In doing so, the Court of Appeal annulled the earlier judgment of the District Court in its entirety with immediate effect. On February 11, 2025, Milieudefensie filed an appeal to the Supreme Court of the Netherlands.
- Societal expectations of businesses are increasing, with a focus on business ethics, quality of products, contribution to society, safety and minimising damage to the environment. There is a focus on the role of the oil and gas sector in the context of climate change and the energy transition. This has negatively affected, and in the future could negatively affect, our brand and reputation, which could limit our ability to deliver our strategy, reduce consumer demand for our products, harm our ability to secure new resources and contracts, and restrict our ability to access capital markets or attract employees.

Physical risks:

- The physical effects of climate change, such as, but not limited to, increases in temperature, sea levels and fluctuations in water availability, could also adversely affect our assets, operations, supply chains, employees and markets.

In summary, rising climate change concerns, the pace at which we decarbonise our operations relative to society and effects of the energy transition pose multiple challenges to our business. These could result in, for example, increased costs, financial penalties, payments of financial damages in the event of losses of lawsuits, cancelled projects and potential impairment of certain assets, and adverse impacts on our supply chains and licence to operate. Individually or collectively, these risks could have a material adverse effect on our earnings, cash flows and financial condition.

How this risk is managed

Overall, we mitigate climate-related risks through our strategy to deliver more value with less emissions. This approach includes:

- reducing the GHG emissions from our operations (Scope 1 and 2) by improving our energy efficiency, deploying renewable electricity, and reducing methane emissions in our assets and projects;
- growing our LNG business while decarbonising our LNG portfolio in two main ways: by growing our portfolio with a lower carbon intensity, and continuing to invest in emissions abatement projects to reduce both CO_2 and methane emissions;
- managing our Integrated Gas and Upstream portfolio to support a balanced energy transition by cutting emissions from oil and gas production. Oil production is increasingly from our deep-water business which, through innovation, produces higher-margin and lower-carbon barrels; and
- focusing our businesses in Downstream and Renewables and Energy Solutions to offer more low-carbon energy solutions, while reducing sales of oil products.

Our investments in low-carbon solutions are subject to financial modelling and stress-testing, due diligence and risk assessments to ensure that our capital is allocated to the most attractive low-carbon projects and opportunities.

We adapt our assets and activities as necessary to enhance our resilience to the physical risks related to climate change. Many of these adaptations are based on our Safety, Environment and Asset Management (SEAM) standards and practices.

We also engage with governments on their climate policies to advocate policies that help establish regulatory frameworks to enable society to reach the goals of the Paris Agreement.

See "Our journey to net zero" on pages 76-108, "Energy Transition Strategy" on pages 77-92, "Renewables and energy solutions" on pages 68-71, Note 32 "Legal proceedings and other contingencies" on pages 308-310 and Note 4 "Climate change and energy transition" on pages 255-265.

3. Country risks

Risk type: ☑ Strategic risk ☑ Operational risk ☑ Conduct and culture risk

We operate in more than 70 countries which have differing degrees of political, legal and fiscal stability. This has exposed, and could expose, us to a wide range of political developments that could result in changes to contractual terms, laws and regulations. We also face various risks from the business and operating environment in Nigeria which could have a material adverse effect on us.

Risk description

Developments in politics, laws and regulations can and do affect our supply chains and operations. Potential impacts, which we have experienced in the past, include: forced divestment of assets; expropriation of property; cancellation or forced renegotiation of contract rights; delay of new projects; additional tariffs and taxes, including windfall taxes (especially during periods of prolonged high oil and gas prices experienced in recent years, such as 2022); restrictions on deductions and retroactive tax claims; antitrust claims; changes to trade compliance regulations; price controls; local content requirements; foreign exchange controls; changes to environmental regulations; changes to regulatory interpretations and enforcement; and changes to disclosure requirements. Many parts of the world are facing economic and fiscal challenges and growing pressure on cost-of-living standards. These issues impact our business as governments, in response to political and social pressures, pursue policies that could have a material adverse effect on our earnings, cash flows and financial condition.

The world is also facing continued geopolitical instability, including the Russia-Ukraine war, which impacts market conditions and our operations. The broader consequences of the ongoing crisis in the Middle East remain uncertain, and a wider escalation could have greater impacts on our operations in the region and beyond.

We also face risks and adverse conditions in our Nigerian operations. These include security incidents affecting the safety of our people, host communities and operations; sabotage and crude theft; ongoing litigation; limited infrastructure; challenges presented by delayed government and partner funding and budget delays; and regional instability created by militant activities. Some of these risks and adverse conditions, such as security issues affecting the safety of our people, sabotage and theft, have occurred in the past and are likely to occur in the future.

Such developments and outcomes have had, and could have in the future, a material adverse effect on our earnings, cash flows and financial condition.

How this risk is managed

- We continually monitor geopolitical developments and societal issues relevant to our interests. Our Corporate Relations function liaises with governments and other external stakeholders in countries where we operate to understand and engage on local policies and to advocate Shell's position on topics relevant to our industry. We are prepared to exit a country if we believe we can no longer operate there in accordance with our standards and applicable law, and we have done so in the past.
- With regard to the crisis in the Middle East, we have made adjustments to our operations in the region to reduce our exposure and we continue to monitor the risk of wider escalation.
- When we participate in joint ventures in Nigeria, we require that they operate in accordance with good industry practice. We seek to proportionally share risks and funding commitments with joint-venture partners. We monitor the security situation, and liaise with host communities, governmental and non-governmental organisations to help promote peaceful and safe operations. As a result of the March 13, 2025 completion of the sale of The Shell Petroleum Development Company, our exposure to these risks arising from onshore activities is expected to reduce. Shell has other businesses in Nigeria that are outside the scope of the announced divestment transaction.

See "Upstream" on pages 38-46.

4. Financial risks

Risk type: ☑ Strategic risk ☑ Operational risk ☐ Conduct and culture risk

We are exposed to treasury risks, including liquidity risk, interest rate risk, foreign exchange risk and credit risk. We are affected by the global macroeconomic environment and the conditions of financial markets. These, and changes to certain demographic factors, also impact our pension assets and liabilities.

Risk description

We are subject to differing economic and financial market conditions around the world. Political or economic instability affects such markets.

We use debt instruments, such as bonds and commercial paper, to raise significant amounts of capital. Should access to debt markets become more challenging, the impact on our liquidity could have a material adverse effect on our operations. For example, some financial institutions have started to limit their exposure to fossil fuel projects. Group financing costs could also be adversely affected by interest rate fluctuations or any credit rating deterioration.

We are exposed to changes in currency values and to exchange controls as a result of our substantial international operations. Our reporting currency is the US dollar, although, to a significant extent, we also hold assets and are exposed to liabilities in other currencies. While we undertake some foreign exchange hedging, we do not do so for all our activities. Even where hedging is in place, it may not function as expected.

We are also exposed to financial losses from credit risk. Some of our counterparties have, from time to time, not met their payment and/or performance obligations under contractual arrangements and this could happen in the future.

We operate a number of defined benefit pension plans with significant associated liabilities. Volatility in capital markets or changes to government policies could affect inflation, interest rates and investment performance, causing significant changes to the funding level of future liabilities. Changes in assumptions for mortality, retirement age or pensionable remuneration at retirement could also cause significant changes to the funding level of future liabilities. In the case of a funding shortfall, we could be required to make substantial cash contributions (depending on the applicable local regulations).

If any of the above risks materialise, they could have a material adverse effect on our earnings, cash flows and financial condition.

How this risk is managed

- We use various financial instruments for managing exposure to foreign exchange and interest rate movements. Our treasury operations are highly centralised and seek to manage credit exposures associated with our substantial cash, foreign exchange and interest rate positions.
- Our portfolio of cash investments is diversified to avoid concentrating risk in any one instrument, country or counterparty. Other than in exceptional cases, the use of external derivative instruments is confined to specialist trading and central treasury organisations that have the appropriate skills, experience, supervision, control and reporting systems.
- We maintain a committed credit facility. Management believes it has access to sufficient debt funding sources (capital markets) and to undrawn committed borrowing facilities to meet foreseeable requirements.
- We have counterparty credit risk policies in place which seek to ensure that products are sold to customers with appropriate creditworthiness. These policies include detailed credit analysis and monitoring of customers against counterparty credit limits. Where appropriate, netting arrangements, credit insurance, prepayments and collateral are used to manage credit risk.
- A pensions forum chaired by the CFO oversees Shell's input to pension strategy, policy and operation. A risk committee supports the forum in reviewing the results of assurance processes with respect to pension risk. Local trustees manage the funded defined benefit pension plans and set the strategic asset allocation for the plans, including the extent to which currency, interest rate and inflation risks are hedged, and the contributions paid are based on independent actuarial valuations that align with applicable local regulations. Pension fund liquidity is managed by holding appropriate liquid assets and maintaining credit facilities. Where appropriate, transactions to transfer pension liabilities to third parties are also considered.

See "Liquidity and capital resources" on pages 24-27 and Note 24 "Retirement benefits" on page 290.

5. Trading risks

Risk type: ☐ Strategic risk ☑ Operational risk ☑ Conduct and culture risk

We are exposed to market, regulatory and conduct risks in our trading operations.

Risk description

Commodity trading is an important component of our business which involves processing, managing and monitoring many transactions across different countries, exposing us to operational risks, market risks including commodity price risk, regulatory and conduct risks. We use physical and financial instruments, including derivatives such as futures and options to hedge market risks. It is not possible to eliminate all market risks we are exposed to. Therefore, our hedging has occasionally not performed as expected and may not do so in the future. We utilise commodity trading to optimise commercial margins from market price movements. Consequently, this activity could expose us to the risk of incurring significant losses if prices develop unfavourably.

Our commodity trading entities are subject to many regulations, including requirements for standards of conduct. Due to the high volume of trades we execute, commodity trading gives rise to the risk of ineffective controls, failure in oversight of trading activities and a risk that traders could deliberately operate outside our internal operating limits. These risks have materialised in the past, and could materialise in the future, resulting in financial losses. The rapidly changing regulatory environment also creates a risk of insufficient, delayed or incorrect implementation of new regulatory requirements or changes to existing regulatory requirements. Violations of such regulatory requirements could expose us and our employees to regulatory fines.

If any of the above risks materialise, it could harm our reputation and licence to operate and have a material adverse effect on our earnings, cash flows and financial condition.

How this risk is managed

- We operate with procedures and policies designed to ensure that trading risks are managed within a prescribed control framework. The framework sets out authorised limits and requirements that trading should only be performed by employees with the appropriate skills and experience. Senior management regularly reviews these authorised trading limits. In addition, a department that is independent from our traders monitors our market risk exposures daily, using techniques such as value-at-risk alongside other risk metrics.
- We maintain a Trading Compliance function managed by a Chief Compliance Officer, as regulated by the UK Financial Conduct Authority, the US Commodities Futures Trading Commission and the Securities Commission of The Bahamas, with adequate resources, including employees and a budget; a comprehensive governance structure, controls, policies and procedures and established reporting lines. Shell's Trading Compliance function has systems for trade surveillance and monitoring communication, in addition to a dedicated conduct and ethics investigation function to assess breaches of non-compliance and thematic trends.
- Employees in Shell's trading organisation receive clear guidance through the Code of Conduct; the organisation's Trading and Supply Compliance Manual, supplemented with specific policies; a specific compliance website; mandatory training modules where completion is monitored; and other relevant training.
- Shell leaders reinforce the importance of managing compliance and conduct risk in the trading organisation through monitoring risk metrics, reporting to compliance risk management and governance committees, setting clear expectations via townhall meetings and other channels, and enforcing consequences for non-compliance.

See "Liquidity and capital resources" on pages 24-27 and "Living by our values" on page 125-126.

6. Health, safety, security and the environment

Risk type: ☐ Strategic risk ☑ Operational risk ☐ Conduct and culture risk

The nature of our operations exposes us, and the communities in which we work, to a wide range of health, safety, security and environment risks.

Risk description

The health, safety, security and environment (HSSE) risks to which we and the communities in which we work are potentially exposed cover a wide spectrum, given the geographical range, operational diversity and technical complexity of our operations. These risks include the effects of safety lapses, natural disasters (including weather events and earthquakes) and pandemic diseases. If a major safety risk materialises, such as an explosion or hydrocarbon leak or spill, which we have experienced in the past, this could result in injuries, loss of life, environmental harm (including biodiversity loss), disruption of business activities, loss or suspension of permits, loss of our licence to operate and loss of our ability to bid on mineral rights.

Social instability, criminality, civil unrest, terrorism, cyber disruption and acts of war have also negatively impacted, and could negatively impact, our operations, our assets, our employees and contractors, and the communities in which we operate. Risks which have materialised in the past include: acts of terrorism; acts of criminality, including maritime criminality and piracy; crude oil theft, illegal oil refining, sabotage of pipelines and militant activities in Nigeria; cyber espionage or disruptive cybersecurity attacks; conflicts and civil unrest; malicious acts carried out by individuals within Shell, such as data exfiltration; and environmental and climate activism (including disruptions by NGOs especially in the USA and north-west Europe). For example, activists have boarded and protested on our vessels, assets and work sites, such as the Penguins floating production and storage and offloading (FPSO) vessel in 2023.

Financial losses and remediation costs from safety and environmental incidents are partially, but not fully, covered by our Group insurance companies (wholly owned subsidiaries) or third-party insurers. Accordingly, in the event of a significant incident, we may have to meet our obligations without access to proceeds from third-party insurers. We have in the past incurred adverse impacts and costs from events, such as Hurricane Ida in 2021.

Our operations are subject to extensive HSSE regulatory requirements that often change and are expected to become more stringent over time, particularly in the areas of environment. Governments could require operators to adjust their future production plans, affecting production and costs. We have incurred, and could incur, significant extra costs in the future because of the need to comply with such requirements. Due to past violations of laws and regulations, and other regulatory obligations, we have incurred significant costs such as fines, penalties, clean-up costs (including decommissioning and restoration costs) and costs associated with third-party claims. We also face the risk of increasing costs from changes in regulations and technical standards relating to decommissioning and restoration.

The above risks have threatened, and can threaten, the safe operation of our assets and the transport of our products. They have harmed, and can harm, the well-being of our people, inflict loss of life and injuries, and disrupt our operational activities. They can also damage the environment and negatively impact our reputation.

If a significant HSSE risk materialises, it could have a material adverse effect on our earnings, cash flows and financial condition.

How this risk is managed

- We follow requirements set out in our SEAM Standards to develop suitable governance structures and mitigation strategies aimed at ensuring that if an HSSE risk materialises, we avoid the worst possible consequences and have ways to remediate any environmental damage. For example, our standards describe the key controls required to ensure safe production and equipment care; and the type of skills and training that are required for relevant employees. We routinely practise our emergency response plans for potential events, such as spills or fire.
- Decommissioning is part of the normal life cycle of every asset or operation. We aim to close and dispose of installations in a safe, efficient, cost effective and environmentally responsible manner while meeting regulatory requirements. This includes restoring the surroundings of these installations in line with relevant legislation, while taking our own environmental standards into account. We seek to reuse, repurpose and recycle materials in decommissioning. Current and non-current decommissioning and other provisions are accounted for on our balance sheet.
- When planning projects, we conduct impact assessments, which help us to identify and assess a project's potential impact on the environment, people and communities. Once identified, we apply a mitigation hierarchy, which is a sequence of actions to manage potential impacts and risks. For example, in a biodiversity context we seek to avoid, minimise, restore and offset.
- Our security risk mitigations follow the principles of "deter, detect, delay and respond". We strengthen the security of our assets, people and operations to reduce our exposure as appropriate, for example, by conducting site security risk assessments, using journey management plans and performing travel risk assessments. We also invest in information risk management capabilities and crisis management and business continuity measures.
- Our insurance companies are adequately capitalised and they may transfer risks to third-party insurers where economical, effective and relevant.

See "Safety" on pages 122-124, "Our approach to sustainability" on pages 127-133, "Corporate" on pages 72-73 and Note 32 "Legal proceedings and other contingencies" on pages 308-310.

7. Information technology and cybersecurity risks

Risk type: ☐ Strategic risk ☑ Operational risk ☑ Conduct and culture risk

We rely heavily on information technology systems in our operations.

Risk description

Shell operates a globally integrated model with a strong focus on digitalising business processes and an increasing dependence on information technology (IT) systems for our core operations, including for the management of personal data. As a result, we are heavily reliant on secure, affordable and resilient IT services provided both in-house and by third parties. Rapid advancements in digital technologies, including artificial intelligence (AI) and quantum computing, are ongoing. If we do not effectively harness these technologies, our business operations may become less efficient, and our product offerings could lose their competitive edge, ultimately hindering our ability to execute our strategy.

Externally, we observe developments impacting our IT and cybersecurity risk profile: a worsening of the cybersecurity threat landscape represented by increasing volumes of sophisticated cybersecurity attacks, technology developments, geopolitical conflicts and increases in regulations across the markets in which Shell operates (such as the EU AI Act). As an organisation we have experienced, and expect to experience in the future, cybersecurity threats such as denial-of-service, ransomware, hacktivism and attacks from nation state actors that target critical energy infrastructure. We have also experienced and could in the future be exposed to non-malicious IT incidents. Across our supply chain, our suppliers, customers and business partners encounter similar cybersecurity threats and incidents. Cybersecurity incidents affecting us or our supply chain have impacted, and could impact, our operations, the security of our assets, the safety of our employees, and have a societal impact on the delivery and maintenance of critical energy infrastructure. Cybersecurity incidents frequently involve personal data breaches causing harm or potential harm to our customers, employees and stakeholders such as investors. In addition, such incidents have disrupted, and could disrupt, operations, cause reputational damage and possibly lead to significant regulatory fines. Cybersecurity incidents could therefore have a material adverse effect on our customers, staff and stakeholders thereby negatively affecting operations and our reputation. Accordingly, cyber security incidents could have a material adverse effect on our earnings, cash flows and financial condition.

How this risk is managed

- Our Information and Digital Technology Standard sets out a structured approach to identify, assess and mitigate IT and cyber security risks. Our global integrated Information Risk Management (IRM) and cyber defence teams are staffed with cyber security professionals that monitor, assure and help defend our global IT and data landscape. As all our employees play a role in protecting our IT systems; we give them training on data protection, regulatory compliance and regularly run cyber security awareness campaigns and simulations on how to respond to cyber-attacks.
- We evaluate emerging digital technologies with our businesses annually to align on their impact and necessary remediation, considering the value and opportunities they present, as well as their incremental risks.
- We continuously track cyber-attacks, threat intelligence, cyber legislation (including the EU AI Act) and vulnerabilities relevant to our IT landscape and have a well-structured incident management and escalation process in place.
- The security of IT services, where operated by external IT companies, is managed through contractual clauses and additionally through formal supplier assurance reports for critical IT services.
- With regard to the protection of personal data, we continue to invest in and maintain a mature and robust global data privacy compliance programme based on our Binding Corporate Rules (BCRs). Further details are explained in risk 8.

See "Other central activities" on pages 74-75.

8. Litigation and regulatory compliance

Risk type: ☐ Strategic risk ☑ Operational risk ☑ Conduct and culture risk

Violations of laws carry fines and could expose us and/or our employees to criminal sanctions and civil suits. We have faced, and could also face, the risk of litigation and disputes worldwide.

Risk description

We must comply with various laws. These include laws related to antitrust, competition, anti-bribery, tax evasion, anti-money laundering, trade compliance (including sanctions) and data privacy.

We have been fined in the past for violations of antitrust and competition laws, including fines by the EU Directorate-General for Competition (DG COMP). We have also, in the past, settled with the US Securities and Exchange Commission regarding violations of the US Foreign Corrupt Practices Act (FCPA). As a result, any future conviction of Shell or any of its operated joint arrangements or associates for violations of EU competition law or the FCPA could result in significantly larger fines and have a material adverse effect on us, including, but not limited to, damage to our reputation, resulting litigation, regulatory actions and criminal sanctions or penalties, and could potentially adversely affect our licence to operate. Violation of antitrust laws is a criminal offence in many countries, and individuals can be imprisoned or fined. In certain circumstances, directors may receive director disqualification orders.

We are also subject to "trade compliance", the umbrella term that we use for various national and international laws designed to regulate the movement of items across national boundaries and restrict or prohibit trade, financial flows and other dealings with certain parties, countries and territories. For example, the EU, the UK and the USA continue to impose comprehensive sanctions on countries and territories such as Syria, North Korea and Crimea and other territories in Eastern Ukraine. The USA continues to have comprehensive sanctions against Iran and Cuba. The EU, the UK and some other nations such as Canada and Australia continue to maintain targeted sanctions against Iran. Countries around the world continue to impose sanctions and trade controls against Russia over its full-scale invasion of Ukraine. Intergovernmental co-operation in this area has increased and there is growing pressure to enforce existing sanctions globally. Abiding by all the laws and regulations on trade compliance is often complex and challenging because of factors such as: the expansion of sanctions; the frequent addition of prohibited parties as other measures; the number of markets in which we operate; the risk of differences in how jurisdictions apply sanctions; and the large number of transactions we process. Shell has voluntarily self-disclosed potential violations of sanctions in the past. Any violation of sanctions could lead to loss of import or export privileges and significant penalties on, or prosecution of, Shell and/or its employees.

The protection and lawful use of personal data is of increasing importance to our licence to operate, given the significant increase in digital solutions provided to Shell's customers and business partners. We process personal data in all our operations. A failure to protect personal data or a failure to use it only for lawful and ethical purposes could result in significant harm to those individuals whose personal data we process. In addition, regulatory action by way of significant fines of up to 4% of Shell Group annual turnover and other enforcement actions such as orders to cease processing personal data may be imposed depending on the law in scope. There is a related risk of harm to our reputation potentially causing the loss of trust of existing and potential customers, stakeholders, regulators and employees. We have notified a number of data privacy regulators of personal data breaches and have had fines issued against us and this could happen in the future.

We also face the risk of litigation and disputes worldwide. For example, Shell (in its capacity as previous owner of SPDC) and various subsidiaries and associates operating in Nigeria are parties to various environmental, non-environmental and contractual disputes brought in the courts of Nigeria, the USA and England. Nederlandse Aardolie Maatschappij B.V. (NAM), a joint venture between Shell and ExxonMobil (50%:50%) has also settled claims for physical damage to property caused by earthquakes induced by historical production from the Groningen gas field, and remains financially responsible insofar as the costs corresponded to NAM's liability. From time to time, social and political factors play a role in unprecedented and unanticipated judicial outcomes that could adversely affect Shell. Non-compliance with policies and regulations could result in regulatory investigations, litigation and, ultimately, sanctions. Certain governments and regulatory bodies have, in Shell's opinion, exceeded their constitutional authority by attempting unilaterally to amend or cancel existing agreements or arrangements; failing to honour existing contractual commitments; and seeking to adjudicate disputes between private litigants. Certain governments have also adopted laws and regulations that could potentially conflict with other countries' laws and regulations, potentially subjecting us to criminal and civil sanctions. It is also now common for persons or corporations allegedly injured by violations of laws to sue for damages.

Violations of laws carry fines, which we have been subject to, and could be subject to in the future, and which could expose us and/or our employees to criminal sanctions, civil suits and other consequences, such as debarment and the revocation of licences. Accordingly, violation of laws, including those noted above, litigation and disputes could harm our reputation and could have a material adverse effect on our earnings, cash flows and financial condition.

How this risk is managed

- Our Legal and Tax functions are organised globally and support our business lines in seeking to ensure compliance with local laws and fiscal regulations and proactively filing claims where warranted to protest unfair practices.
- To help manage antitrust, competition, anti-bribery, tax evasion, anti-money laundering and trade compliance risks with adequate resources we maintain risk-based compliance programmes, a comprehensive governance structure, established reporting lines and policies and procedures, including mandatory due diligence, counterparty-screening and regular risk assessments.
- Our employees receive guidance on the requirements listed in our Ethics and Compliance Manual – including via a dedicated website, and training modules where completion is monitored – which is reinforced by messages from Shell leaders on these requirements. This manual also includes the Protect Shell Policy, which explains Shell's position on managing antitrust risks in engagements with parties external to Shell. In response to fast-moving external antitrust developments and trends, internal guidance is continually being monitored to ensure that it remains relevant.
- With regard to the protection of personal data, we continue to invest in and develop a mature and robust privacy compliance programme based on our Binding Corporate Rules (BCRs). Every Shell company is required to manage personal data in a professional, ethical and lawful manner. We have a robust "privacy by design" process, which includes the monitoring of data privacy regulations, to help ensure that necessary controls are built into our IT systems and solutions to protect personal data.

See "Living by our values" on pages 125-126 and Note 32 "Legal proceedings and other contingencies" on pages 308-310.

9. Reputation and risks to our licence to operate

Risk type: ☑ Strategic risk ☐ Operational risk ☑ Conduct and culture risk

An erosion of our business reputation could have a material adverse effect on our brand, on our ability to secure new hydrocarbon or low-carbon opportunities, to access capital markets, and to attract and retain people, and on our licence to operate.

Risk description

Our reputation is an important asset. Real or perceived failures of governance or regulatory compliance or a perceived lack of understanding of how our operations affect surrounding communities and the environment could harm our reputation.

Societal expectations of companies are high, with a focus on business ethics, quality of products, contribution to society, safety and minimising negative impact on the environment and people, including human rights. There is ongoing focus on the role of oil and gas companies in the context of climate change and the energy transition. NGOs continue to challenge Shell's licence to operate through activities to block or delay projects and by bringing legal actions, diverting our resources and challenging trust. In key markets, we continue to see protests at external events such as our Annual General Meeting. We also continue to receive claims brought by NGOs. Our brand communications have been subject to challenge from advertising regulators in the UK and the Netherlands, following complaints received from members of the public. During prolonged periods of high oil and gas prices, the oil and gas industry has been accused in the past and could in the future be accused of profiteering from higher fuel and electricity prices and therefore impacting living costs. The materialisation of these risks has at times negatively affected, and could affect in the future, our brand, which could limit our ability to deliver our strategy; reduce consumer demand for our branded and non-branded products; harm our ability to secure new resources, partnerships and contracts; and restrict our ability to access capital markets or attract staff.

Individually or collectively, these risks could negatively affect our reputation and licence to operate and, accordingly, could have a material adverse effect on our earnings, cash flows and financial condition.

How this risk is managed

- The Shell General Business Principles (SGBP) set out our responsibilities to shareholders, customers, employees, business partners and society. They set the standards for how we conduct business with integrity, care and respect for people. As part of these principles, we commit to contribute to sustainable development. All Shell employees and contractors, and those at the joint ventures we operate, are expected to behave in line with these principles. We undertake a range of activities to help embed the SGBP and the Code of Conduct throughout the organisation. This includes training and encouraging people to discuss the dilemmas they face in their work. Shell employees, contractors and third parties with whom Shell has a business relationship can report any potential breaches of the Code of Conduct confidentially through several channels, including anonymously through a global helpline operated by an independent provider.
- We continually assess and monitor the external environment for potential risks to our reputation. We engage in dialogue with our key stakeholders, such as investors, industry and trade groups, academics, governments and non-governmental organisations to gain greater insights into societal expectations of the Shell Group. We make efforts to explain to our stakeholders what the Company is doing and why, the validity of our energy transition targets and our progress towards meeting them.
- Human rights are fundamental to Shell's core values of honesty, integrity and respect for people. Respect for human rights is embedded in the Shell General Business Principles and our Code of Conduct.
- We take proactive steps when appropriate through legal means to protect our reputation from unwarranted accusations.

See "Living by our values" on pages 125-126.

10. Our people and culture

Risk type: ☐ Strategic risk ☐ Operational risk ☑ Conduct and culture risk

The successful delivery of our strategy is dependent on our people and on a culture that aligns to our goals and reflects the changes we need to make as part of the energy transition.

Risk description

Shell's culture is defined as the shared values, practices and beliefs of its employees. All these elements need to act in harmony to create our desired culture and ensure successful and sustained performance in line with our strategy. Our culture is influenced by decisions on organisational structure and accountabilities, people and skills, how work is done using processes and systems, and the mindset and behaviours that exist.

As the energy system transforms and we reshape our portfolio, elements of our culture will need to adapt. For example, we will have to develop new skills, and adapt our processes and systems, which, in some areas, will need to be different from those required for our traditional oil and gas businesses. We will have to continually leverage our learner mindset to anticipate and respond to changes in the external market. However, we will also need to retain our core values of honesty, integrity and respect for people to help ensure trust and openness in how we do business and help ensure our employees feel valued and perform at their best.

If we fail to maintain a culture that aligns with our strategy, this could harm our reputation and have a material adverse effect on our earnings, cash flows and financial condition.

How this risk is managed

- The SGBP, Code of Conduct and Ethics and Compliance Manual help everyone at Shell act in line with our values.
- Delivery of our desired outcomes is pursued by leveraging our Performance Culture, i.e., the shared values, practices and beliefs of our employees. This is influenced by decisions on our structure and accountability; people and skills; processes and systems; and mindset and behaviours. Our mindset and behaviours emphasise psychological safety.
- We have ambitions around diversity, equity and inclusion and monitor these on a regular basis. We also continually assess our culture and employee engagement through tools such as the annual Shell People Survey.
- People development remains a priority for our organisation. We proactively identify skill and capability gaps for traditional and emerging businesses; offer training to address these gaps; and if needed recruit talent externally to add to the skills and experiences of our workforce. To enable our leaders to lead this change, we support them through targeted interventions including leadership development and coaching.

See "Powering lives (People)" on pages 115-119 and "Living by our values" on pages 125-126.

Investors should also consider the following, which could limit shareholder remedies.

11. Other (generally applicable to an investment in securities)

The Company's Articles of Association determine the jurisdiction for shareholder disputes. This could limit shareholder remedies.

Risk description

Our Articles of Association generally require that all disputes between our shareholders in such capacity and the Company or our subsidiaries (or our Directors or former Directors), or between the Company and our Directors or former Directors, be exclusively resolved by arbitration in London, the United Kingdom. Our Articles of Association also provide that, if this provision were to be determined invalid or unenforceable for any reason, the dispute could only be brought before the courts of England and Wales. Accordingly, the ability of shareholders to obtain monetary or other relief, including in respect of securities law claims, could be determined in accordance with these provisions.

Principal decisions and stakeholders

Section 172(1) statement

The Board of Directors, having considered the matters set out in section 172(1)(a) to (f) of the Companies Act 2006 (S172), confirm in good faith that the Directors have acted in a way that they consider would most likely promote the success of the Company for the benefit of its members as a whole.

This S172 statement discloses how the Directors took into account the interests of Shell's wider stakeholders in the Board's decision-making process. The level of information disclosed is consistent with the size and the complexity of Shell's businesses and focuses on matters of strategic importance to Shell.

General confirmation of directors' duties

Shell's Board has a clear and robust corporate governance framework, which sets out certain financial and strategic thresholds which need to be triggered for matters to be considered and approved by the Board. The corporate governance framework covers matters reserved for the Board, delegations to its committees and delegations to the Executive Directors. The Manual of Authority sets out the delegation and approval process across the broader business.

All Directors, upon joining Shell, have participated in induction training and are provided with ongoing guidance covering the regulatory requirements of their role, including, but not limited to, S172.

When making decisions, each Director ensures that they act in the way they consider, in good faith, would most likely promote Shell's success for the benefit of its members as a whole, and in doing so has regard (among other matters) to the issues set out below.

S172 Factor	Key examples
(a) The likely consequences of any decision in the long term	The Directors understand the business and the evolving and challenging environment in which we operate, including the challenges of the global energy transition. In 2024, the Board continued with its oversight of Shell's strategy, including with respect to the Energy Transition Strategy 2024 (ETS24). The Board focused on financial strength and discipline with a dynamic approach to our portfolio of assets, with consideration given to key stakeholders and the likely long-term impact of any decision. During the year, the Board reiterated its commitment to Shell's energy transition strategy and reflected on the challenges to be faced by Shell in the next phase of this strategy, given the shifting macroeconomic and geopolitical context. We put customers at the centre of our strategy, innovating the products customers need as they seek to decarbonise. See pages 10-13 for more on our strategy. The Directors recognise there are significant complexities in relation to Board decision-making, given differing societal and stakeholder views about our operations and the intricacies associated with the evolving energy transition. Accordingly, the Directors have considered S172 and made their decisions in good faith relating to Shell's strategy having regard for the long-term sustainable success of the Company.
(b) Interests of employees	Shell employees are fundamental and core to our business model and the safe delivery of our strategic ambitions. The success of our business depends on attracting, retaining, developing and motivating talented employees. The Directors consider and assess the implications of relevant decisions on employees and the wider workforce. The Directors seek to ensure that Shell remains a responsible employer, including with respect to pay and benefits, fairness (including gender pay gap reporting, see pages 118), promotion of equal opportunity (information on Shell's diversity, equity and inclusion is detailed on page 117-119), health and safety issues, and the workplace environment. The Directors regularly engage with employees and the wider workforce (a summary of engagements is provided on pages 167-168), as well as consider the annual employee survey, the Shell People Survey (the most recent is detailed on page 117). The Directors recognise that our pensioners also remain important stakeholders.
(c) Fostering the company's business relationships with suppliers, customers and others	To deliver our strategy we require strong, mutually beneficial relationships with suppliers, customers, governments, national oil companies and joint-venture partners. Shell seeks to promote and apply certain general principles in such relationships. The Board continues to review Shell's approach to suppliers, which is set out in the Shell Supplier Principles. In 2024, the Board reviewed steps taken with suppliers and supply chains to combat modern slavery and human trafficking. More detail on Shell's Modern Slavery Act Statement is set out on page 217. The businesses continually assess the priorities related to customers and those with whom we do business, with the Board engaging with the businesses on these topics, for example, within the context of business strategy updates and investment proposals. The Directors also receive updates on a variety of topics that indicate how these stakeholders have been engaged. These updates include information provided by the Projects & Technology function on suppliers and joint-venture partners, with respect to items such as project updates and supplier contract management. Businesses also provide information, as relevant, on customers and joint-venture partners in relation to business strategies, projects and investment or divestment proposals. The CEO provides a comprehensive update to the Board on material business and external developments, including external engagements, at each main Board meeting.
(d) Impact of operations on the community and environment	It is integral to our decision-making that we reflect on our impact on the community and the environment. To help it make decisions, the Board receives information on various topics including, for example, the net carbon intensity target, proposals to invest or divest, and business strategy reviews. The information also goes into Group-level overviews, such as updates on safety and environment performance, reports from the Chief Ethics and Compliance Officer, and reports from the Chief Internal Auditor. In 2024, the Board held meetings with Shell's in-country stakeholders, including a staff engagement during the Board's off-site in the Netherlands, which also included dialogue with Mark Rutte, who was Dutch prime minister at the time. Engaging with staff enabled the Board to maintain and strengthen its connection with Shell's businesses, workforce and other local stakeholders. It also provided the opportunity to gain a deeper understanding of Shell's reputation, role and contribution within the communities where we operate. See "Understanding and engaging with our stakeholders" on pages 165-166, and the Board committee reports.
(e) Maintaining a reputation for high standards of business conduct	Shell aims to meet the world's growing need for more and cleaner energy solutions in economically, environmentally and socially responsible ways. The Board periodically reviews and approves clear frameworks – such as the Shell General Business Principles, Shell's Code of Conduct, specific Ethics and Compliance manuals, the Ethical Decision-Making Framework and the Modern Slavery Act Statement – to ensure that high standards are maintained in Shell businesses and in Shell's business relationships. Complemented by the ways the Board is informed and monitors ethics and compliance with relevant governance standards, this helps to ensure that Board decisions and the actions of Shell companies both promote and maintain high standards of business conduct.
(f) Acting fairly between members of the company	After weighing up all relevant factors, the Directors consider which course of action best enables delivery of our strategy in the long-term interests of the Company, taking into consideration the effect on stakeholders. In doing so, our Directors act fairly as between the Company's members but are not required to balance the Company's interests with those of other stakeholders.

Culture

The Board plays an important role in establishing, assessing and monitoring our desired culture and how it is embedded in our values, attitudes and behaviours, including in our activities and stakeholder relationships. For example, the Board has established honesty, integrity and respect for people as Shell's core values. (For further information see "Living by our values" on pages 125-126). The Shell General Business Principles and Code of Conduct help everyone at Shell to act in line with these values and comply with relevant laws and regulations. The Shell Commitment and Policy on Health, Safety, Security, Environment & Social Performance applies across Shell and is designed to help protect people and the environment. (For further information, see "Safety" on pages 122-124).

To achieve our strategic goals, we need to adapt our mindset and behaviours as we navigate the increasing complexity of the world around us. At Shell, we seek to have a culture that encourages the attitudes and behaviours we believe will help us succeed:

- We deliver results: We own our performance, to power progress together. We deeply understand our business, we deliver the basics brilliantly, simplifying and improving every day. We are disciplined in meeting our promises even when the unexpected happens. Our values and care enable our competitive performance.
- We learn and adapt: we have the courage to raise the bar. With our Learner Mindset we navigate uncertainty and adapt in a rapidly changing world. We value and grow our expertise. We learn from setbacks to accelerate progress, knowing we have each other's back.
- We're one team: We win together, driven by our common outcomes. We listen to different views to make better data-based decisions and then we commit. We are the partner of choice by working together with our customers, communities and countries to consistently deliver our promises.
- We care: We care about each other, our work, our values, goal zero, ethics and DE&I. This builds trust, sets us apart and is key to our performance. Because we care, we are honest with each other to grow to be our best and deliver commercial outcomes.

The Board considers the Shell People Survey to be an important tool for measuring employee engagement, motivation, affiliation, and commitment to Shell. With consistently high response rates, it provides valuable insights into employee views. It also helps the Board understand how the survey's outcomes are being used to strengthen Shell culture and values.

Stakeholder engagement (including employee engagement)

The Board recognises the important role Shell has in many societies and is deeply committed to public collaboration and stakeholder engagement. The Board strongly believes that Shell will only succeed by working together with customers, governments, business partners, investors, and other stakeholders.

We continue to build on our long track record of working with others, such as investors, industry and trade groups, universities, governments, non-governmental organisations (NGOs) and, in some appropriate instances, our competitors through our joint-venture operations or industry bodies. We believe that working together and sharing knowledge and experience with others offers us greater insight into our business. We also appreciate our long-term relationships with our investors and acknowledge the positive impact of ongoing engagement and dialogue.

The guidance on preparing information, proposals or discussion items for the Board asks for these materials to include considerations of the views, interests, and concerns of stakeholders and how management addressed them. This helps to strengthen the Board's knowledge of how the broader business undertakes significant levels of stakeholder engagement. The Terms of Reference for our Sustainability Committee (SUSCO) include, within the committee's remit: review and consider external stakeholder perspectives on sustainability issues of relevance to the Group's business, and review selected sustainability topics and matters of public concern, such as biodiversity, water and human rights.

The Board also engaged with certain stakeholders directly, to understand their views. The Board draws upon Shell's substantial in-house expertise by periodically receiving input from economics and policy experts on key political and economic themes, with some updates being presented to the Board each quarter.

See "Understanding and engaging with our stakeholders" on pages 165-166.

Information on how the Directors have engaged with employees can be found on pages 167-168 and in the "Powering lives" section on page 117. The tables below include examples of how Directors have considered the interests of Shell employees and the resulting outcomes.

Principal decisions

In this section, we outline some of the principal decisions made by the Board over the year. We explain how the Directors have engaged with or in relation to key stakeholder groups and how stakeholder interests were considered in decision-making.

To remain concise, we have categorised our key stakeholders into seven groups. Where appropriate, each group is considered to include both current and potential stakeholders. The groups are:

- investor community;
- employees/workforce/pensioners;
- our customers;
- regulators/governments;
- NGOs/civil society stakeholders/academia/think tanks;
- communities; and
- suppliers/strategic partners.

Board decisions

We define principal decisions taken by the Board as decisions taken in 2024 that are of a strategic nature and significant to any of our key stakeholder groups. As outlined in the UK Financial Reporting Council (FRC) Guidance on the Strategic Report, we include decisions related to capital allocation and dividend policy.

How were stakeholders considered

We describe how regard was given to the likely long-term consequences of the decision, including how stakeholders were considered during the decision-making process.

What was the outcome

We describe which accommodations or mitigations were made, if any, and how Directors have considered different interests, and what factors they took into account.

Strategic updates

Strategy
As part of the Board's continuing oversight of Shell's strategy, the Directors receive and discuss regular strategy updates including feedback from stakeholder engagements with management, investors, the media, climate activists and internal staff.

How stakeholders were considered
Energy Transition Progress and Strategy
In March 2024, the Board approved a report (the Shell Energy Transition Strategy 2024 (ETS24)) building on ETS21 which was created with the aim of helping investors and society obtain a better understanding of how Shell is addressing the risks and opportunities of the energy transition. ETS24 was put to shareholders for an advisory vote at the 2024 Annual General Meeting (AGM), with 78.03% of shareholders that voted supporting the resolution.

Both before and after the 2024 AGM, the Chair, CEO and some members of the Executive Committee engaged with key stakeholders to understand their views and opinions on Shell's progress on its ETS. They engaged with our largest shareholders and offered further opportunities to discuss Shell's progress on its ETS and to understand the reasons behind various voting decisions. The Chair also engaged directly with our large institutional shareholders during his investor roadshow in September 2024.

What was the outcome
Energy Transition Progress and Strategy
There are differing views about Shell's ambition, targets and strategy to become a net-zero emissions energy business by 2050. Shell continued its dialogue with its stakeholders on the progress of its ETS, and the Board recognises the different views of each Shell stakeholder group. The Board continues to listen, learn and adapt as Shell delivers against its strategy, with consideration given to the long-term success of the organisation, as well as the interests of Shell's shareholders, customers and wider society. More information on the outcome of discussions following the 2024 shareholder advisory vote can be found on page 165.

Discussions with stakeholders and feedback from those engagements were integral to the preparation of ETS24, and the Board's approval of this strategy. In this Annual Report, we strive to provide information on Shell's progress on its energy transition strategy, along with our ambitions, targets and the clarifications our stakeholders are seeking.

Insights into Shell's operations in the Netherlands
In June 2024, the Board held its annual off-site in-person over the course of three days in the Netherlands, providing for a number of engaging and interactive events with both internal and external stakeholders. A summary of the Board off-site is provided on page 161. The key focus areas related to Shell's strategy and presence in the Netherlands.

Staff engagements
As part of the Board off-site, the Board and Executive Committee had the opportunity to engage and speak directly with staff about their experience within the Shell businesses in the Netherlands. For further information on the engagement with our workforce see "Board activities" and "Workforce engagement" on page 162 and pages 167-168.

Board off-site
Through engagements with multiple stakeholders, the Board:
- experienced the breadth of businesses that Shell has in the Netherlands;
- met with a diverse cross-section of staff and leaders in the Netherlands and considered their feedback from the engagements that took place;
- built awareness of the local context and risks;
- considered geopolitical contexts in connection with the energy transition;
- considered key external perspectives connected to Shell's energy transition ambitions, targets and strategy; and
- discussed core elements of our strategy with key customers, government officials and other stakeholders.

Financial strength, cash allocation including shareholder distributions

The Board considered cash flow, the macro environment and business performance in 2024 against 2023. The Board also considered management's view of the outlook for the Group's performance, and reviewed the financial framework with specific focus on shareholder distributions. Directors approved several proposals with the aim of delivering value to shareholders and increasing shareholder distributions through a combination of progressive dividends and share buybacks.

How stakeholders were considered
A number of considerations underpinned each proposal, with proposals discussed and reviewed at certain points throughout the year. These considerations took account of the macro environment, robust business performance and outlook, the strength of the balance sheet, capital discipline, feedback from advisers and feedback from other stakeholders.

What was the outcome
In relation to the decisions to increase distributions to shareholders, the Board and management considered the views of stakeholders, the strength of the Company's balance sheet and the need to continue to invest in the future of energy. The form, and timing, of distributions to shareholders were announced throughout 2024, alongside the publication of the quarterly results.

During 2024, the Board approved share buybacks of $14 billion, and a further $3.5 billion of share buybacks was announced on January 30, 2025.

Approval of Shell's detailed Operating Plan 2025-2027 (OP24)

The approval of OP24 followed an in-depth review by the Board of proposals on capital allocation, capital investment outlook, competitive outlook, operating expenses, return on average capital employed, shareholder distributions and alignment with net carbon intensity targets. In the December 2024 Board meeting, OP24 was approved.

How stakeholders were considered
OP24 discussions included ensuring credible metrics, scenario testing and understanding the risks and levers to enable delivery of the near- and long-term targets which were set out at CMD23. Meeting commitments made to investors is critical to building trust and confidence with our external stakeholders. The Directors also considered the financial strength of the organisation, the macroeconomic environment, and the continued heightened geopolitical risks as a result of the Russia-Ukraine war and conflict in the Middle East. The Directors and Executive Committee balanced the priorities in the financial framework, including capital and operating expenditure commitments towards the energy transition alongside increased shareholder distributions, maintaining balance sheet strength, aspired credit ratings and greenhouse gas target tracking. The plan was discussed extensively and reviewed thoroughly. Responses from investors and discussions with equity and debt market analysts were also presented to the Board for consideration. The Board asked management questions about the flexibility of OP24 in the event of various energy transition scenarios.

What was the outcome
Following extensive review and discussion, the overall outcome of this decision was an Operating Plan that the Board believes is robust against various scenarios and features strong optionality if needed. In particular, the Board assured itself that, as these decisions were taken, OP24 flexibly demonstrated pathways to enable delivery of Shell's near- and long-term targets.

We recognise that stakeholder opinions differ on the approach towards the energy transition. OP24 is based on society's demand for products and services. OP24 also supports Shell in maintaining a reputation for high standards of business conduct and health, safety, security and environment issues. It maintains the approach to employee remuneration and benefits to pensioners. OP24 also seeks to reward our investors with returns, a strong balance sheet and capital discipline, and to maintain the long-term financial strength of the Company to invest in more and cleaner energy and meet the current and future needs of society.

Investing in new business, acquisitions and divestments, and closures

Over the course of the year, the Board considered and approved new opportunities and projects and proposed divestments or closures.

How stakeholders were considered

The Board considered the impact of decisions related to new business opportunities and divesting from existing opportunities in the context of sustainability, supply, regulations and carbon intensity. Critically, the Board reviewed the alignment of various proposals with Shell's strategy. Particular focus was given to potential benefits of certain divestments, including their potential to: create returns for shareholders; further strengthen the balance sheet; de-risk future cash flow; and avoid significant additional capital investment. As part of the discussions, the Board considered the strategic drivers for the intended divestments, including the Scope 1 and 2 emissions of each asset, anticipated regulatory changes expected to lead to value erosion, and any value opportunities afforded by the macro environment.

As part of each proposal, the respective business unit will undertake effective due diligence on prospective purchasers from a financial, reputational, as well as operating philosophy standpoint to ensure future obligations are met, or suitable mitigating measures are in place, to protect Shell and its people.

Within each divestment proposal, the Board considered if the Company was being a responsible seller of its assets and if the purchasers have the capability to manage our assets/people appropriately. Staff matters are explicitly considered during negotiations and the due diligence process for acquisitions and divestments. Comprehensive engagement plans are developed as appropriate in parallel to the negotiations.

As part of Shell's intercompany approval process, the following investments or divestments were discussed and supported by the Board.

Investment in Ruwais LNG
The investment in the Ruwais LNG project in Abu Dhabi taking a 10% equity interest.

Atapu Consortium final investment decision on Atapu-2 project in Brazil
The Atapu Consortium's investment in the Atapu-2 project, a second floating production, storage and offloading (FPSO) vessel to be deployed at the Atapu field. Further information on this can be found on page 39.

Investment in Bonga North, Nigeria
Investment in Bonga North, a deep-water project off the coast of Nigeria.

Project Manatee final investment decision
Investment in an undeveloped gas field in the East Coast Marine Area (ECMA) in Trinidad and Tobago.

Expansion of the CSPC petrochemical facility, China
Expansion of the petrochemicals facility owned by CSPC in Daya Bay, Huizhou, China.

Creation of joint venture for operations in the North Sea
The creation of a joint venture between Equinor UK Ltd, a subsidiary of Equinor ASA, and Shell U.K. Limited, a subsidiary of Shell plc which combines their UK offshore oil and gas assets and expertise.

What was the outcome

Investment in Ruwais LNG project in Abu Dhabi
The Board approved the investment in the Abu Dhabi National Oil Company's (ADNOC) Ruwais liquefied natural gas (LNG) project in Abu Dhabi through a 10% participating interest. In Board discussions the Board considered, among other things, the position of minority shareholders, the relationship between Shell and ADNOC and the strategic fit for the project in delivering low carbon LNG.

Atapu Consortium final investment decision on Atapu-2 Project in Brazil's Pre-Salt
The Board approved the progression of the Atapu-2 project enabling the consortium to take a final investment decision. In Board discussions, the Board considered the strategic alignment and status of the project noting suppliers and supply chain constraints, contractor capacity and the position of the consortium partners.

Bonga North Investment
The Board approved the investment in Bonga North, a deep-water project off the coast of Nigeria. In Board discussions, the Board considered among other things, the alignment of the opportunity with the strategy and the in-country stakeholders.

Project Manatee final investment decision
The Board approved investment in an undeveloped gas field in the East Coast Marine Area (ECMA) in Trinidad and Tobago. During Board discussions, the Board considered relations with the government in Trinidad and Tobago, customers, the carbon competitiveness of the project and geopolitical risk in the region and noted the project's alignment with the strategy.

Expansion of the CSPC petrochemical facility, China
The Board approved the proposed expansion of the CSPC petrochemicals facility enabling CSPC to take a final investment decision to build a third ethylene cracker and a new facility which will produce high-performance specialty chemicals. In Board discussions the Board noted the relations with government and the customer needs and the alignment of the investment with the strategic intent.

Creation of joint venture with Equinor for operations in the North Sea
The Board approved the execution of the commercial agreements with Equinor to progress the proposed joint venture. During Board discussions, the Board noted that the incorporated joint venture (JV) will be set up to sustain UK oil and gas production and security of energy supply in the UK and considered the impact on staff, communities, government relations and other stakeholders.

Strategic Report signed on behalf of the Board

/s/ Sean Ashley

Sean Ashley
Company Secretary
March 25, 2025

Governance

Directors' Report

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Introduction from the Chair

Dear Shareholders

I am pleased to introduce this governance section of our 2024 Annual Report and Accounts. As a Board, we engage with Shell's purpose, strategy, vision, values and culture to fully understand how these all work together.

In 2024, I and my fellow Board members were especially impressed by how Shell's Executive Committee has focused on performance, discipline and simplification to transform Shell into a more competitive energy business.

We saw how this focus is rewarding shareholders and creating a simpler organisation. At the same time, Shell continues to provide its customers with the secure and affordable energy they need to power their lives and businesses today and through the transition to low-carbon energy.

In line with Shell's transformation, on March 4, 2025, we announced further changes to Shell's Executive Committee (EC) and leadership structure to support its strategy to deliver more value with less emissions. These changes reflected Shell's three main areas of business value – Integrated Gas, Upstream, and Downstream, Renewables and Energy Solutions – and they follow the creation of a new Trading and Supply position in the EC.

Like the EC, the Board, in 2024, also took some important steps to drive more focus and simplification in the ways we work. For example, we have further integrated carbon management considerations at Board level; simplified the allocation of work between the Board, Board Committees and the EC; dedicated time to reflect on our dynamics and we will continue to look at how we can simplify our governance processes.

Shell has a strategy that is transforming its business, and a vision [A] to become the world's leading integrated energy company delivering impact at scale, connecting energy and people, matching supply to demand. The Board believes that this is the right approach for our customers, investors and wider society.

Energy Transition Strategy 2024

In March 2024, Shell published its Energy Transition Strategy 2024 (ETS24) which was endorsed by shareholders at our Annual General Meeting (AGM) in May 2024. The Board was pleased to see this support for our Energy Transition Strategy which reduces emissions from our operations and our products as we work to become a net-zero emissions energy business by 2050.

Time was allocated to ETS24 at the annual Board off-site in June 2024, and the Board routinely discussed the energy transition at Board meetings throughout 2024.

[A] A vision statement defines the desired future state of a company rather than a series of firm, binding commitments.

Board leadership and Shell's purpose

Shell's purpose is set out in the early pages of this report. Throughout this Governance report we focus on how Shell's governance operates in practice, and why we believe this is the best approach for us.

The Governance report is structured around the key themes of the 2018 UK Corporate Governance Code (the Code). Our narrative seeks to explain how governance supports and protects Shell and our stakeholders.

Shell applies the principles and the spirit of the Code. There is one instance where we adopt an approach slightly different from that suggested by one of the Code's provisions, namely Provision 5 which concerns workforce engagement. We explain this on page 170. We consider our governance processes are appropriate, given the specific circumstances and range of factors particular to Shell, such as its global nature, size, complexity and history.

Our AGM continues to reach a wider audience through its hybrid format, allowing our global shareholder base to participate in proceedings. However, disruptive and unsafe behaviour from some attendees requires us to continually assess how we conduct this meeting.

Information on how the Board discharges its duty in relation to key stakeholder interests, including those of our workforce, and an explanation of how it considered these when making principal decisions are set out on pages 145-148. On pages 161-164, we provide information about our Board activities and highlight which stakeholders we considered.

I was delighted to visit a range of Shell sites with a number of Board members, including in Brazil, the Netherlands, Oman and Qatar. I also went to China where I delivered a lecture at Tsinghua University School of Economics and Management, and presented awards to the finalists of the Shell Eco-marathon.

Our workforce engagement methods can be found on pages 167-168. We continue to believe that constructive relationships built on mutual respect and transparency help Shell attract and retain employees, while supporting greater productivity and operational safety and efficiency. Helping ensure that employee voices are heard on relevant matters in the boardroom in practical ways is key to understanding the broader impact of business decisions, including with respect to organisational culture.

The Board recognises the importance of culture in delivering Shell's purpose and strategy. In December 2024, the Board received updates on the Shell People Survey, an annual employee survey, and the conduct and culture within the organisation, along with the associated risk areas (see "Risk management and risk factors" on pages 134-144 for more information on this risk).

In January 2025, the management team shared with us how it is seeking to evolve the Shell culture, placing people at the heart of transforming Shell's performance. Shell's culture reflects the long-held values of the organisation – honesty, integrity and respect for people. These underpin all the work we do and are embedded in our strategy and purpose. The Board will continue to increase its focus on Shell's culture to make sure it continues to align with the business strategy.

Division of responsibilities

More information on how the Board and Board committees support business operations is provided on pages 159-160. In 2024, the Terms of Reference for the Board committees were reviewed and updated. The full Terms of Reference for each committee, and the Matters Reserved for the Board are provided on our website. Commitments of Directors are reviewed to help ensure they have sufficient time to fulfil their duties.

Composition, succession and evaluation

There were no changes to the Board in 2024. In 2024, Cyrus Taraporevala became a member of the Remuneration Committee. He will succeed Neil Carson as Chair of the Remuneration Committee following the 2025 AGM.

The 2024 Board evaluation process comprised a Board Dynamics review, as well as an internally facilitated questionnaire-based Board and Committee evaluation. More on this can be found on pages 169-170.

Audit, risk management and internal control

Throughout the year, the Audit and Risk Committee (ARC) assisted the Board in implementing sound systems of risk management and internal control, oversight of Shell's financial reporting, and consideration of ethics and compliance matters. A variety of standing matters and more specific topics are discussed by the ARC throughout the year and more on this can be found on pages 176-187.

Looking ahead

Our Capital Markets Day 2025 outlines how we intend to accelerate our strategy to deliver more value with less emissions.

We are cognisant of and accept, that not all our stakeholders will be fully supportive of all the decisions that we take, and some stakeholders will choose different methods of communicating their views and their concerns. We will continue to engage with stakeholders, and we will continue to have the humility to listen, learn and adapt as we focus and frame our strategy for the long-term success of the Company.

As always, as we work through the energy transition, there is more that needs to be done. Your Board is confident that the update presented at Capital Markets Day 2025 will help Shell to deliver on its promises to shareholders.

Sir Andrew Mackenzie
Chair
March 25, 2025

The Board of Shell plc

Sir Andrew Mackenzie
Chair

Board Committee membership:
NOMCO (Chair)

British, 68. Appointed October 1, 2020; Chair from May 18, 2021.

Career
Prior to joining Shell, Sir Andrew was CEO of BHP from 2013 to 2019 after joining BHP in 2008. As BHP CEO, he simplified and strengthened the business, and made it the first miner to pledge to tackle emissions caused when customers use its products. From 2004 to 2007, he held various executive positions at Rio Tinto, including Head of Industrial Minerals and Diamonds. Prior to this, Sir Andrew spent 22 years with bp, during which he worked across most business streams and functions – principally in exploration and production, and petrochemicals – and held senior and executive positions, including as Chief Reservoir Engineer and Chief Technology Officer. From 2005 to 2013, Sir Andrew served as a Non-executive Director of Centrica. He has also served on many not-for-profit boards, including public policy think tanks in the UK and Australia.

Relevant skills and experience
Sir Andrew has more than 30 years' experience in the mining and energy industries. In 2014, he was made a Fellow of the Royal Society, a Fellowship of many of the world's most eminent scientists. Sir Andrew has applied his deep understanding of the energy business and geopolitical outlook to create public-private partnerships and advise governments around the world. He continues to advocate for sustainable action on climate change, including access to affordable energy. His expertise is helping Shell navigate the energy transition. Sir Andrew also champions gender balance, the rights of Indigenous Peoples, and the power of large companies to make a positive contribution to society.

External appointments
- Chair of UK Research and Innovation (UKRI)

Dick Boer
Deputy Chair and Senior Independent Director

Board Committee membership:
ARC | NOMCO | REMCO

Dutch, 67. Appointed May 20, 2020; Deputy Chair and Senior Independent Director from May 23, 2023.

Career
Dick was President and CEO of Ahold Delhaize from 2016 to 2018. Prior to the merger between Ahold and Delhaize, he served as President and CEO of Royal Ahold from 2011 to 2016. From 2006 to 2011, he was a member of the Executive Board of Ahold and served as Chief Operating Officer of Ahold Europe. Dick joined Ahold in 1998 as CEO of Ahold Czech Republic and was appointed President and CEO of Albert Heijn in 2000. In 2003, he also became President and CEO of Ahold's Dutch businesses. Before joining Ahold, Dick spent more than 17 years in various retail positions, for SHV Holdings N.V. in the Netherlands and abroad, and for Unigro N.V. Dick has chaired the Remuneration Committee of Nestlé since April 2024.

Relevant skills and experience
Dick has a deep understanding of brands and consumers, and extensive knowledge of the US and European markets, from his time leading one of the world's largest food retail groups. He has considerable experience at the forefront of retailing and customer service, which extended in more recent years to e-commerce and the digital arena. This experience is most timely as Shell focuses on the growth of our marketing activities and increasing consumer choices in energy products. Dick brings sound business judgement and a proven track record in strategic delivery to Shell, evidenced by the combination of Ahold and Delhaize. He is also passionate about sustainability and is well informed about the importance of the various stakeholder interests in this area.

External appointments
- Non-executive Director of Nestlé and SHV Holdings.
- Chair of the Supervisory Board of Just Eat Takeaway.com

Wael Sawan
Chief Executive Officer

Board Committee membership:
N/A

Lebanese and Canadian, 50. Appointed January 1, 2023.

Career
Wael began his career at Shell in 1997 as an engineer with Petroleum Development Oman. By the mid-2000s, Wael was Managing Director and Chairman of Shell Qatar, where he oversaw Shell's business in Qatar, including its LNG and GTL divisions. Wael then became Executive Vice President of Deep Water, where he was responsible for driving its transformation into a leading business for Shell. Prior to being appointed CEO at the start of 2023, Wael joined the Executive Committee in 2019 as Upstream Director and in 2021, he became Shell's Director of Integrated Gas, and Renewables and Energy Solutions. Wael was a trustee of Shell Foundation from 2019 to the end of 2022.

Relevant skills and experience
Wael holds an MEng from McGill University in Montreal, Canada, and an MBA from Harvard Business School. During his Shell career, spanning more than 25 years, he has worked in Europe, Africa, Asia and the Americas, and has held roles across all of Shell's businesses. He has led several major commercial transactions, including mergers, acquisitions and divestments, as well as new business development projects. Wael is an exceptional leader, with all the qualities needed to drive Shell safely and profitably through its next phase of transition and growth. His track record of commercial, operational and transformational success reflects not only his broad, deep experience and understanding of Shell and the energy sector, but also his strategic clarity. He combines these qualities with a passion for people, which enables him to get the best from those around him.

External appointments
- No external appointments

Sinead Gorman
Chief Financial Officer

Board Committee membership:
N/A

British, 47. Appointed April 1, 2022.

Career
Sinead joined Shell in 1999 and has held key leadership roles in Finance. She started her Shell career in the Shell International Trading and Shipping Company based in London, UK, and then moved to the Coral Energy joint venture, in Houston, Texas, USA. Sinead worked in Mergers and Acquisitions and Treasury, based in the Netherlands, before moving back to Houston as Vice President Finance for Shales. Prior to her appointment as CFO, Sinead held the positions of Executive Vice President Finance for Upstream; Projects & Technology, as well as Integrated Gas and New Energies (now Renewables and Energy Solutions).

Relevant skills and experience
Sinead has an MEng from the University of Oxford, and an MSc in Finance from London Business School.

Sinead has more than two decades' experience of working for Shell and has held regional and global finance leadership roles across Europe and the USA. She has built a deep understanding of finance across the industry, spanning a wide range of businesses, and possesses a breadth of experience in trading, new business development and capital projects.

Highly regarded for her commercial abilities and external focus, Sinead has a strong track record in cost leadership, principle-based decision-making and detailed capital stewardship.

External appointments
- No external appointments

Neil Carson OBE
Independent Non-executive Director

Board Committee membership:
REMCO (Chair) | SUSCO

British, 67. Appointed June 1, 2019.

Career
Neil is a former FTSE 100 CEO. He joined Johnson Matthey in 1980 where he held several senior management positions in the UK and the USA, before being appointed CEO in 2004. Since retiring from Johnson Matthey in 2014, Neil has focused on his non-executive roles. He was Chair of TT Electronics plc from 2015 until May 2020.

Relevant skills and experience
Neil has an engineering degree, considerable operational experience and a strong understanding of capital-intensive businesses. He has a broad industrial outlook and a thorough commercial approach combined with a practical perspective on businesses. His intuitive international point of view helps drive value in complex environments. Neil was awarded an OBE for services to the chemical industry in 2016.

Neil uses his experience to bring fresh insight and industry understanding to Board discussions.

External appointments
- Non-executive Chair of Oxford Instruments plc

Ann Godbehere
Independent Non-executive Director

Board Committee membership:
ARC (Chair) | NOMCO

Canadian and British, 69. Appointed May 23, 2018.

Career
Ann started her career with Sun Life of Canada in 1976 in Montreal, Canada. She joined M&G Group in 1981, where she served as Senior Vice President and Controller for both life and health, and property and casualty businesses throughout North America. She joined Swiss Re in 1996, after it acquired the M&G Group and served as Chief Financial Officer from 2003 to 2007. From 2008 to 2009, she was interim CFO and an Executive Director of Northern Rock bank in the initial period following its nationalisation. Ann has held non-executive director positions at Prudential plc, British American Tobacco plc, UBS AG, and UBS Group AG. Ann served as a Non-executive Director of Rio Tinto plc and Rio Tinto Limited from 2010 until May 2019 and was also Senior Independent Director of both entities. In January 2021, Ann joined the Board of Stellantis N.V., and she chairs its Audit Committee. Ann joined the Board of HSBC Holdings plc in September 2023 and HSBC Bank plc in January 2025.

Relevant skills and experience
Ann is a former CFO and a Fellow of the Institute of Chartered Professional Accountants and a Fellow of the Certified General Accountants Association of Canada. She has more than 25 years of experience in the financial services sector. Ann's extensive international business experience enables her to make significant and valuable contributions and bring a global perspective to Board discussions. Ann's long and varied international business career powered by her financial acumen is reflected in the insights and constructive challenges she brings to the boardroom. As ARC Chair, Ann leverages her background to ensure robust discussions are consistently held as the ARC delivers its remit.

External appointments
- Non-executive Director and Audit Committee Chair of Stellantis N.V.
- Senior Independent Director of HSBC Holdings plc
- Independent Non-executive Director of HSBC Bank plc

Jane Holl Lute
Independent Non-executive Director

Board Committee membership:
REMCO | SUSCO

American, 68. Appointed May 19, 2021.

Career
Jane was President and Chief Executive Officer of SICPA Securink Corporation's North American operations from 2017 to 2021, when she assumed the role of Non-executive Strategic Director. From 2018 to 2021, Jane was a Non-executive Director of Atlas Air Worldwide Holdings Inc. In 2013, she established and led the Council on CyberSecurity, an independent not-for-profit organisation with a global scope, committed to the security of an open internet. From 2015 to 2016, Jane was Chief Executive Officer of the Center for Internet Security, an independent not-for-profit organisation that works to improve cyber security worldwide. From 2009 to 2013, Jane served as Deputy Secretary of the US Department of Homeland Security. From 2003 to 2009, she held various senior political and peacekeeping roles at the United Nations. Jane started her career in the US Army in 1978, serving in Berlin during the Cold War, on the US Central Command Staff during Operation Desert Storm, and on the National Security Council Staff under Presidents George H.W. Bush and William J. Clinton. After retiring from the military in 1994, she joined the Carnegie Corporation as an Executive Director of its Commission on Preventing Deadly Conflict.

Relevant skills and experience
Jane is a proven and effective leader, who has held significant leadership roles in public service, the military, and the private sector. She brings a wealth of expertise in matters of public policy, cyber security, and risk management to our Board. Jane is an experienced board director, having served on the boards of large companies since 2016. These appointments have given her business perspectives across different sectors and geographical regions. She has also served on various committees including those which focus on audit, environmental and sustainability, nomination, and governance issues.

External appointments
- Non-executive Director of Marsh & McLennen
- Non-executive Director of Union Pacific Corporation
- Strategic Director of SICPA Securink Corporation

Catherine J. Hughes
Independent Non-executive Director

Board Committee membership:
ARC | SUSCO (Chair)

Canadian and French, 62.
Appointed June 1, 2017.

Career
Catherine was Executive Vice President International at Nexen Inc. from January 2012 until her retirement in April 2013, where she was responsible for all oil and gas activities including exploration, production, development, and project activities outside Canada. She joined Nexen in 2009 as Vice President Operational Services, Technology and Human Resources. Prior to this, Catherine was Vice President Oil Sands at Husky Oil from 2007 to 2009 and Vice President Exploration & Production Services, from 2005 to 2007. She started her career with Schlumberger in 1986 and held key positions in various countries, including France, Italy, Nigeria, the UK, Canada, and the USA. Catherine has held non-executive director positions at SNC-Lavalin Group Inc, Statoil ASA and Precision Drilling Inc.

Relevant skills and experience
Catherine contributes through her knowledge of industry and the ease with which she engages with other Directors and managers in the boardroom. With over 30 years of industry experience, she brings a geopolitical outlook and deep understanding of the industry. An engineer by training, she has also spent significant time working in senior human resources roles. The Board highly regards her perspectives on our industry and people. Catherine has a strong track record of executing operational discipline with a focus on performance metrics and a drive for excellence. Her knowledge of the technology underpinning oil and gas operations, logistics, procurement and supply chains benefits the Board as it considers projects and investment and divestment proposals. She uses her industry knowledge, combined with her commitment to the highest standards of corporate governance and safety, ethics and compliance, in her role as Chair of SUSCO.

External appointments
- Non-executive Director of Valaris Limited

Sir Charles Roxburgh
Independent Non-executive Director

Board Committee membership:
ARC

British, 65. Appointed March 13, 2023.

Career
Sir Charles was Non-executive Chair of Legal and General America from 2023 to 2025. From July 2016 to June 2022, he was Second Permanent Secretary, one of the most senior positions within the UK's Treasury. In this role, he was responsible for policy and oversight across a range of functions including financial services, financial stability, infrastructure, energy, science and research and development, business investment, venture and growth capital, transport, and culture and creative industries. He was also Chair of the HMT Operating Committee. Sir Charles was Director General, Financial Services at HMT from 2013 to 2016 and led the legislative process for the biggest reforms in the UK banking sector in a generation before being appointed Second Permanent Secretary. Prior to HMT, Sir Charles spent over 25 years at McKinsey & Company and obtained an MBA from Harvard Business School. While at McKinsey, he held a range of senior positions. Sir Charles has worked for large banks, insurance companies, hedge funds and private-equity investors in strategy, risk management, and organisation roles. Sir Charles also led major research efforts at McKinsey and authored articles on strategy and scenario planning.

Relevant skills and experience
Sir Charles' succession of roles placed him at the nexus between industry and government, and have included his active involvement in forging and delivering energy policies. He was an influential figure within HMT in pioneering energy policy, including for COP26, and providing funding for innovative organisations to support the energy transition.

External appointments
- Chair of Lloyd's of London (effective May 1, 2025)
- Non-executive member of Global Council, Herbert Smith Freehills

Abraham Schot
Independent Non-executive Director

Board Committee membership:
REMCO | SUSCO

Dutch, 63. Appointed October 1, 2020.

Career
Abraham ("Bram") has been on the Board of Volkswagen AG, responsible for the Premium Car Group, CEO of Audi AG, Chair of Lamborghini and Ducati, responsible for the VW Group Commercial Operations and Vice-Chair of Porsche Holding Salzburg.

From 2011 to 2016, he was a member of the Board of Volkswagen Commercial Vehicles and Executive Vice President responsible for Global Marketing, Sales & Services, New Business Models. In 2017, he became a member of the Board of Audi AG. From 2006 to 2011, Bram was President and CEO of Daimler/Mercedes-Benz Italia & Holding S.p.A. From 2003 to 2006, he was President and CEO of DaimlerChrysler in the Netherlands. Prior to this, Bram held a number of director and senior leadership roles within Mercedes-Benz in the Netherlands, having joined the business in 1987 on an executive management programme.

Relevant skills and experience
Bram has over 30 years' experience working in the automotive industry. He was part of the transformation journey at Audi AG, which saw the car company become a provider of electric vehicles that offered sustainable mobility. He is able to leverage this knowledge as Shell navigates its own journey through the energy transition.

Bram brings his high regard for integrity and compliance to board meetings. His studies have encompassed innovation and organisational effectiveness, geopolitical environments, shareholder value, corporate social responsibility and risk management, which are all valued management tools.

External appointments
- Non-executive Director of Signify N.V
- Non-executive Director of Cognizant Technology Solutions Corporation
- Non-executive Director of Compagnie Financière Richemont SA

Leena Srivastava
Independent Non-executive Director

Board Committee membership:
SUSCO

Indian, 64. Appointed March 13, 2023.

Career
Leena has dedicated her career to sustainability research and policy matters, and has held positions on boards of scale. She was Deputy Director General for Science at the International Institute for Applied Systems Analysis. Prior to this, she was an Executive Director at The Energy and Resources Institute (TERI), a not-for-profit policy research organisation working on energy, environment and sustainable development, and then Vice Chancellor of the TERI School of Advanced Studies – a research university focused on sustainability education based in India. Leena is a member of the UN Technical Advisory Group on SDG 7, a Scientific Advisory Board Member of the European Forum Alpbach, and an advisory Board Member of NAMTECH, an Indian technical education institute. She has served committees and organisations at international and national levels, including as energy and climate adviser for the United Nations and Member of the Advisory Committee at Future Earth. She has also been a non-executive director of companies, including companies involved in manufacturing and infrastructure.

Relevant skills and experience
Leena has served on sustainability advisory boards of multinational companies, such as The Coca-Cola Company, Caterpillar Inc. and Suez Environment. She recognises the challenges large organisations face in managing stakeholder priorities, including balancing business, government and societal needs, while pursuing a sustainability agenda. As a member of the Cement Sustainability Initiative of the World Business Council for Sustainable Development, she provided a pragmatic perspective on how to support the sector through its decarbonisation journey. She has a strong network of relationships in multiple global institutions focused on sustainability and an understanding of the issues the energy sector faces.

External appointments
- Member of the Independent Council of Climate Experts of Edelman

Cyrus Taraporevala
Independent Non-executive Director

Board Committee membership:
ARC | REMCO

American, 58. Appointed March 2, 2023.

Career
Cyrus was President and Chief Executive Officer of State Street Global Advisors from 2017 to 2022. Cyrus has held numerous leadership roles in asset management including at Fidelity, BNY Mellon, Legg Mason, and Citigroup. Cyrus was previously a partner at McKinsey & Company, based in New York and Copenhagen.

He serves on the Board of two non-profit organisations: The Trustees of Reservations, a Massachusetts-based conservation organisation, and GBH, a public media producer, distributor, broadcaster and content creator. He joined the Board of Pfizer Inc. in July 2024.

Relevant skills and experience
Cyrus brings a unique mix of strategic perspectives and business skills. He has significant experience in driving organic and inorganic growth, and company transformations. He is one of the most senior professionals in the asset management industry and has successfully led and grown global businesses of scale. He played a critical role in affirming State Street's reputation as both a stalwart and a pioneer within the sector. At times, Cyrus was helping to implement change amid market uncertainty caused by geopolitical tensions and an evolving regulatory environment.

Cyrus also possesses a unique vantage point on core board-related issues impacting public companies including sustainability. He has spoken about and published multiple articles on climate risk and other aspects of sustainability. He is credited with strengthening the sustainability credentials of State Street Global Advisors.

External appointments
- Non-executive Director of Bridgepoint Group plc
- Non-executive Director of Pfizer Inc.

Sean Ashley

Company Secretary

British, 54. Appointed July 1, 2024.

Career

Sean qualified as a solicitor in 1998 and has significant experience across a broad range of legal, regulatory, governance and compliance matters, including UK listed company securities and disclosure laws, UK corporate governance and reporting requirements as well as public company M&A.

Relevant skills and experience

Sean leads the Corporate Secretariat and the Group Disclosures and Securities Team in the UK, USA and the Netherlands.

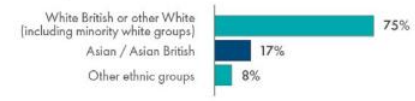
Sean has held a variety of roles in the Shell Group since joining from private practice in 2006, including most recently as Associate General Counsel Conventional Oil and Gas. Previous roles include leading the Shell Legal team on Shell's recommended combination with BG Group plc.

Board diversity

Gender diversity

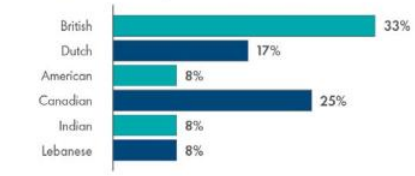
Non-executive Director tenure (years)

Ethnicity



Non-executive Director sector experience

Director nationality



The graphs above capture board diversity data as at December 31, 2024. For further information in relation to UK Listing Rule 6.6.6R(10) and (11), see "Other regulatory and statutory information" on page 219.

Attendance

The Board met nine times during 2024. Five of the nine meetings were held physically, one meeting in the Netherlands, and four in London, United Kingdom. Four meetings were held virtually. Attendance during 2024 for all Board meetings is given in the table [A].

Board member	Meetings attended
Dick Boer	9/9
Neil Carson [B]	8/9
Ann Godbehere	9/9
Sinead Gorman [C]	8/9
Jane Holl Lute [D]	8/9
Catherine J. Hughes	9/9

Board member	Meetings attended
Sir Andrew Mackenzie	9/9
Sir Charles Roxburgh	9/9
Wael Sawan	9/9
Bram Schot [E]	8/9
Leena Srivastava	9/9
Cyrus Taraporevala	9/9

[A] For attendance at Committee meetings during the year, please refer to individual Committee Reports.
[B] Neil Carson was absent from the May 2024 Board meeting due to a scheduled business commitment.
[C] Sinead Gorman was absent from the July 2024 Board meeting due to personal circumstances.
[D] Jane Holl lute was absent from the March 2024 Board meeting due to personal circumstances.
[E] Bram Schot was absent from the September 2024 Board meeting due to a scheduled business commitment.

Director independence

All Non-executive Directors are considered by the Board to be independent in character and judgement. The Chair is not subject to the UK Corporate Governance Code's independence test other than on appointment.

Ethnic diversity

The Board is satisfied that it currently exceeds the Parker Review recommendation on board diversity in the UK.

Executive Committee

The Executive Committee of the Company comprises the Executive Directors, Wael Sawan and Sinead Gorman, and those listed below (see "Governance Framework" on page 159).

Philippa Bounds
Legal Director

British, 54.
Appointed July 2023.

Career
Philippa was previously General Counsel for Trading and Supply, based in London. She joined Shell in 2005 after a decade of working at English and American law firms, specialising in structured finance.

She has held legal roles across Shell's businesses, including Senior Legal Counsel in Gas and Power and in Corporate. She has also held several advisory roles, including special adviser to the EU Commission's Director General Internal Markets on securities laws. She has represented Shell on a committee that worked with the UK government on the introduction of the Companies Act 2006.

Robin Mooldijk
Projects & Technology Director

Dutch, 58.
Appointed July 2023.

Career
Robin was previously Executive Vice President of Shell Chemicals and Products. He was appointed to that role in August 2021, following the integration of Shell's chemicals and manufacturing businesses.

Robin began his career at Shell in 1991 at its Research Laboratory in Amsterdam, the Netherlands, and since then he has held critical roles, including General Manager of Shell Chemicals Europe, Managing Director South African Petroleum and Vice President of Manufacturing Americas. In 2018, he was appointed Shell's Executive Vice President for Manufacturing.

Rachel Solway
Chief Human Resources and Corporate Officer

British, 51.
Appointed January 2024.

Career
Rachel joined Shell in 1995 in Upstream in Aberdeen, Scotland. She has since held HR roles in manufacturing, LPG, lubricants and chemicals. In 2016, Rachel was appointed Executive Vice President HR Integrated Gas. She became the Executive Vice President HR Upstream in 2020 before being appointed interim Executive Vice President HR Organisation Development & Learning in May 2023.

Huibert Vigeveno
Downstream, Renewables and Energy Solutions Director

Dutch, 55.
Appointed January 2020.

Career
Huibert was previously Executive Vice President Global Commercial. He joined Shell in 1995 as a business analyst and led Downstream businesses across Shell in Europe, Africa, North and South America, as well as Asia. In 2009, Huibert was appointed Vice President Supply & Distribution, Europe and Africa. In 2012, he became Executive Chair of Shell in China, and in 2016 led the integration of BG Group.

Zoë Yujnovich
Integrated Gas and Upstream Director

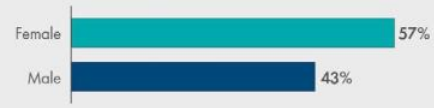
Australian, 49.
Appointed October 2021.

Career
Zoë has held various management positions in Downstream, Integrated Gas and Upstream. She served as Upstream Director, and was previously Executive Vice President Conventional Oil and Gas and prior to that Chair and Executive Vice President Shell Australia Pty Ltd. She joined Shell from Rio Tinto in 2014 to lead Shell's Oil Sands business in Canada.

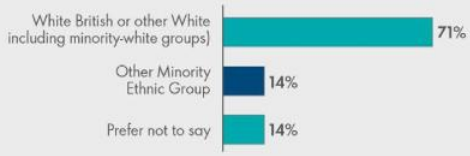
Zoë joined the Board of Unilever plc in March 2025 as an independent Non-Executive Director and member of the Nominating and Corporate Governance Committee and Corporate Responsibility Committee.

Executive Committee diversity

Gender diversity



Ethnicity



Changes to the Executive Committee

On January 23, 2025, Shell announced that Huibert Vigeveno, Downstream, Renewables and Energy Solutions Director, will step down effective March 31, 2025. It was also announced that Andrew Smith will be appointed Director, Trading and Supply, and Machteld de Haan will be appointed Director, Downstream, Renewables and Energy Solutions.Their appointments are effective from April 1, 2025. On March 4, 2025, Shell announced that Zoë Yujnovich, Integrated Gas and Upstream Director, will step down effective March 31, 2025.

On March 4, 2025, Shell also announced that from April 1, 2025, leaders on the Executive Committee representing Integrated Gas; Upstream; Downstream, Renewables and Energy Solutions; Trading and Supply; and Projects & Technology, will each be referred to as President of their respective organisations, rather than Director. Functional leaders on the Executive Committee will be referred to as Chief Officer of their respective functions. The changes to the Executive Committee structure are designed to support our strategy to deliver more value with less emissions, and as part of our ongoing transformation.

Cederic Cremers will be appointed President, Integrated Gas, and Peter Costello will be appointed President, Upstream. Both Cederic and Peter will join the Executive Committee from April 1, 2025. We thank Huibert and Zoë for their outstanding service and wish them success in all that lies ahead.

Shell's financial reporting segments remain Integrated Gas; Upstream; Marketing, Chemicals and Products; Renewables and Energy Solutions; and Corporate.

Andrew Smith
President, Trading and Supply

Australian, 60.
Appointment effective April 2025.

Career
Andrew was appointed Executive Vice President, Trading and Supply in 2017. Prior to his current role, Andrew was Vice President, Downstream in Australia and subsequently became the Executive Vice President, Upstream and Country Chair, leading the expansion of Shell's Liquid Natural Gas and Onshore Gas businesses in Australia. Andrew joined Shell in 1986 as a refinery engineer and has worked across all of Shell's integrated value chains including leading Shell's petrochemical manufacturing business in Singapore.

Machteld de Haan
President, Downstream, Renewables and Energy Solutions

Dutch, 51.
Appointment effective April, 2025.

Career
Machteld joined Shell in 1998 and has had several leadership and geographically diverse roles across the Downstream portfolio including Mobility, Strategy, Fleet Solutions, Lubricants and most recently Chemicals and Products. Prior to being appointed to lead Chemicals and Products, Machteld was Senior Vice President, Lubricants Americas, which included being the CEO of Pennzoil Quaker State Company, and subsequently became Executive Vice President, Global Lubricants.

Cederic Cremers
President, Integrated Gas

Dutch, 46.
Appointment effective April 2025.

Career
Cederic was appointed Executive Vice President, Liquefied Natural Gas in August 2021. He joined Shell's Retail business in 2002 and has held a variety of finance and commercial roles across Shell upstream and downstream businesses, including General Manager, Shell Chemicals Europe; Vice President, Commercial and New Business Development, Asia; and Executive Vice President and Country Chair, Russia.

Peter Costello
President, Upstream

British, 59.
Appointment effective April 2025.

Career
Peter was appointed Executive Vice President, Conventional Oil and Gas in November 2021 after serving as Senior Vice President of that same business. Peter joined Shell in 2016 as Vice President, Nigeria and Gabon following the company's combination with BG Group, where he held geographically diverse senior roles across Downstream, Midstream, and Upstream, including President and Country Head, Kazakhstan.

Governance framework

Board of Directors

The Company has a single-tier Board of Directors headed by a Chair, with executive management led by the Chief Executive Officer. The names of the Directors who held office during the year can be found on pages 152-156. Information on the Directors who are seeking appointment or reappointment is included in the Notice of Annual General Meeting.

There is no fixed number of times that the Board may meet in one year. During 2024, the Board met nine times (nine times during 2023) and, as detailed throughout our Strategic Report, including the Section 172 statement and activities undertaken throughout the year, worked to promote the long-term sustainable success of the Company, generating value for shareholders and contributing to wider society. Further information on the Board's work and assessments in relation to strategy, culture, engagement with stakeholders, and its workforce can be found in this section.

The Board's responsibilities are governed by a formal schedule of matters reserved to it and include:

- Approval of overall strategy and oversight of management.
- Changes to the corporate and capital structure.
- Approval of financial reporting and controls, including interim dividends.
- Oversight of risk management and internal control.
- Approval of significant contracts.
- Determining succession planning and new Board appointments.
- Remuneration for the Chair and Executive Directors.
- Corporate governance matters.

Board Committees

Audit and Risk Committee ("ARC")	**Sustainability Committee ("SUSCO")**
Nomination and Succession Committee ("NOMCO")	**Remuneration Committee ("REMCO")**

More information on the composition of each of the Board committees, their purpose, roles and activities during the year is provided on the following pages:

ARC	176-187	SUSCO	175-175
NOMCO	171-174	REMCO	188-190

Board of Directors continued

Division of responsibilities

The roles of the Chair, a non-executive role, and the CEO are separate and clearly defined. The Board has agreed on their respective responsibilities and set these out in writing. These documents are available on request from the Company Secretary.

Chair

- Responsible for ensuring that the Board and its committees function effectively. One way in which this is achieved is by ensuring Directors receive accurate, timely and clear information; and
- Responsible for making sure that there is an adequate induction and training programme followed by all Directors (see page 164), with assistance from the Company Secretary.

Deputy Chair/Senior Independent Director

- Sounding board for the Chair;
- Serves as an intermediary for the other Directors and shareholders; and
- Leads the annual appraisal of the Chair's performance.

Non-executive Directors

- Appointed by the Board or by shareholders at general meetings and, in accordance with the Code, seek re-election by shareholders on an annual basis;
- Letters of appointment refer to a specific term of office in accordance with the provisions of the Code and the Company's Articles of Association;
- Upon appointment, Non-executive Directors confirm they are able to allocate sufficient time to meet the expectations of the role. Appointments are subject to a minimum of three months' notice of termination, and there is no compensation provision for early termination;
- The Non-executive Directors bring a wide range and balance of skills and international business experience. Through their contribution to the Board and Board committee meetings, respectively, they are expected to challenge and help develop proposals on strategy and bring independent judgement on issues of performance and risk; and
- At every Board meeting, time is set aside for the Chair and Non-executive Directors to meet without the Executive Directors being present. The Non-executive Directors discuss, among other matters, the performance of individual Executive Directors. A number of Non-executive Directors also meet major shareholders over the course of the year.

Executive Management

Chief Executive Officer (CEO)

- Has overall responsibility for the implementation of the strategy approved by the Board, the operational management of the Company and the business enterprise connected with it; and
- Is supported in this by the EC that he chairs.

Executive Committee (EC)

- Operates under the direction of the CEO in support of his responsibility for the overall management of Shell's business. The CEO has final authority in all matters of management that are not within the duties and authorities of the Board or of the shareholders' general meeting; and
- EC members are listed in the Executive Committee biographies on pages 157-158.

Governance documents available on shell.com/investors:

- Articles of Association
- Matters Reserved for the Board
- Board Committee Terms of Reference
- Modern Slavery Act Statement
- Shell General Business Principles
- Shell Code of Conduct
- Code of Ethics for Executive Directors and Senior Financial Officers

Board activities

Board activities

The Board works to a yearly meeting plan with corresponding agendas and reading materials, provided digitally in advance of meetings, to support the Board in its oversight of the Group's operations and management. Standing agenda items include reports from the CEO, the CFO and the Chair of each Board committee. Other updates throughout the year come from various businesses and key functions, including Investor Relations; Health and Safety, Security and Environment; Information Technology; Human Resources; and Legal, as well as the Company Secretary. The Board also considers and approves the quarterly, half-year and full-year financial results, shareholder distributions and the associated announcements, and, at most meetings, considers investment, divestment and/or financing proposals and tracks performance. Additionally, the Board reviews the Group's annual Operating Plan, including activities undertaken designed to meet the Group's carbon reduction targets. To enable purposeful discussion and focus on particular aspects of agenda topics, including the impact on key stakeholders, Directors have an opportunity to specify information they require to be provided in advance of Board meetings.

During the year, where possible, Non-executive Directors conduct site visits. The visits are designed to provide them with a deeper insight into certain business operations.

See "Understanding and Engaging with our Stakeholders" on pages 165-166 and in "Workforce Engagement" on pages 167-168.

Some of the activities and areas of Board focus over the year are summarised in the table below. The information in the table is not exhaustive. Information on other topics discussed by the Board and details of the resulting decisions are covered elsewhere, primarily in the Section 172 statement provided earlier in this report on pages 145-148. In some cases, a brief outline has been provided below, and page references are provided for additional information.

Board off-site

Each June, the Board and Executive Committee participate in a three-day programme, known as the "Board off-site", which takes place in a priority country setting and serves to improve Board effectiveness and strategic decision-making. The 2024 Board off-site was held in person in the Netherlands over three days. The event sought to deliver insights into business strategy and operations. It also incorporated a visit to one or more strategic assets and facilitated dialogue with the Netherlands country chair, employees, contractors, regional country chairs, and external stakeholders, including customers and suppliers.

The Netherlands is an important heartland for Shell. The Board and EC members conducted a deep dive into each of Shell's businesses in the country. Around this theme, the event provided for the following key discussion and engagement opportunities:

- visits to the Shell Energy and Chemicals Park Rotterdam and the Holland Hydrogen I construction site;
- engagements with staff; and
- discussions with global energy-geopolitical experts and engagement with the Prime Minister at that time.

Topic	Discussion/activity/updates included	Examples of outcome/progress	Stakeholders considered
Board leadership and company purpose			
External business environment	◦ Received updates on and discussed regional geopolitical issues and market outlook.	◦ Provided opportunity to ask questions on updates on geopolitical issues and market outlook. ◦ Considered feedback from investor community on quarterly financial performance, including business segment results.	A, B, C, D, E, F, G
Strategy	◦ Reviewed and discussed ETS24. ◦ Reviewed and discussed progress of strategy including management recommendations. ◦ Reviewed and discussed the materials and proposed communication for Capital Markets Day 2025 (CMD25). ◦ Directors participated in Board off-site strategy sessions. ◦ Reviewed and discussed the Group's Annual Operating Plan for 2025-2027 (OP24). ◦ Received metrics demonstrating Shell's delivery of CMD23 targets. ◦ Received updates pending the outcome of the Hague Court of Appeal's ruling in the Milieudefensie case.	◦ Alignment on outcomes from Board Off-site strategy sessions. ◦ Received an overview of the business, divestments, projected investments and opportunities. ◦ Approved OP24. ◦ Provided steer on draft CMD25 narrative and messaging.	A, B, C, D, E, F, G

A – investor community B – employees/workforce/pensioners C – regulators/governments D – NGOs/civil society stakeholders/academia/think tanks
E – communities F – customers G – suppliers/strategic partners

Topic	Discussion/activity/updates included	Examples of outcome/progress	Stakeholders considered
Board leadership and company purpose continued			
Climate	○ Reviewed and discussed ETS24 metrics. ○ Discussed and engaged with various stakeholders on the development of ETS24. ○ Considered shareholder proposed resolutions for the 2024 Annual General Meeting. ○ Considered how carbon credits, divestments and potential investment opportunities contributed to meeting Shell's carbon reduction targets. ○ Considered the nature and extent of the broader climate change and energy transition risk across Board proposals and further considered the potential influence on the delivery of Shell's carbon reduction targets.	○ Discussed and engaged with various stakeholders on the development of ETS24 and approved for ETS24 to be presented to shareholders for an advisory vote at the 2024 AGM. ○ Delivering alignment of divestment and investment opportunities with Shell's carbon reduction targets.	A, B, C, D, E, F, G
Culture			
Shell People Survey (2024 results)	○ In December 2024, the Board reviewed the results of the 2024 Shell People Survey.	○ Having recognised that the 2024 Shell People Survey results were an indicator of the organisation's health, the Board reflected on the role of people and culture in Shell's transformation.	B
Staff updates	○ Received updates from management and Board Committees on organisational changes. ○ Engagement through various sources such as Shell People Survey results, talent information, conduct and culture risk dashboard, Chief Ethics and Compliance Officer Report, cultural information embedded in investment proposals.	○ The Board was kept informed of health, safety and the environment with regard to Shell's staff and activities. ○ The Board considered the impact of the organisational changes during the year and steps to address Shell People Survey results.	B
Board staff engagements	○ Directors participated in in-person staff engagements on site visits. ○ Received updates from management on staff achievements and outstanding contributions made by our people.	○ Gained first-hand insight into the development and culture of operations and maintenance teams, as well as staff perspectives on other matters of interest to our people. ○ Received practical examples of ways in which staff members were exhibiting Shell's core values and contributing to society. ○ In addition to the Board off-site in the Netherlands in June 2024, some Board members visited Shell's businesses in Qatar and Oman at the beginning of 2024 and Brazil in April 2024. They engaged with members of staff and got to observe the strategy in action.	B

A – investor community B – employees/workforce/pensioners C – regulators/governments D – NGOs/civil society stakeholders/academia/think tanks
E – communities F – customers G – suppliers/strategic partners

Topic	Discussion/activity/updates included	Examples of outcome/progress	Stakeholders considered
Audit, risk and internal control			
Safety and environment	◦ Received regular updates from management on safety and environment performance. ◦ Throughout the year, Directors shared reflections and insights on topics related to core values and safety. ◦ Received regular updates from the SUSCO, including site visit reports and engagement with stakeholders.	◦ Provided with commentary and examples of how safety continues to be upheld as important by staff. ◦ Gained perspective and brought diversity of thought to Board discussions by using learnings and insight gained outside Shell. ◦ Provided with insights into the views and priorities of NGOs, communities and other stakeholders.	B, D, E, F, G
Risk management and internal control	◦ Reviewed reports on Shell's top risks, external and internal trends and emerging risks. ◦ Provided regular updates on potential impact of external risk factors including geopolitical risk in the Middle East and CrowdStrike cyber incident.	◦ Considered the effectiveness of the risk management and internal control system. ◦ Received regular updates on Shell's top risks, as well as several risk deep dives, and continued discussions on the risk appetite for these risks. ◦ Received reports on the performance of the Group's cyber defences. ◦ Reflected on progress regarding risk management and controls, pace and inherent risks to the digital transformation strategy, and enhancements to management of climate risk and disclosures.	A, E, F
Auditor appointments	◦ Received recommendation on reappointment of external auditors. ◦ As part of the external audit tender, received recommendation from the Audit and Risk Committee on the appointment of external auditors for the financial year commencing January 1, 2026.	◦ Reappointment of external auditors submitted to shareholders for approval. ◦ Approved Audit and Risk Committee recommendation for auditor appointment for the financial year commencing January 1, 2026.	
Composition, succession and evaluation			
Succession planning	◦ Received recommendations from the NOMCO regarding succession plans and Board and committee composition.	◦ Kept regularly informed about succession planning arrangements. ◦ Approved a recommendation from NOMCO that each Non-executive Director continues to be considered independent. ◦ Please see the "Nomination and Succession Committee" section for further details.	A, B, D, E
Board and committee effectiveness reviews	◦ Conducted Board dynamics review in September 2024 which explored opportunities for the Board to further elevate its collective performance, noting strengths and opportunities to develop. ◦ In January 2025, examined the Evaluation Report following a survey based on the requirements of the UK Corporate Governance Code facilitated digitally by the Company Secretary, on the effectiveness and performance of the Board, its Committees and the Chair.	◦ Concluded that throughout the year, the Board, its committees and the Chair continued to operate effectively. ◦ Conducted the annual Board effectiveness review. ◦ Please refer to the "Board evaluation" section for further details.	A, B, D, E, F, G
Board membership, other appointments	◦ Reviewed Directors' tenure, external commitments, conflicts of interests, composition/membership of Board committees and appointments.	◦ Approved committee membership change, approach to conflicts of interest and appointments to the Board, following recommendations made by the NOMCO. ◦ Approved a renewal of the Directors' terms and tenure, where relevant. ◦ Please see the "Nomination and Succession Committee" section for further details.	A, B, D, E
Talent overview and senior succession review	◦ Received updates on senior succession strategy.	◦ Enhanced insight into Shell talent and future leaders, assurance of robust succession and contingency plans.	B

A – investor community B – employees/workforce/pensioners C – regulators/governments D – NGOs/civil society stakeholders/academia/think tanks
E – communities F – customers G – suppliers/strategic partners

Topic	Discussion/activity/updates included	Examples of outcome/progress	Stakeholders considered
Remuneration			
Remuneration and reward matters	◦ Oversight of matters reviewed and considered by the REMCO.	◦ Received regulatory, political and investor insights and updates relating to reward matters.	A, B, C
Governance matters			
Governance	◦ Provided with emerging corporate governance developments and updates relating to ethics and compliance matters. ◦ Reviewed the Modern Slavery Act Statement and assurance, and considered other regulatory and legislative requirements. ◦ Reviewed Matters Reserved for the Board and Board Committee Terms of Reference.	◦ Considered the impact of the 2024 UK Corporate Governance Code. ◦ Approved a single Group Modern Slavery Act Statement for the Group. ◦ Approved updates to the Committee Terms of Reference.	A, B, C, D, E, F
Ethics and Compliance	◦ Reviewed the Chief Ethics and Compliance Officer's annual report.	◦ Ethics and compliance remain forefront in Board considerations and decision-making.	A, B, C, D, E, F

A – investor community B – employees/workforce/pensioners C – regulators/governments D – NGOs/civil society stakeholders/academia/think tanks
E – communities F – customers G – suppliers/strategic partners

Director induction and training

After being appointed to the Board, Directors receive a comprehensive induction tailored to their individual needs. This normally includes site visits and meetings with senior management to enable them to build up a detailed understanding of Shell's business and strategy, and the key risks and issues that Shell faces. Existing Directors are also able to join these visits to keep abreast of business developments and progress. Onboarding will continue to be phased and prioritised based on forthcoming Board agenda items.

A digital onboarding book is provided to each new Non-executive Director. These onboarding books complement the existing digital Directors' Handbook and feature:

- Overviews of scheduled briefing meetings customised to the Non-executive Directors' needs and linked to upcoming Board agenda items;
- Hyperlinks to key Shell publications (external and internal);
- Lists of common Shell acronyms;
- Key current materials on:
  - Shell's safety and core values;
  - Board governance;
  - Group strategy and portfolio;
  - Key businesses and functions; and
  - Climate change and energy transition.
- Biographies of key executives;
- Other elements of the onboarding programme for Non-executive Directors include:
  - Briefing meetings with key executives (both business and functional) customised to Non-executive Directors' needs and phased based on forthcoming Board agenda items;
  - Pairing up new Non-executive Directors in onboarding briefings to optimise learning while also providing opportunities for collegial relationship-building and increasing efficiencies for the executives; and
  - Site visits (either specifically for onboarding or by inviting the new Directors to committees' site visits).

Understanding and engaging with our stakeholders

The Board values and recognises the importance of engagement with our stakeholders. Time is dedicated to listening to different stakeholder views and our commitment to stakeholder engagement is built upon the understanding that knowledge-sharing, widening of experiences and adopting a learner mindset will help us achieve our commercial, environmental and social objectives. The Board remains grateful for the engagement opportunities it has had, including the 2024 AGM.

The Directors have continued to consider stakeholders' views in Board discussions and decision-making, as described on pages 145-148. Engagement with our stakeholders also goes beyond the Board and is continuous. Our broader businesses regularly engage with stakeholders throughout the year, and in the build-up to or during many Shell projects, activities, acquisitions and divestments. This engagement is often governed by formulated policies, control frameworks, regulation and legislation. It may differ by region.

Site visits
The Chair, certain Board committees and Non-executive Directors traditionally visit several Shell operations and overseas offices in a given calendar year. The objective of these visits is to provide the Directors with local context and deepen their understanding in the following ways, where relevant:

- provide insights into asset operations and portfolio positions;
- opportunity to engage directly with stakeholders, including staff, business partners, communities;
- improve the Board's oversight of top risks; and
- assess the Company's culture first-hand.

Visits provide a good opportunity for Board members to engage with each other. For further information in relation to site visits, see "Board Activities" on pages 161-164.

Shareholders
The Chair, the Deputy Chair, the CEO, the CFO and the Executive Vice President Investor Relations and Strategic Planning each meet regularly with major shareholders and report the views of such shareholders to the Board. Committee chairs also seek engagement with shareholders on significant matters related to their areas of responsibility. During the year, Sir Andrew Mackenzie, in his capacity as Chair, met with more than 50 major shareholders, including during four days of roadshows. A variety of topics were discussed with the Chair, including performance, capital discipline and simplification of Shell; governance and Board priorities; and the Company's role in the energy transition. In the early part of the year, the REMCO Chair met with more than 25 shareholders and discussed 2023 pay outcomes and implementation of the shareholder-approved Remuneration Policy for 2024 ahead of the 2024 AGM.

Shareholders can contact Shell directly via the "Contact us" section of the Shell website. This allows investors' questions to be directed to the appropriate Shell team that can assist. The Shell website also provides contact details for our Registrar, Equiniti, shareholder queries, our media team, requests for copies of the Annual Report, and general customer enquiries.

The Company's Registrar operates an internet access facility for registered shareholders, providing details of their shareholdings. Facilities are also provided for shareholders to lodge proxy appointments electronically. The Corporate Nominee service, facilitated by Equiniti, provides a facility for investors to hold their shares in the Company in paperless form.

Shareholder engagement on AGM resolutions
At the 2024 AGM, shareholders voted on two climate-related resolutions: (i) Resolution 22, which was an advisory vote on Shell's Energy Transition Update – shareholders showed strong endorsement, with 78% of shareholders who voted casting votes in favour; and (ii) Resolution 23, a shareholder resolution, submitted by an organisation called Follow This on behalf of a small group of shareholders. The resolution from Follow This was similar to their 2023 submission, which was also rejected by shareholders, as its variations have been every year since first being submitted in 2016. The resolution urged Shell to: "align its medium-term emissions reduction targets covering the greenhouse gas (GHG) emissions of the use of its energy products (Scope 3) with the goal of the Paris Climate Agreement: to limit global warming to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°". We remain committed to constructive engagement with our shareholders, and we believe our climate targets are aligned with the more ambitious goal of the Paris Agreement. The Board did not consider the proposal from Follow This to be in the best interest of the Company, its shareholders as a whole, its customers, and the climate. Resolution 23 received support from 19% of shareholders who voted. Shell is aware that some shareholders voted in support of both Resolutions 22 and 23, despite their conflicting content.

In 2024, the Chair, CEO and CFO hosted meetings with some of our large shareholders. These meetings covered many topics. We recognise and value the importance of stakeholder engagement when considering our energy transition progress. The Board is grateful for the time and contribution of all those stakeholders who provided feedback, and for the overall indications of support for Shell's strategy.

Following the AGM, we engaged with our largest shareholders offering further opportunities to discuss Shell's energy transition strategy and to understand the reasons behind various voting decisions. The Chair subsequently had an opportunity to engage directly with our large institutional shareholders during his roadshow in September 2024.

These discussions have highlighted that some shareholders have outlined societal pressure influencing media coverage and expectations from beneficial owners as reasons for not aligning with the Board recommendation. Others raised questions related to our intention to grow our LNG portfolio, using an LNG volumetric target as an energy transition indicator in the 2024 scorecard, the changes made to our Net Carbon Intensity (NCI) targets, and a new absolute Scope 3 ambition covering oil products.

This feedback was added to the ongoing internal considerations of the Company's climate targets and ambition, along with the outcome of the Milieudefensie Hague Court of Appeal hearing, Shell's strategy, progress since Capital Markets Day 2023, and the commitments that Shell had made within its energy transition strategy.

Engagements in 2024

Information on engagements the Board has held during the year is summarised below. Information on engagement with other stakeholders including the workforce is provided on pages 167-168. The way in which stakeholder interests were considered in principal decision-making by the Board in 2024 (Section 172 statement) can be found on pages 145-148.

Engagement before event	Event/activity	Director attendance	Outcome/insight
Remuneration roadshow – first-quarter 2024 engagement			
Engagement was undertaken before the meetings so that the Directors were provided with understanding and insight on particular topics of interest.	In March 2024, Neil Carson, Chair of the REMCO, presented the 2023 remuneration outcomes and 2024 remuneration plans to investors. The presentation included summaries on: ◦ reflections on the Company's financial performance, portfolio, and strategic delivery; ◦ 2023 remuneration outcome; ◦ Implementation of the shareholder-approved Remuneration Policy for 2024, including impact of ETS24; and ◦ forward-looking agenda.	REMCO Chair	Shareholders were provided with context and an explanation of the REMCO deliberations in arriving at the 2023 pay outcomes and setting the pay framework for 2024. They had the opportunity to ask questions and provide feedback.
Annual ESG update 2024			
Discussion with the Chair of the Board to ensure that key topics would be covered.	This annual engagement took place in March 2024 in London with investors. It included an update on ESG matters of significance, including Shell's 2024 Energy Transition Strategy.	CEO and CFO	Any questions requiring follow-up were addressed outside the presentations. In some cases, follow-up meetings were held with stakeholders and the Chair of the Board.
2024 AGM			
Directors engaged with investors ahead of the event on a number of matters, including those being voted on at the AGM.	As well as the Company giving a balanced report of results and progress at the AGM, shareholders had an opportunity to ask questions in person, via the digital AGM platform, telephone, or submit questions via the Q&A desk outside of the auditorium.	Board	A number of additional engagements including follow-up meetings and answering of queries.
Chair roadshow			
The Chair of the Board engaged with more than 50 large institutional investors during two roadshows in April and September 2024.	The Chair of the Board provided an update on the governance of Shell and gave key investors opportunities to ask questions. Key topics included governance, remuneration, energy transition and business outlook.	Chair	Provided the Chair with an opportunity to listen to key institutional shareholders and to provide Board perspective on topics such as governance, energy transition, business and management performance.
Director visits			
Discussions were held with the respective Directors ahead of the visit to formulate the agenda and encourage a natural, open dialogue in the group sessions.	In June 2024, the Board and Executive Committee visited the Netherlands. More information on this visit can be found on page 161. Two additional Board visits took place in 2024: to Qatar and Oman in January and to Brazil in April. The Chair attended both trips and was accompanied by a sub-set of the Board including representatives of both the Audit and Risk Committee and the Sustainability Committee. The visit programme focused on general Board-related matters plus areas of particular importance to both committees. The Chair also visited Brasilia, and met with the British Ambassador, Minister of Finance and Vice-President of Brazil/Minister for Development, Industry and Trade. In October, the Chair visited China to deliver an energy lecture to Tsinghua University School of Economics and Management, to participate in the School of Economics and Management's Advisory Board, and to present to the finalists of the Shell Eco-marathon. More information on these visits can be found on page 167.	Directors	The Board gained an insight into the development and culture of the operations and maintenance teams. The use and impact of digitalisation tools were highlighted, and the future environmental capabilities of the sites were discussed.

Workforce engagement

As with all the UK Corporate Governance Code's provisions, boards must consider the size and structure of their business, including its international scope, and select an approach to engaging with the workforce that most practically delivers the underlying spirit and ambition of the Code.

The Code states that its use of the term "workforce" is not meant to align with legal definitions of workforce, employee, worker or similar terms. But for a global organisation bound by the laws of more than 70 countries, blurring the clearly prescribed legal definitions that affect complex issues (such as local health, safety, security and environment (HSSE) requirements, work contract terms, legal accountability, employment rights) or merging two definitions of the same term could have a notable impact on the business, its operations and its stakeholder relationships (including with suppliers). As a result, Shell considers its workforce to be employees of companies in the Shell Group. The Board also engages with others outside this group (for example, on site visits), and some of this engagement is shared on page 165.

Although our reporting and formal engagement focuses predominantly on our employees, all individuals working on Shell sites (including Shell offices) are required to undertake certain Shell training (for example, on matters relating to HSSE and the Code of Conduct). Adhering to the Life-Saving Rules and the Code of Conduct compliance obligations is included within our contracts with suppliers. Shell employees, contractors and third parties with whom Shell has a business relationship can report any potential breaches of the Code of Conduct confidentially through several channels, including anonymously through a global helpline operated by an independent provider.

For many years, Shell has recognised the importance of engaging with its workforce. Engagement is especially important in maintaining strong business delivery in volatile times of change. We strive to maintain a dialogue between management and our workforce – both directly and, where appropriate, engagements take place with union and employee representatives at asset and country level, as well as with the Shell European Works Council. Management regularly engages with the workforce through elected employee representatives and a range of formal and informal channels. These channels include webcasts and all-employee messages from the Chief Executive Officer (CEO) and other senior leaders, as well as town halls, team meetings, site visits by the Board and EC, internal social platforms and online publications via our intranet.

The Board considers effective engagement a key element of its understanding of the Company's ability to create value, because it recognises that our people are our greatest asset. Workforce views can help inform the Board on matters such as operational effectiveness, Shell culture, diversity, equity and inclusion, identifying risk and opportunity, and developing and delivering strategy. We believe these engagements enable Shell to maintain a constructive employee and industrial relations environment.

The Board considers the current workforce engagement approach to be effective, and feedback from employees indicates that they too find the interactions valuable and worthwhile. The information provided in the following table gives examples of various methods of Board engagement.

Board's direct engagements with the workforce

Informal engagement – Board

NOMCO members met with various senior leaders and high-potential individuals throughout the year.

Off-site visits

Workforce engagements during Board and/or meetings off-site.

Meeting talent/leadership teams.

The Chair undertaking staff engagement sessions.

Through these more formal engagements, the Chair and other Non-executive Directors (either individually or in groups) have deepened their understanding of how the Company's purpose, strategy and values are embedded in particular businesses, sites and countries. This continues to give insight into progress made, risks and opportunities. The benefits are mutual. The Board obtains direct insight into local business operations and projects, and local strengths and challenges. Our people have a chance to better understand the Board and to provide direct feedback on topics of importance to them, their business or function and their location.

Shell Qatar

In Qatar, the group had discussions on how the business is optimising value through integration and efficiencies, followed by a visit to the Pearl GTL gas-to-liquids plant and the LNG North Field Expansion Project. While the Chair participated in a staff engagement session, the rest of the group visited the Qatar Shell Research Centre. There was a dinner with the extended leadership team of Qatar Shell, and a lunch with the Minister for Energy and senior leaders in QatarEnergy.

Shell Oman

In Oman, the programme entailed deep dives on business strategy, opportunities and risks, diversity, equity and inclusion (DE&I), and social performance. It also incorporated a site visit to the Block 10 oil-producing field, a dinner with the Minister for Energy, and an informal evening with staff.

Shell Brazil

The Brazil programme started in Rio de Janeiro, home to Shell Brasil's head office and where the upstream business in-country operates from. Here the Board members engaged in a roundtable of approximately 10 senior external stakeholders including former senior government officials and thought leaders. While the Chair had a staff engagement session, other Board members met DE&I network leads. Board members then travelled to Sao Paolo to meet with leaders and staff of the Raízen biofuels joint venture for discussions on business opportunities and risks, the potential for biofuels in Brazil and globally, and sustainability considerations.

The programme concluded with a visit to the Bomfim Advanced Biofuels and Renewable Natural Gas Plant and adjacent sugar-cane plantations to hear first-hand about the agricultural activities, technology, challenges and opportunities.

Shell Netherlands

The Board and Executive Committee (EC) visited the Netherlands over three days in June for their annual off-site visit and Board meeting. The visit provided significant opportunities for workforce engagement on our strategy and the energy transition.

Over the three days, the Board and EC engaged with the workforce in a range of different ways, including business briefings covering Shell's integrated value chain in north-west Europe, the mobility business in the Netherlands, the Upstream business in the Netherlands, and how Shell is applying digital innovation to support decision-making and deliver value. They had lunch with 60 staff members from various functions, including those active in DE&I networks, and dinner with 24 members of the leadership team in the Netherlands. As referenced in our Board activities section on page 161, the Board and EC also visited the Shell Energy and Chemicals Park Rotterdam and the Holland Hydrogen I construction site. Here the Board and EC engaged in site interactions and lunch with staff at both sites.

Shell China

In October 2024, the Chair visited China to deliver an energy lecture to Tsinghua University School of Economics and Management, to participate in the School of Economics and Management's Advisory Board, and to present to the finalists of the Shell Eco-marathon, followed by dinner.

Formal reports and information updates to the Board

Shell People Survey

Through the results of the Shell People Survey (an anonymous survey, facilitated externally), the Board was provided with an update on employee engagement levels, and the quality and resilience of leadership across Shell's workforce. The Board was informed of a broad range of subjects, including principal metrics, with particular focus on rewards, working conditions, workload and reputation.

The Board considers the Shell People Survey to be one of its key tools for measuring employee engagement, motivation, affiliation and commitment to Shell. It provides insights into employee views and has a consistently high response rate. In 2024, the response rate was 86%, down 2% from 2023. The Board also considers this engagement to understand, for example, how Shell is using the survey outcomes in: i) data analytics, for example, to identify potential correlative relationships between employee engagement and safety or ethics and compliance incidents; and ii) strengthening Company culture and values. See also "Powering lives" section on page 117.

Senior Succession and Resourcing Review

The annual Senior Succession and Resourcing Review focused on the strength of senior leadership and plans for its development and succession, while highlighting the breadth, depth and diversity of its pipeline, the developing profile of the leadership cadre, and recruitment and attrition levels.

The Senior Succession and Resourcing Review also highlighted the effectiveness of succession planning, the impact of its associated execution, and the data-driven, integrated approach to leadership and leadership development. The review continues to focus on proactive management of Shell's talent pipeline, and on advancing Shell's diversity agenda with increased attention on gender, race and ethnicity, LGBT+ and disabilities.

Assessment of key trends and material incidents

Presented by the Chief Ethics and Compliance Officer. This is based on the established channels for staff and others to file complaints or report on suspected breaches in relation to the Shell General Business Principles (SGBP), the Code of Conduct or any breaches of laws or regulations, including accounting control and auditing concerns.

The assessment covers Shell employees and our wider stakeholder base. The Board (also via the ARC) obtains insight into incidents and reporting levels and remediation. These provide indicators of conduct risks and, together with the related Board reports noted below, suggest the strength of embedding and awareness of the Code of Conduct and SGBP obligations and employees' comfort levels in raising incidents.

Risks

The Board reviewed reports on Shell's top risks, external and internal trends and emerging risks.

Organisational culture

The Board has continued its discussion on the strategy, including powering lives. The Board also focused on diversity, equity and inclusion ambitions.

Chief Ethics and Compliance Officer Report

Data and insights include information from the Global Helpline, the Shell Ethics and Compliance organisation and the Shell People Survey.

The ARC is kept updated when matters highlighted through the Global Helpline are investigated. The ARC is also informed about the associated remediation. See "Audit and Risk Committee Report" on page 176-187.

Assurance activities

Assurance activities, including items raised by businesses and functions (through the Group Assurance Letters process) and assurance (from Internal Audit, HSSE, Ethics and Compliance, Reserves Assurance and Reporting, Financial and Non-Financial Reporting), provide additional evidence to the Board of the commitment to high standards of risk management and internal control. The assurance activities ensure that work can be done safely, within regulatory frameworks.

The information provided within these reports further supports the Board's annual review of the effectiveness of the Group's system of risk management and internal control, and feeds into the Group scorecard, against which staff bonuses are calculated.

The Shell Performance Framework

Significant HSSE, Ethics and Compliance, and more broadly, business control incidents are brought to the attention of senior management, the Board, and, as appropriate, the Board Committees, through regular reporting.

During these discussions, the Board seeks to learn more from incidents and ensure that the business continues to drive safety performance.

Board evaluation

The 2024 Board evaluation was facilitated internally, led by the NOMCO and managed by the Company Secretary.

[A] Separate reports were provided for the responses from the Board and the Executive Committee. The reports in relation to the ARC, NOMCO, SUSCO and REMCO were sent to the respective committee chairs.

Board review process
The 2024 Board evaluation process comprised:

(a) Board Dynamics review
The review, which took place in September 2024, was structured to reflect on the current state of Board practices, focusing on opportunities for the Board to further elevate its collective performance, noting where there are strengths as well as opportunities to develop. The review, supported by the Chief Human Resources Officer and the Company Secretary, involved one-to-one discussions between the Chair and each Non-executive Director as well as plenary discussions with the Board and Executive Committee. A number of key themes and focus areas were identified as part of the review, including: (i) preparing for the next phase of key strategic decision points for the Company; (ii) deepening the Board's relationship with non-Board members of the Executive Committee; (iii) balancing how the Board continues to best act as a collective, while recognising the strengths and diversity of individual members needed to maximise performance; and (iv) continuing to sharpen the onboarding process. A number of actions to address these findings are under way.

(b) Internally facilitated questionnaire-based Board and Committee evaluation
Taking into account the structure and output from the 2024 Board Dynamics review, it was recommended that NOMCO conduct an in-house review (similar to the 2023 process). The form of the questionnaires were appropriately adjusted to reflect the output from the Board Dynamics review and Board members responded to those questionnaires, which were shared at the end of 2024, with results discussed at the January 2025 Board and committee meetings. Separate questionnaires were produced for the evaluation of the Chair, and the Board committees. In addition, the Chair held separate one-to-one discussions with each of the Non-executive Directors to assess their individual performance during the year. To broaden the inputs into the evaluation process, members of the EC participated in the evaluation process, also completing questionnaires relating to their attendance at Board meetings. The Company Secretary produced a feedback summary providing recommendations to the Directors. This report was shared with the Chair, NOMCO and subsequently all Board members.

Insight
The feedback from Board Directors was positive throughout their responses to the evaluation. Views were provided on a number of topics including: composition and diversity; skills, capabilities and competencies; engagement with, and/or challenge of, management; atmosphere in the room; management of meetings; the support the Board and Board committees receive; strategic focus; oversight of risk and risk management; stakeholder engagement; and any priorities for 2025.

Board dynamics
Noting also the Board Dynamics review, the Non-Executive Directors' support and challenge of management rated well, with the Non-Executive Directors welcoming extra informal time with the EC as planned for future meetings.

Board oversight
The Board's oversight in framing and setting the Group's strategy rated highly, as did the Board's understanding of the capacity of the Group to deliver and its monitoring of external developments. Strategy was identified as a continued area of focus for 2025. The Board's oversight of risk and risk management rated highly, with risk appetite and risk mitigation continuing to be a priority. The Board's oversight of the development of senior talent and success planning rated highly, with the process considered to be well organised.

Management of meetings
Themes included continued: (i) focus on interaction between Non-executive Directors and EC members to more fully leverage the skills of individual Non-executive Directors as appropriate outside of the formal Board setting; and (ii) engagement with external speakers to bring diverse and external perspectives into the boardroom on key issues facing Shell.

Overall, the Board was found to be functioning well, with a high level of commitment from both the Non-executive and Executive Directors. There are good personal relationships, amid a collegial spirit, with a high degree of mutual respect. Directors are able to share opinions and offer guidance and feel that they are heard. The agenda has been broad and the committees have complemented the Board agenda to ensure that the Board has covered the areas viewed to be key.

Feedback themes for the committees
The committees were considered to be well chaired and well operated and received excellent input from senior management. All committee reviews provided focus on meeting management and effectiveness, oversight, and performance improvement opportunities. Each committee analysed topics specific to their respective forum. The committees also provided feedback on the implementation of recommendations from the 2023 evaluation process.

Chair evaluation
The Deputy Chair communicated feedback to the Chair, who was considered to have built and maintained strong relationships with the Executive and Non-executive Directors. He was also thought to communicate well, be constructive and open at all times, encouraging all Board members to make a full contribution to discussions. References to his accessibility and openness to input from others were made and these are valued across the Board.

Delivery against the 2024 ambitions
The Board continued to focus on being a well-functioning Board and spent additional time on strategic matters, including with respect to the implementation of ETS24 and the continued delivery on CMD23, focusing on shareholder value and operating expenditure efficiencies. With respect to risk oversight, the Board continued to optimise the work of both the Board and the Audit and Risk Committee on risk-related matters.

Planned enhancements for 2025
The 2024 Board evaluation provided areas of focus or priorities for 2025, including: (i) CMD25 and longer-term strategy; (ii) continued Non-executive Director engagement with members of the EC outside the formal Board setting; and (iii) continued engagement with external speakers to bring diverse and external perspectives to the boardroom on key issues facing Shell. Other items identified which are already being progressed in 2025 include enhancement of Board skills and capabilities; further focus on risk appetite and risk mitigation; and continued improvement to pre-read materials.

Statement of compliance with the UK Corporate Governance Code

The Board confirms that, throughout the year, the Company has applied the principles, both in spirit and in form, and complied with the provisions set out in the current UK Corporate Governance Code issued by the Financial Reporting Council (FRC) in July 2018 (the "Code"), with the exception of Provision 5 noted below. In January 2024, the FRC published a new version of the UK Corporate Governance Code, which will apply to the 2025 Annual Report. A copy of the Code can be found on the FRC's website: frc.org.uk.

Shell's governance arrangements have been considered alongside the Code. The information set out in the Directors' Report, including the Board committee reports on pages 171-190, is intended to provide an explanation of how the Code's principles were applied practically throughout the year. We also provide clear and meaningful explanation below where we believe stakeholders may benefit from more specific information on a particular Code provision.

Workforce engagement (Provision 5)
The size and diversity of our employee base and wider workforce have complicated the feasibility of implementing any of the three specific workforce engagement methods recommended in the Code. The Board believes that its current approach to workforce engagement continues to be pragmatic and effective, particularly when considered against the required coverage needed for a global organisation, such as Shell. Elsewhere in this Annual Report, we explain how our people are essential to the successful delivery of the Shell strategy, and how the Board recognises the importance of understanding their views through engagement. During the year, the Board and individual Directors were able to visit our sites across the world, which helped the Board engage with parts of the workforce and gain insight into the work, culture and impact of Shell in communities. During these engagements, there were opportunities for the Board to speak with our stakeholders and obtain feedback. The Board also intends to keep the effectiveness of the engagements under review. Stakeholder engagement also continues to be enhanced in management reporting.

More information on the current approach and a description of the channels used by the Board, its committees and the Executive Committee are outlined in "Workforce engagement" on pages 167-168.

AGM voting (Provision 4)
At the 2024 AGM, 21.97% of shareholders who voted voted against a resolution proposed by the Board which related to the approach Shell was taking with regard to its energy transition strategy. Provision 4 of the Code requires certain actions to be undertaken if 20% or more of shareholders vote in a way which is different to what the Board recommended. There are three stages to these actions. First, explain when announcing the voting results what actions the Company intends to take to consult shareholders to understand the reasons behind the voting result. Shell included this explanation with its voting results, published on May 21, 2024. Second, an update on the engagement with shareholders should be published no later than six months after the shareholder meeting. This statement was added to the Shell website on November 1, 2024. Third, a final summary of the engagement and the actions taken should be included within the Annual Report. This information is provided on page 165.

Corporate governance requirements outside the UK
In addition to complying with applicable corporate governance requirements in the UK, the Company complies with the rules of Euronext Amsterdam and Dutch securities laws because of its listing on that exchange. The Company, likewise, adheres to US securities laws and the New York Stock Exchange (NYSE) rules and regulations because its securities are registered in the USA and listed on the NYSE.

Nomination and Succession Committee

Focus areas for 2024
- Non-executive Director and Executive Committee succession.
- In-depth Board Dynamics review, as part of annual Board and Committee evaluation, to accelerate effectiveness.
- Continued talent engagements with key staff and succession candidates.

Priorities for 2025
- Non-executive Director and Executive Committee succession.
- Continued talent engagements with key staff and succession candidates.
- Externally facilitated Board and committee evaluation.

Sir Andrew Mackenzie
Chair of the Nomination and Succession Committee

Committee membership and attendance for 2024

Sir Andrew Mackenzie

Dick Boer

Ann Godbehere

Committee member	Member since	Meetings attended	% of meetings attended
Sir Andrew Mackenzie (Chair of the Committee)	October 1, 2020	4/4	100%
Dick Boer	May 19, 2021	4/4	100%
Ann Godbehere	October 27, 2021	4/4	100%

Purpose

The Nomination and Succession Committee (the "NOMCO") leads the process for appointments to the Board and Senior Management [A] positions, ensures plans are in place for orderly, well-planned succession, and oversees the development of a diverse succession pipeline of candidates. It also reviews the Company's policy, targets and strategy on diversity, equity and inclusion (DE&I), and monitors the effectiveness of these initiatives. It makes recommendations to the Board on corporate governance guidelines, as referred to in the Chair's introduction.

[A] In this section of the report, "Senior Management" refers to the Executive Committee and the Company Secretary, as defined by the UK Corporate Governance Code.

Talent management and succession

The NOMCO is fully engaged with the end-to-end talent management and senior succession planning approach that is deployed within Shell. It plays a key role in senior succession and resourcing. Retaining in-depth knowledge of the individuals within the talent pipeline is a NOMCO priority. The NOMCO makes time to personally meet and engage with numerous individuals within the pipeline. The NOMCO's oversight and input extend from recruitment to leadership identification and from leadership development to leadership appointment, all of which are underpinned by clearly articulated talent priorities and a commitment to advancing DE&I across Shell.

The NOMCO manages Board and supports Senior Management succession under a structured, proactive methodology. The processes have clear and agreed selection principles for short-, medium- and long-term succession and are aligned with Shell's strategic priorities.

For Non-executive Director succession, the NOMCO continues to follow its Principles for the Strategic Composition of the Board, adding factors as they evolve. These principles include both quantitative and qualitative principles, considering:
- the overall aspired Board composition and diversity of age; gender; race; ethnicity; educational, social, geographical and professional backgrounds; skills; knowledge; and experience that align with the Company's strategy including among other criteria consideration of the skills and strengths needed for the energy transition; and
- the values, attitudes, and behaviours expected of Directors.

During the year, the Principles for the Strategic Composition of the Board were reviewed and updated. The NOMCO also focused on the future needs for the Board's composition, including size and tenure, skills and experience, and the DE&I requirements of the UK Listing Rules, FTSE Women Leaders and the Parker Review. The current size of the Board was considered to be appropriate, also taking account of Committee memberships. Greater flexibility around Non-executive tenure continues to be an area of focus. Although Shell does not publish its Principles for the Strategic Composition of the Board, its Board Diversity Policy (which was first published in March 2024) is available on the Company's website. This Policy highlights that Shell aims for a gender balance on the Board, with at least one senior Board position (Chair, CEO or CFO) held by a woman. In addition, Shell's target is to maintain the representation of both men and women at, or above, a minimum of 40% [B].We believe that this allows Shell to be truly representative of all genders and gender identities and provides flexibility during periods of change. Further, Shell aims to maintain or exceed having at least one Board member from a minority ethnic background. For more details on the progress against these targets see page 174.

[B] These targets align with those set by the FCA under the UK Listing Rules, and all such targets on Board diversity remain subject to applicable equalities legislation, including the Equality Act 2010 (as amended from time to time) and its provisions on discrimination.

See "Other regulatory and statutory information" on page 219.

For Senior Management succession, the selection principles include process-specific elements, such as a clear and proactive approach to identifying and developing succession candidates. The principles also outline the long-term structured nature of the succession planning process. There is also strong focus on ensuring that the principles reflect the leadership qualities required for future business success and that they advance the progress of diversity in all its forms.

Senior Management principles feature in the NOMCO's review of the succession plans which occurs in every committee meeting. Using the principles, the NOMCO implements any changes through a well-defined and diligent process with overall Board engagement. The NOMCO agrees on candidate profiles and meets prospective candidates well ahead of any selection decision being necessary. It also engages the Board early in the process to ensure all Directors have an opportunity to meet and assess prospective candidates. Consequently, some of the leaders with whom the NOMCO and Board engaged extensively in the past became or are about to become members of the Board (Wael Sawan and Sinead Gorman) or the Executive Committee (most recently, Andrew Smith, Machteld de Haan,Cederic Cremers and Peter Costello whose appointments are effective April 1, 2025).

During 2024, the NOMCO's annual in-depth look at the status and succession plans for Senior Management within Shell, along with the review of the talent pipeline in line with the business, was undertaken by the full Board. The Board reflected on the simplification of the senior leadership structure with clear accountabilities achieved in 2024 with a view to the further evolvement of the composition of the total workforce and of the organisation's culture as an enabler for performance.

Diversity of leadership

The NOMCO recognises that continuing to improve all types of diversity at each level of the Shell Group is crucial. Shell aims to be an inclusive workplace where everyone feels valued and respected and has a strong sense of belonging. The NOMCO's review of diversity objectives and strategies for the Shell Group as a whole also monitors the impact of diversity and inclusion initiatives.

In February 2021, Shell published its aspirations for DE&I under the Powering lives goal, with a focus on four areas of gender, race and ethnicity, LGBT+ and disability inclusion. For more details on the progress against our ambitions for women hired and women in Senior Leadership, see pages 117-118.

"Senior Leadership" is a Shell-specific measure based on compensation grade levels. This is different from what we are required to report under the Code, which is female representation in Senior Management and their direct reports, where the percentage is 32%.

Nationality diversity, such as Asian and American talent, continues to be managed in accordance with the business outlook and we have a strong focus on progressing race and ethnic minority representation.

In line with the recommendations from the 2023 Parker Review, Shell has reviewed its ambitions for ethnic minority representation at the Senior Management level and aims for 15% Senior Management positions [C] to be occupied by ethnic minority executives by December 2027. As at the end of 2024, 15% of Shell's Senior Management identifies as being from an ethnic minority group.

[C] Senior Management here refers to senior leadership based in the UK and is a Shell measure based on compensation grade levels. We have moved to this Shell definition of Senior Management for 2024 onwards to align with our self-identification data collection and processes.

Although the NOMCO monitors Shell's organisational DE&I strategies and initiatives, it also holds itself accountable for the Board's own diversity and inclusion. Back in 2020, the Board's diverse composition met the Hampton Alexander requirements (now FTSE Women Leaders) and, in 2024, it met the Parker Reviews' objectives by reflecting 42% women representation with three Directors from a minority ethnic background. Shell's Board diversity is aligned with the targets set by UK Listing Rules. The position of CFO is held by a woman and three Directors are from a minority ethnic background.

See "Powering lives" on pages 117-119 for more information on DE&I in Shell.

The People Strategy and diversity, equity and inclusion
Diversity continued to be a key area of focus during the year. In 2024, Shell published a new Board Diversity Policy further to a recommendation by the NOMCO. The policy is aligned to the requirements of the UK Corporate Governance Code and includes our targets for Board diversity, as well as complementing Shell's wider diversity policies and embracing Shell's values, Code of Conduct and sustainability goals. Currently, this policy is not applied to the individual Committees, although we strive to apply diverse representation across the Committees. DE&I across Committee membership remains an ongoing consideration. A copy of the Board Diversity Policy is available on our website, shell.com/investors/environmental-social-and-governance/board-of-directors.

In relation to Board director appointments and diversity, the NOMCO oversees the development of a diverse pipeline for succession to the Board and monitors that all Board appointments are subject to a formal, rigorous and transparent procedure and that such appointments are based on merit and objective criteria taking into account (among other things) factors such as diversity of gender, age, educational and professional background, social, ethnic and geographical background and cognitive and personal strengths.

To this end, the NOMCO is responsible for engaging an independent executive search consultant, who assists in preparing shortlists of candidates, co-ordinating interviews and seeking references. In accordance with the Board Diversity Policy, the NOMCO only engages with external search firms who are able to align with Shell's approach to DE&I in identifying suitable individuals from diverse pools of candidates.

Under the Board Diversity Policy, the Board commits to:
- Ensuring an inclusive environment: Through inclusive behaviours and practices, we aim to create an environment in which every Board member feels valued, respected and empowered to contribute fully.
- Ensuring support for External Best Practices: The Board endorses and supports external best practices, such as the FTSE Women Leaders Review, Parker Review and others, to maintain and enhance diversity within the Board.
- Ensuring that Board appointments are managed with rigour and transparency: Candidates are evaluated based on merit, skills, experience, qualifications, performance and business considerations, with due regard for diversity factors.
- Ensuring regular Board composition reviews: The Board regularly assesses the composition of the Board, including age, gender, race, ethnicity, educational, social, geographical and professional backgrounds, skills, knowledge and experience, making recommendations for necessary adjustments.

Shell has an inclusive Board environment, comprising individuals that are suitably qualified. They have the required skills, industry expertise, breadth of perspective and high-quality decision-making capabilities to support the strategy and overall direction of Shell.

See "The Board of Shell plc" on pages 152-156 for details about the skills and backgrounds of individual members.

From a gender perspective, the Board comprises five female directors and seven male directors, which equates to 42% female representation (2023: 42%, 2022: 55%). Two of the four main Board committees are chaired by a female director.

While the Board aspires to achieve gender parity, progress against diversity targets is sensitive to the size of the Board. In respect of other forms of diversity, three members of the Board self-identify as being from an ethnic minority background [D]. In accordance with the Board Diversity Policy, the Board firmly believes that diversity fosters a broader range of perspectives, resulting in improved Board effectiveness, decision-making and outcomes.

[D] Ethnic minority refers to an individual who self-identifies as Asian, Black, Mixed/multiple, or other ethnic minority group, in line with UK Office for National Statistics classifications

Committee activity

In addition to its considerations regarding succession, the NOMCO made recommendations on corporate governance guidelines, monitored compliance with corporate governance requirements and made recommendations on corporate governance-related disclosures.

The NOMCO continues to monitor and review this area, considering whether and how current Company governance matters should be strengthened. Further insight on some of the NOMCO's areas of consideration in 2024 is provided below.

	Topic of discussion/example of Committee activity
Succession [A]	
Recommendation	◦ Changes to the composition of the Board committees. ◦ Appointment of Company Secretary.
Oversight	◦ Shell diversity, equity and inclusion and the Board Diversity Policy.
Engagement	◦ Talent engagements.

	Topic of discussion/example of Committee activity
Talent overview and senior succession review	
Shell Senior Succession and Resourcing Review covering Executive Director and EC succession, EC direct reports, the senior executive group and the overall talent pipeline	◦ Enhanced insight on Shell talent and future leaders. ◦ Assurance of robust succession and contingency plans.

	Topic of discussion/example of Committee activity
Board membership and other appointments	
Directors' tenure, external commitments, conflicts of interest and succession planning	◦ Non-executive Director appointments and changes to committee membership.

	Topic of discussion/example of Committee activity
Governance	
Regulation, legislation and other governance-related guidance	◦ Reviewed its Terms of Reference, and the Terms of Reference for other Board committees and the Matters Reserved for the Board. ◦ Received corporate governance updates, including with respect to the UK Corporate Governance Code.
Shell plc matters	◦ Considered any potential conflicts of interest and the independence of the Non-executive Directors. ◦ Reviewed additional external appointments requested by Directors, with specific focus on the time allocated to all commitments. ◦ Determined the process for the 2024 Board Dynamics review and internal Board Evaluation (see page 169 for an overview of the process and the outcome of the evaluation).

[A] The NOMCO was assisted during 2024 by Russell Reynolds Associates ("Russell Reynolds") and, more recently, by Korn Ferry (UK) Limited ("Korn Ferry"), both of which are external global search companies whose main role was to propose suitable candidates. Neither Russell Reynolds nor Korn Ferry has any connection with the Company other than that of search consultants. The Chair does not participate in discussions regarding his own succession. Russell Reynolds and Korn Ferry are signatories to The Voluntary Code of Conduct for Executive Search Firms, which aims to improve board diversity.

Executive Committee succession

The NOMCO undertakes comprehensive engagement to understand who the candidates are for senior roles, what personally drives them and how they will ensure Shell achieves its strategic ambitions.

Succession for senior roles is planned well in advance and reviewed regularly. Succession planning is a crucial, ongoing consideration and not just an area of focus when an Executive Committee (EC) member change is anticipated. The Board oversees Shell's succession planning process in which selection is the final step of a rigorous, sophisticated and well-planned process.

For Executive Director and EC appointments, the NOMCO has set a structured process:
- Before any potential decision on resourcing, it explicitly describes the requirements of the role and the candidate profile.
- By working in a planned, consistent manner, last-minute surprises are avoided and well-considered decisions are made in line with evolving business requirements.
- It also plans for the unexpected and maintains a list of candidates capable of stepping into senior roles to provide cover if necessary.

The NOMCO spends time getting to know the candidates to ensure that the pipeline is robust, diverse and adaptive. The NOMCO ensures it has visibility of today's and tomorrow's leaders. Over the last few years, the NOMCO has met many leaders and had extensive engagements with each of them. Some of these leaders now sit on the EC, others were appointed to the Board (Wael Sawan and Sinead Gorman).

The NOMCO engages across the executive talent pipeline to ensure it interacts with and becomes familiar with talent at different levels of the organisation; for example, on a regular basis informal engagements are held with employees from a range of businesses, functions and backgrounds prior to a Board meeting. Not only does this engagement support senior succession, it also provides a helpful element of the NOMCO's workforce engagement.

The Board is proud that candidates for the most senior leadership roles have primarily come from within the business, demonstrating that the leadership development and succession process remains effective.

Sustainability Committee

Focus areas for 2024
- Shell's sustainability progress.
- Respecting nature.
- Powering lives.
- Emerging non-financial risks.

Priorities for 2025
- Shell's sustainability performance.
- Respecting nature.
- Powering lives.
- Emerging non-financial risks with a focus on nature and social elements.

Purpose

The roles and responsibilities of the Sustainability Committee (the "SUSCO") are set out in its Terms of Reference, which were last reviewed and revised in December 2024. A copy is available on shell.com.

The updated Terms of Reference revise the SUSCO's Purpose to assist the Board of Directors in fulfilling its responsibilities by reviewing the performance of Shell with respect to sustainability, reviewing and monitoring relevant emerging trends including regulatory developments in sustainability, and reviewing and monitoring the non-financial elements of Shell's strategy, with a focus on nature and social elements.

"The SUSCO focused on Shell's sustainability progress in 2024, with particular attention to Respecting nature and Powering lives."

Catherine J. Hughes
Chair of the Sustainability Committee

Committee membership and attendance for 2024

Catherine J. Hughes

Neil Carson OBE

Bram Schot

Jane Holl Lute

Leena Srivastava

Committee member	Member since	Meetings attended	% of meetings attended
Catherine J. Hughes (Chair)	November 1, 2017	4/4	100%
Neil Carson OBE	June 1, 2019	4/4	100%
Bram Schot	October 1, 2020	4/4	100%
Jane Holl Lute	May 24, 2022	4/4	100%
Leena Srivastava	March 13, 2023	4/4	100%

Overview

The SUSCO meets regularly to review performance on sustainability with focus on Respecting nature and Powering lives.

The SUSCO also reviews selected sustainability topics and matters of public concern and helps the Board review existing and emerging impacts, risks and opportunities including regulatory developments.

As directed by the Board, the SUSCO may also review environmental, social and governance (ESG) and safety matters in more detail.

The SUSCO also reviews and considers external stakeholder perspectives on sustainability issues of relevance to the Group's business.

In line with the strategic importance of the SUSCO's agenda, the Chair of the Board and the CFO attend committee meetings.

Activities

During 2024, the SUSCO reviewed the progress made on sustainability including progress on Respecting nature and Powering lives.

The sustainability topics and matters of public concern considered in particular depth by the committee included biodiversity, nature-based solutions and methane emissions.

The SUSCO provided input to Shell's annual reporting and disclosures on sustainability. The SUSCO Chair held meetings during the year with senior leaders to discuss specific topics.

Site visits

In 2024, members of the SUSCO visited Brazil, Qatar and Oman as part of Board site visits. These visits deepen directors' understanding of how the Company's strategy is being implemented. Members of the SUSCO give particular attention to sustainability topics during these visits. See Board activities on pages 161-164 for further information in relation to Board site visits.

Audit and Risk Committee Report

Dear Shareholders,
I am pleased to present our Audit and Risk Committee (the ARC) Report for 2024.

The ARC assists the Board in fulfilling its oversight responsibilities in areas such as the integrity of financial reporting, the effectiveness of risk management and internal controls, as well as the consideration of ethics and compliance matters. We are responsible for assessing the quality of the audit performed by, and the independence and objectivity of, the external auditor. The ARC also makes a recommendation to the Board on the appointment or reappointment of the external auditor. In addition, we oversee the work and quality of the internal audit function.

Our work programme over the course of a year focuses on a variety of matters that involve a high degree of judgement and/or are significant to Shell's Consolidated Financial Statements. We review with management the sources of estimation uncertainty and other key assumptions against the backdrop of economic and market uncertainty and volatility, climate risk and the energy transition and evolving stakeholder expectations. In addition, we consider the robustness of the risk and internal control framework, results of internal control testing performed throughout the year, and remediation activities.

"The primary role of the ARC is to assist the Board in fulfilling its oversight responsibilities in areas such as the integrity of financial reporting, the effectiveness of risk management and internal controls, as well as the consideration of ethics and compliance matters."

Ann Godbehere
Chair of the Audit and Risk Committee

Topics addressed in 2024 included: deferred taxes and tax exposures; the impact on tax balances and disclosures as a result of windfall and minimum taxes around the world; significant portfolio developments; litigation; impairment trigger assessments; impairment charges and reversals; accounting for complex contracts; dividend distribution capacity; and mark-to-market derivatives accounting, including the impact of volatile gas and power markets.

We received briefings from the Chief Internal Auditor on the outcomes of significant audits and notable control matters. We also received briefings from the Chief Internal Auditor and the Executive Vice President (EVP) Controller on the effectiveness of Shell's risk management and internal control system.

The impacts of climate change and the energy transition continue to touch on many aspects of the ARC's work, including the financial statement impacts. The ARC also considered sustainability-related disclosures required in accordance with the Corporate Sustainability Reporting Directive (CSRD).

The ARC, recognising the evolving nature of climate change risks and responses, concluded that climate change has been appropriately considered by management in key judgements and estimates and agreed with the disclosure made by management.

As noted in last year's report, during 2023, the tender process for the appointment of the external auditor was commenced, with a view to reaching a conclusion during 2024. We completed the process during 2024 and the ARC recommended to the Board that EY be re-appointed as the Company's external auditor in respect of the financial year ending December 31, 2026. Further information with respect to this process is set out on page 186.

During 2024, the ARC received updates on the implementation of the Shell Performance Framework. Focus topics for 2024 included Trading and Supply; CSRD implementation, Shell's Carbon Management Framework, regulatory developments, for example in relation to UK corporate governance reforms, fraud and sustainability reporting regulations; information risk management, including cyber security; and pensions.

As part of its oversight of compliance with applicable legal and regulatory requirements, including monitoring ethics and compliance risks, the ARC discussed with the Group Chief Ethics and Compliance Officer activities undertaken in the ethics and compliance programme related to compliance with data privacy laws and regulations and artificial intelligence (AI), and steps taken to manage those risks.

In 2024, members of the ARC visited Oman, Qatar and Brazil as part of Board site visits. These site visits deepen directors' understanding of risks and opportunities, as well as their understanding of how the Company's strategy is being implemented. See "Understanding and engaging with our stakeholders" for further information in relation to Board site visits.

On a final note, the ARC recognises the strong commitment and dedication of the financial and non-financial reporting teams and would like to thank them for all their efforts during 2024.

Ann Godbehere
Chair of the Audit and Risk Committee
March 25, 2025

Focus areas for 2024
- External audit tender.
- Information risk management, including cyber security.
- CSRD implementation.
- Regulatory developments, including corporate governance reforms, fraud and sustainability reporting regulations.
- Trading and Supply.
- Carbon Management Framework.
- Pensions.

Priorities for 2025
- Trading and Supply.
- Regulatory developments, including corporate governance reforms, fraud and sustainability reporting regulations.
- Information risk management, including cyber security.
- Pensions.
- Treasury.

Committee membership and attendance for 2024

Ann Godbehere

Dick Boer

Cyrus Taraporevala

Sir Charles Roxburgh

Catherine J. Hughes

During 2024, the members and meeting attendance of the ARC were as follows:

Committee member	Member since	Meetings attended	% of meetings attended
Ann Godbehere (Chair)	May 23, 2018	6/6	100%
Dick Boer	May 20, 2020	6/6	100%
Cyrus Taraporevala	March 2, 2023	6/6	100%
Sir Charles Roxburgh	March 13, 2023	6/6	100%
Catherine J. Hughes	May 23, 2023	6/6	100%

[A] In addition to the six meetings, as part of its activities in 2024, the ARC held additional meetings in relation to the external audit tender process.

All ARC members are financially literate, independent Non-executive Directors. In respect of the year ended December 31, 2024, for the purposes of the UK Corporate Governance Code, Ann Godbehere qualifies as: a person with "recent and relevant financial experience" and competence in accounting, and, for the purposes of US securities laws, an "audit committee financial expert".

The experience of the ARC members outlined on pages 152-156 demonstrates that the ARC as a whole has competence relevant to the sector in which Shell operates, and the necessary commercial, regulatory, financial and audit expertise required to fulfil its responsibilities. The ARC members have gained further knowledge and experience of the sector as a result of their Board membership and through various in-person and virtual site visits since their respective appointments.

The ARC invites the CFO, the Legal Director, the Chief Internal Auditor, the EVP Controller, the Vice President Group Appraisal and Reporting and Deputy Controller and the external auditor to attend each meeting. The CEO, the Chair of the Board and the Company Secretary may also attend ARC meetings. Other members of management attend when requested on specific topics or to provide input on more detailed technical matters that may arise. The ARC regularly holds private sessions separately with the Chief Internal Auditor and the external auditor without members of management present (except for the Legal Director who may attend). Outside of the formal ARC meetings, the Chair of the ARC meets regularly with each of the following: the CFO, the EVP Controller, the Chief Internal Auditor and the external auditor.

Committee remit

The roles and responsibilities of the ARC are set out in its Terms of Reference and are reviewed annually (last reviewed and updated in December 2024, a copy of which can be found on shell.com). The key responsibilities of the ARC include, but are not limited to:

Risk management and internal control
- assisting the Board in reviewing the emerging, principal and other significant risks facing the Group;
- monitoring the effectiveness of the risk management and internal control framework; and
- reviewing proposed related party transactions as described within the Terms of Reference.

Financial reporting
- reviewing the integrity of the financial statements, including annual reports, half-year reports and quarterly financial statements;
- reviewing the potential impacts on the consolidated financial statements of the implementation of the Company's strategy, climate change and the energy transition;
- advising the Board whether, in the ARC's view, the Annual Report taken as a whole is fair, balanced and understandable and provides the information necessary for shareholders to assess the Company's position and performance, business model and strategy;
- reviewing and discussing with management the appropriateness of judgements involving the application of accounting principles and disclosure rules;
- providing oversight in respect of material non-financial reporting disclosures with respect to corporate sustainability as applicable to the Company's annual reports, half-yearly reports and quarterly results releases;
- reviewing management's assessment of going concern and longer-term viability; and
- reviewing, in conjunction with management, the Company's policies with respect to earnings releases, financial and non-financial performance information and earnings guidance provided to investors and financial markets.

Compliance and governance
- reviewing the functioning of the Shell Global Helpline and reports arising from its operation; and
- overseeing compliance with applicable legal and regulatory requirements, including monitoring ethics and compliance risks.

Internal audit
- monitoring the qualifications, expertise, resources and independence of the internal audit function;
- approving the internal audit function's charter and the annual internal audit plan to ensure alignment with the key risks of the business;
- reviewing with the Chief Internal Auditor, the Company's management and the external auditors any significant matters arising from internal audits and assessing management's response to internal audit findings and control weaknesses as appropriate, including potential improvements and agreed actions; and
- assessing internal audit's performance and effectiveness each year.

External audit
- reviewing and monitoring the independence and objectivity of the external auditor;
- considering the annual external audit plan and approving related remuneration, including fees for audit and non-audit services;
- assessing the performance and effectiveness of the external auditor and the audit process, including an assessment of the quality of the audit; and
- recommending to the Board that it put to the Company's shareholders for approval at the Annual General Meeting (AGM) a resolution to appoint, reappoint, or remove the external auditor.

The ARC's responsibilities as set out in its Terms of Reference form the basis of the ARC's annual work plan, which is adjusted as appropriate throughout the year. In addition, the ARC annually identifies certain business and function areas to focus on during that year. The focus areas generally encompass aspects of risk management and internal control, financial reporting and compliance. The ARC is authorised to seek any information it requires from management and external parties and to investigate issues or concerns as it deems appropriate. The ARC may also obtain independent professional advice at the Company's expense. No such independent advice was requested in 2024.

The ARC keeps the Board informed of its activities and recommendations, and the Chair of the ARC provides an update to the Board after every ARC meeting. The ARC discusses with the Board if it is not satisfied with or believes that action or improvement is required concerning any aspect of financial reporting, risk management and internal control, compliance or audit-related activities.

Focus areas for 2024

The ARC met with senior leaders from various business and function areas to discuss the adequacy, design and operational effectiveness of risk management and controls related to the critical activities carried out by their respective business or function. The discussions included information on any enhancements to strengthen controls and how areas identified for improvement had been addressed; the monitoring of activities around key risks; and the steps being taken to identify new or emerging areas of risk.

In addition to the significant accounting and reporting considerations discussed on pages 181-182, the business and function areas reviewed by the ARC in 2024 included the following:
- Shell Performance Framework – the ARC received updates on progress with the implementation of the Shell Performance Framework (SPF) following its introduction in July 2023. The ARC discussed with management how the SPF is being applied in practice, including simplification of standards and cultural change from a performance, discipline and simplification perspective.
- Trading and Supply (T&S) – the ARC was briefed in relation to the T&S organisational mandate, governance and oversight committees, including in relation to financial risk management and stress-testing. The ARC also received an update regarding process, data and transformation systems.
- CSRD implementation – the ARC received regular updates in relation to the additional disclosures required by the CSRD, including the challenges with the reporting, the double materiality assessment and assurance requirements.
- Regulatory developments – the ARC was briefed regularly regarding regulatory developments and their implications for Shell, including for example, in the UK, in relation to the 2024 Corporate Governance Code and the Economic Crime and Corporate Transparency Act 2023. In addition to CSRD, the ARC was briefed in relation to other UK, US and EU sustainability reporting developments.
- Pensions – the ARC received an overview of the pensions landscape, including the defined benefit landscape, and was updated in relation to the transfer of certain US pensions liabilities which was completed in January 2024 and proposals in relation to the Dutch pension arrangements.

Site visits
During the year, members of the ARC visited Oman, Qatar and Brazil as part of Board site visits. See "Understanding and engaging with our stakeholders" for further information in relation to Board site visits.

Risk management and internal control

The ARC assists the Board in reviewing the emerging, principal and other significant risks facing the Group and in fulfilling its responsibilities in relation to risk management and internal control. In order to monitor the effectiveness of the procedures for internal control over financial reporting, compliance and operational matters, the ARC reviews reports on risks, controls and assurance, including the annual assessment of the system of risk management and internal control. The ARC also reviews management's evaluation of the internal control of financial reporting as required under Section 404 of the Sarbanes-Oxley Act (SOX 404). The ARC updated the Board on compliance with internal controls across the Shell Group and on any major matters for which action or improvement was recommended.

Activities performed	Frequency
Risk management and internal control	
Review the emerging, principal and other significant risks facing the Group.	P
Review the policies and practices and monitor the effectiveness relating to Shell's risk management and internal control system.	P
Receive briefings on regulatory developments.	P
Review management's SOX 404 assessment.	P
Discuss significant matters arising from completed internal audits with the Chief Internal Auditor, management and the external auditors.	Q
Assess management's responses to significant audit findings, recommendations and notable control weaknesses, including potential improvements and agreed actions.	P
Review significant legal matters with Shell's Legal Director.	P
Review the oil and gas reserves control framework.	A
Review Shell's information risk management.	P
Review Shell's tax function, key tax risks and Shell's approach to the evolving area of tax transparency.	P

A = Annually Q = Quarterly P = Periodically

Throughout the year, the ARC and management discuss Shell's overall approach to risk management and internal control, including compliance, tax and information risk management matters and the adequacy of disclosure controls and procedures. The ARC receives regular reports from the EVP Controller on the status of actions to address control weaknesses identified via business control incidents and the trends in other measures used to monitor the robustness of the risk management framework and internal control systems.

The ARC is also briefed on litigation and other matters (see Note 32 to the "Consolidated Financial Statements" on pages 308-310 and "Other regulatory and statutory information" on page 222).

For 2024, reviews included overall assessment of the risk landscape, including controls, exception reporting and SIAI observations as well as deep dives on specific areas. The ARC also regularly reviews the status of management's SOX 404 testing of controls and remediation actions to address any identified weaknesses. The ARC and management also discussed the steps taken to maintain an effective control environment and to further demonstrate "management in control" during the year.

It is important that the ARC monitors and learns about relevant evolving external developments in a timely fashion. Accordingly, the ARC is regularly briefed on developments in the legal, regulatory and financial reporting landscape that could affect the Company.

In 2024, the ARC dedicated time to the following topics:

- Tax risks – In addition to the regular review of Shell's tax provisions, the ARC received updates regarding developments in the external tax landscape, including windfall and minimum taxes and how different jurisdictions are seeking to incentivise investment when entering new markets and businesses. Management outlined for the ARC the steps being taken to manage tax risks and exposures arising from differing viewpoints on complex tax laws.
- Information risk management, including cyber security – The ARC was briefed in relation to Shell's information risk management framework, against the backdrop of a deteriorating external threat environment and evolving global regulatory landscape, including SEC cyber-security disclosure rules.
- Oil and gas reserves control framework – The ARC annually reviews the framework that supports Shell's internal reporting and external disclosures of oil and gas reserves. The ARC also reviews the processes and controls that prevent and/or mitigate the risks of non-compliance with regulatory reporting requirements. This annual review of Shell's oil and gas reserves control framework supports the ARC's review of Shell's reported proved oil and gas reserves discussed later in this report.

In addition to the above, the ARC also had quarterly discussions with the Chief Internal Auditor regarding the Company's risk management and internal control system, significant matters arising from the internal audit assurance programme and management's response to internal audit findings and control weaknesses, including potential improvements and agreed actions.

The ARC similarly holds discussions with EY, the external auditor, on a quarterly basis regarding how risks to audit quality are addressed, key accounting and audit judgements, results from audit procedures and management's response to any significant audit findings and any material communications between EY and management.

Financial reporting

The ARC receives comprehensive reports from management and the external auditor on quarterly, half-yearly and annual financial reporting, accounting policies and areas of significant judgements and other reporting matters.

Activities performed	Frequency
Financial reporting	
Review Shell's accounting policies and practices, including compliance with accounting and reporting standards.	Q
Assess the appropriateness of key judgements and the interpretation and application of accounting principles.	Q
Review the potential impact on the consolidated financial statements of the implementation of the Company's strategy, climate change and the energy transition.	P
Consider the integrity of the year-end financial statements and recommend to the Board whether the audited financial statements should be included in the annual and statutory reports.	A
Consider the integrity of the half-year report and quarterly financial statements.	Q
Review management's assessment of going concern and longer-term viability.	Q
Review Shell's policies with respect to earnings releases; financial and non-financial performance information and earnings guidance; and significant financial reporting matters.	Q
Review Shell's policies with respect to oil and gas reserves accounting and reporting including the outcome of the oil and gas reserves booking/debooking process.	A
Review the internal controls for financial reporting.	P
Advise the Board of the ARC's view on whether, taken as a whole, the Annual Report is fair, balanced and understandable and provides the information necessary for shareholders to assess Shell's position and performance, business model and strategy.	A

A = Annually Q = Quarterly P = Periodically

The ARC reviewed the Company's 2024 quarterly unaudited interim financial statements, half-year report, Annual Report and Form 20-F with management and the external auditor.

Shell uses alternative performance measures (APMs) to provide greater insights into its financial and operating results. The ARC regularly considers the APMs used in Shell's reporting, the reconciliations to IFRS financial statements and explanations for changes from the previous quarter and year. The ARC reviews the overall presentation of APMs with management to ensure they are not given undue prominence. The ARC discusses adjusting items with management including any changes to methodology.

The APMs disclosed by Shell are subject to the same internal control process as applied for other financial reporting.

Fair, balanced and understandable assessment

The ARC advised the Board that in its view the 2024 Annual Report including the financial statements for the year ended December 31, 2024, taken as a whole, is fair, balanced and understandable and provides the information necessary for shareholders to assess Shell's position and performance, business model and strategy (see "Other regulatory and statutory information" on page 223). To arrive at this conclusion, the ARC critically assessed drafts of the 2024 Annual Report including the financial statements and discussed with management the process undertaken to ensure that the relevant requirements were met. This process included: verifying that the contents of the 2024 Annual Report are consistent with the information shared with the Board during the year to support their assessment of Shell's position and performance; ensuring that consistent materiality thresholds are applied for favourable and unfavourable items; considering observations from the external auditor; and receiving assurance from the Executive Committee (EC).

Going concern and viability statement

The ARC reviewed the Directors' half-year and full-year statements with respect to the going concern basis of accounting. As noted in the viability statement, the Board reviews the strategic plan which takes account of longer-term forecasts and a wide range of outlooks. Key assumptions included: the impact of commodity prices; exchange rates; production levels, product demand and schedules of growth programmes; the financial framework; Shell's business portfolio developments including consideration of the impacts of various possible energy pathways and scenarios for changes in societal expectations in relation to climate change and Shell's commitment to the Paris Agreement goals; the project funnel to support future growth; and using severe but possible scenarios to run models of the financial impact if certain of Shell's principal risks materialised. The ARC considered the mitigating measures and sensitivities that management had applied to the modelling of scenarios when evaluating the viability statement. The ARC also considered the merits of extending the viability statement beyond a period of three years and concluded that the three-year period selected by the Board for the review of Shell's prospects, in line with the Operating Plan, remained appropriate. Particularly noting that assumptions do go well beyond the three-year period and do take into account climate change and energy transition, the ARC supported the going concern basis of accounting and the inclusion of Shell's viability statement in "Other regulatory and statutory information" on page 217. The ARC considered such statement to be in line with best practice guidance issued by the Financial Reporting Council (FRC).

Financial Reporting
continued

Significant accounting and reporting considerations

The ARC assessed the following significant accounting and reporting areas, including those related to Shell's 2024 Consolidated Financial Statements. The ARC was satisfied with how each of the areas below was addressed. As part of this assessment, the ARC received reports, requested and received clarifications from management, and sought assurance and received input from the internal and external auditors.

Issue	Committee activity and outcome
Climate change and energy transition	
Risks related to climate change and the energy transition are regularly monitored to ensure impacts are reflected within Shell's financial statements. The external landscape related to non-financial disclosures continues to evolve. In the absence of one global standard for climate-related reporting there are growing demands from various regulatory and voluntary bodies all with their own expectations for disclosures.	The ARC discussed with management key regulatory requirements including (but not limited to) the EU, ISSB, and SEC disclosure requirements and their implications or potential implications for Shell's external disclosures. The ARC reviewed Note 4 to the "Consolidated Financial Statements" summarising the key climate risk impacts on the Consolidated Financial Statements as well as the impairment sensitivity disclosures using price outlooks based on different climate change scenarios, including external scenarios. See Note 4 to the "Consolidated Financial Statements" on pages 255-265. The ARC was briefed on the non-financial reporting external landscape developments and regulatory requirements. In this connection, the ARC considered the potential implications required for Shell's external disclosures going forward. The ARC reviewed regulatory sustainability disclosures including the new CSRD disclosures within the "Sustainability Statements" section, and other non-financial disclosures as part of the Annual Report review. The ARC was also briefed on the EU Taxonomy disclosures included within "Sustainability Statements" section. Updates regarding climate change and energy transition risk factor have been included on pages 137-138.
Impairment and impairment reversals	
The carrying amount of an asset should be tested for impairment or impairment reversal whenever events or changes in circumstances indicate that the recoverable amount for that asset may have changed, for example if there is a change in the outlook for commodity prices or refining margin assumptions, or in the event of revisions to future activity plans and developments. On classification as held for sale, the carrying amounts of property, plant and equipment (PP&E) and intangible assets must also be reviewed.	The ARC reviewed the impairment assessments that were performed each quarter, and the methodology applied in conducting impairment assessments. The ARC considered continued volatility in global risk-free interest rates, alongside other input assumptions, in assessing market expectations of the expected rate of return on various assets for the purposes of impairment testing. This included reviewing the outcomes of periodic reassessments of the weighted average cost of capital during the year, including management's conclusion on the reasonability of the discount rate applied as at December 31, 2024. The ARC was satisfied the discount rate applied throughout the period was appropriate. The ARC considered the updated oil and gas price outlooks against market developments and benchmarks. The 2024 commodity price outlook was reassessed to determine whether revised price premises would result in a trigger for impairment or impairment reversal. Based on the analysis performed, no triggers were identified. The ARC also reviewed other circumstances that may indicate that the recoverable amount of assets have changed, such as those related to revision of future plans and developments, exploration and evaluation assets, held-for-sale classification for asset disposals and margin assumptions. The ARC also reviewed the outcomes of goodwill testing. See Notes 2, 11, 12 and 13 to the "Consolidated Financial Statements" on pages 245-255, 274-275, 275-276 and 277-279.
Gas and power markets and derivatives accounting	
External events during the year affected trading activities. The impacts on financial outcomes of Integrated Gas, and Renewables and Energy Solutions included, for example, significant derivatives movements.	The ARC reviewed Trading and Supply activities and developments, including analysis of the trading strategies employed, their impact on financial metrics, and the associated accounting treatment applied. The ARC reviewed the impacts of volatile gas and power markets including the impact on mark-to-market valuation of derivatives, income for the period and adjusted earnings, as well as the resulting cash flow movements. See Note 26 to the "Consolidated Financial Statements" on pages 298-304.

Financial Reporting
continued

Issue	Committee activity and outcome
Taxation	
The determination of tax assets and liabilities requires the application of judgement as to the ultimate outcome, which can change over time. In particular, uncertain tax treatments require management to assess the more-likely-than-not outcome, and the recognition of deferred tax assets requires management to make assumptions regarding future profitability. As a result, they are inherently uncertain.	The ARC considered the uncertain tax positions and discussed management's assumptions of future taxable profits. The ARC also evaluated the appropriateness of the recognition of deferred tax assets and tax liabilities. The ARC recognises that assumptions regarding future taxable profits are inherently uncertain because they involve assessing factors such as the potential impacts of climate change and the energy transition. The ARC deemed the assessments of uncertain tax exposures and the recognition of deferred tax assets and tax liabilities to be reasonable. On June 20, 2023, the UK substantively enacted the OECD Pillar Two Model Rules (Rules), effective as from January 1, 2024. The ARC has been updated on the implementation of the rules and the Pillar Two tax charges throughout the year. See Notes 2 and 23 to the "Consolidated Financial Statements" on pages 245-255 and 287-290.
Portfolio activities	
In implementing our strategy, several portfolio developments occurred in 2024.	The ARC discussed the accounting implications of these developments and the recognition of: (i) decommissioning and restoration provisions; (ii) deferred tax balances; (iii) impairment; and (iv) assets held for sale. The ARC also considered complex accounting treatments arising from acquisitions and divestments, including the proposed sale of Shell Energy and Chemicals Park Singapore and the recognition of UK North Sea assets as held for sale at December 31, 2024. See Notes 2 and 25 to the "Consolidated Financial Statements" on pages 245-255 and 297.
Provisions, contingent liabilities and disclosures	
Provisions, including decommissioning and restoration provisions, are one of the main components of the balance sheet liabilities. The quantification of these provisions requires judgements on input parameters which include, but are not limited to, discount rates and estimated future decommissioning and restoration costs. Contingent liabilities, arising from uncertain future events, are assessed for recognition or disclosure in line with reporting standards.	The ARC reviewed the input parameter assumptions and judgements used in arriving at the decommissioning and restoration provisions. The discount rate is reviewed regularly and the ARC considered the extent to which the rate applied remained appropriate in the context of volatile US Treasury yields. The ARC was satisfied that the rate applied remained appropriate as at December 31, 2024. The ARC reviewed provisions, contingent liabilities and disclosures related to litigation, based on quarterly updates, for inclusion in the quarterly unaudited interim financial statements, half-year report, Annual Report and Form 20-F. The ARC also reviewed other provisions. The ARC has continued to receive updates on the withdrawal from Russian oil and gas activities throughout 2024 including implications for the financial statements.
Retirement benefit obligations	
Retirement benefits are an important component of both assets and liabilities on the balance sheet. The quantification of these assets and liabilities requires judgements on input parameters which include, but are not limited to, actuarial assumptions and discount rates.	The ARC reviewed the management of risks in relation to retirement benefits in 2024, including financial, operational and regulatory developments. The ARC reviewed the key assumptions (including discount rates and inflation) and sensitivities as part of the Annual Report review and the enhanced disclosures made in this Report. The ARC also considered the accounting treatment for complex retirement benefit transactions, including the buy-out of pension liabilities in the USA and anticipated changes arising from the Future of Pensions Act in the Netherlands. See Note 24 to the "Consolidated Financial Statements" on pages 290-296.
Other matters	
Other significant accounting and reporting matters assessed.	The ARC considered segmentation requirements under IFRS 8 following the change announced to the Executive committee. The ARC also reviewed: the year-end reported proved oil and gas reserves, including management judgements and adjustments made to reflect changes in geological, technical, contractual and economic information (including yearly average price assumptions) and the effectiveness of financial controls.

Compliance and governance

Activities performed	Frequency
Compliance and governance	
Monitor the receipt, retention, investigation and follow-up actions of complaints received, including those from the Shell Global Helpline.	P
Review with the Chief Ethics and Compliance Officer the implementation and effectiveness of the ethics and compliance programme and function.	A
Consider compliance with applicable external legal and regulatory requirements.	P
Perform an evaluation of the ARC's performance and effectiveness and report the results to the Board.	A
Review and, if required, update the ARC's Terms of Reference.	A
Review the Chief Financial Officer's significant business and investment transactions for potential conflicts or related party transactions.	A
Assess the Chief Financial Officer's performance.	A

A = Annually Q = Quarterly P = Periodically

Ethics and compliance

In 2024, the ARC received an update from the Chief Ethics and Compliance Officer on how a range of macro factors and external trends and developments were affecting conduct risk at Shell. The Chief Ethics and Compliance Officer summarised the specific emerging ethics and compliance risks, with a particular focus on trade compliance and data privacy, and management's actions to manage and mitigate them. The Chief Ethics and Compliance Officer briefed the ARC on communications to staff from both senior leaders and mid-level management reinforcing the importance of adherence to and affirming Shell's commitment to the Ethics and Compliance framework and Code of Conduct throughout the year.

As part of the overall assessment of the system of risk management and internal control, the ARC discussed with the Chief Ethics and Compliance Officer their annual report on compliance matters. The report included an overview of the effectiveness of the Shell ethics and compliance programme in managing ethics and compliance risk in Shell's business activities, regulatory developments and compliance activities. The ARC also reviewed investigations of cases involving ethics and compliance concerns. The ARC discussed management's findings in such cases to satisfy itself that a rigorous process had been followed, with appropriate disciplinary action being taken where necessary, and that management had embedded learnings into Shell's systems and controls.

Whistleblowing investigations

The ARC is responsible for establishing and monitoring the implementation of procedures for the receipt, retention, investigation and follow-up actions of complaints received, including those from the Shell Global Helpline. The ARC reviewed whistleblowing reports and internal audit reports and considered management's responses to the findings in these reports. In 2024, 2,025 allegations and enquiries were made through the Shell Global Helpline (2023: 2,134), of which approximately 39% were submitted anonymously (2023: 41%). In 2024, a total of 555 investigations were closed (2023: 470), of which 62% were found substantiated (2023: 54%) and were highest in the areas involving harassment, information and records management, conflicts of interest and protection of assets.

Regulatory developments

The ARC was briefed on regulatory developments in areas including: (i) sustainability and climate-related disclosures; (ii) accounting and reporting developments; (iii) environmental liabilities; (iv) treasury activities; and (v) the 2024 UK Corporate Governance Code.

ARC annual evaluation

The ARC undertakes an annual evaluation of its performance and effectiveness. As in 2023, in 2024 the Company Secretary facilitated the ARC's performance evaluation. Each ARC member responded to a confidential anonymised questionnaire about the ARC's performance covering questions on: the management of the ARC in areas such as the annual cycle of work and the agenda for meetings; the quality of the information provided to the ARC; the effectiveness of the ARC's oversight in areas such as financial reporting, risk management policies and practices and internal controls, and the work of internal and external audit; rating the ARC's performance in reviewing and assessing significant accounting/reporting issues; and how to improve the ARC's performance. The ARC considered that there had been significant progress on the feedback from the 2023 evaluation, including with respect to risk management and presentation; structure of internal audit updates and further enhancement of pre-read for ARC meetings. See also the Board evaluation section on page 169. Two themes from the 2024 evaluation process were identified as areas of focus for 2025, including further focus on litigation risk and Trading and Supply risk in a more challenging environment and continued enhancement of pre-read for ARC meetings. The ARC concluded that its performance in 2024 had been effective and that it had fulfilled its role in accordance with its Terms of Reference.

In preparing its work plan for 2025, the ARC has included the following focus areas in addition to the standing items: Trading and Supply; regulatory developments, including corporate governance reforms, fraud and sustainability reporting regulations; information risk management, including cyber security; Pensions and Treasury.

Internal Audit

Activities performed	Frequency
Internal Audit	
Evaluate the quality, efficiency and effectiveness of the internal audit function including the competence, qualifications, expertise, compensation and budget.	A
Review and approve the internal audit function's remit, charter and audit plan.	A
Assess the performance of the Chief Internal Auditor.	A

A = Annually Q = Quarterly P = Periodically

Each quarter, the ARC discusses with the Chief Internal Auditor the Company's risk management and internal control system, any significant matters arising from the internal audit assurance programme and management's response to significant audit findings and notable control weaknesses, including planned improvements and agreed actions. In 2024, the Chief Internal Auditor's reports were developed with the use of artificial intelligence (AI). The ARC also holds private sessions separately with the Chief Internal Auditor without members of management, except for the Legal Director, who may attend. Outside of the formal ARC meetings, the Chair of the ARC meets regularly with the Chief Internal Auditor.

Internal audit remit

The internal audit function is an independent assurance function which supports Shell's continuous efforts to improve its overall control framework. The internal audit function contributes to the maintenance of a systematic and disciplined approach to evaluate and improve the design and effectiveness of Shell's risk management, and control and governance processes. The primary role of the internal audit function's assurance and investigation activities is to safeguard value by protecting Shell's assets, reputation and sustainability in relation to the organisation's defined goals and objectives.

The ARC defines the responsibility and scope of the internal audit function and approves its annual plan. The Chief Internal Auditor reports functionally to the Chair of the ARC and administratively to the Chief Financial Officer. The Chair of the ARC approves, in consultation with the Chief Financial Officer, all decisions regarding the performance evaluation, appointment or removal of the Chief Internal Auditor. A new Chief Internal Auditor was appointed with effect from March 2025.

Annual internal audit plan and assessment of internal audit's effectiveness

The ARC considered and approved the internal audit function's annual audit plan, including these focus areas for 2024:

- People – talent and capability (professional audit development and technical capabilities).
- Operational excellence – further enhance the planning, execution and reporting processes.
- Competitiveness – increase value by tailoring its structure and targeting critical risks areas.
- Innovative technology – further leveraging innovation and new technologies, such as AI and data analytics.

The Chief Internal Auditor updated the ARC quarterly on the approved 2024 internal audit plan and discussed whether the plan remained fit for purpose in addressing the most critical areas of risk. The ARC assessed the performance of the internal audit function as effective. The ARC also assessed the performance of the Chief Internal Auditor as effective.

The Chief Internal Auditor periodically assesses whether the purpose, authority and responsibilities of the internal audit function continue to enable it to accomplish its objectives. The results of this periodic assessment are communicated to the EC and the ARC. The Chief Internal Auditor also confirms to the ARC the continued validity of the charter of the internal audit function or puts forward proposals for updates to it. The Chief Internal Auditor maintains an internal quality assurance and improvement programme, including an annual assessment of the effectiveness and efficiency of the internal audit function's activities and evaluations of conformance with the standards of the Chartered Institute of Internal Auditors (CIIA). The Chief Internal Auditor discusses the results of this annual assessment with the EC and the ARC. The Chief Internal Auditor also provided the ARC with an update on the status of implementation of the Institute of Internal Auditors new Global Internal Audit Standards which took effect on January 9, 2025, and noted the steps taken to meet the intent of these new standards.

At least every five years, the effectiveness and quality of the internal audit function are independently assessed externally, and the Chief Internal Auditor reviews the report with the EC and the ARC. An independent assessment of the internal audit was conducted at the end of 2022. The 2022 assessment confirmed that the internal audit conformed with the CIIA standards and the 2020 Internal Audit code of practice and identified some opportunities for further improvement. The next external assessment is planned to take place in 2027.

External Auditor

Activities performed	Frequency
External Audit	
Review and approve the engagement letter for the external auditor's annual audit of the Company's consolidated and parent company financial statements.	A
Approve the remuneration for audit and non-audit services, including pre-approval of permissible non-audit services.	Q
Consider the annual external audit plan and monitor the execution and results of the audit.	P
Monitor the qualifications, expertise, resources and independence of the external auditor.	A
Review the Company's representation letter prior to signing by management.	P
Assess the performance, objectivity and effectiveness of the external auditor, the audit process, the quality of the audit, the external auditor's handling of key judgements and the external auditor's response to questions from the ARC.	P
Recommend to the Board that the reappointment of the external auditor be put to the Company's shareholders for approval at the AGM.	A

A = Annually Q = Quarterly P = Periodically

Annual external audit plan and assessment of external audit's effectiveness

EY reviewed with the ARC its audit strategy, scope and plan for the 2024 audit, highlighting areas which would receive special consideration. In particular, the ARC and EY discussed how the audit would take into consideration risks associated with:

- Trading and Supply complexity;
- Revenue recognition fraud risk (unauthorised trading and management override);
- Climate change and the energy transition;
- Oil and gas reserves;
- Impairment assessments;
- Litigation;
- Decommissioning and restoration obligations;
- Accounting for divestments;
- Pensions; and
- Taxation.

EY defines significant audit risks as those areas where there is a higher likelihood of a material error and which therefore require special audit attention. In EY's view, the significant audit risks are Trading and Supply complexity and the risk of unauthorised trading or management override.

The ARC considered the annual audit plan, which included assessing whether the planned materiality levels and proposed resources to execute the audit plan were consistent with the scope of the audit.

EY regularly updated the ARC on the status of its procedures and preliminary findings, providing an opportunity for the ARC to monitor the execution and results of the audit. The ARC and EY discussed how risks to audit quality were addressed, key accounting and audit judgements, material communications between EY and management and any issues arising from them. EY also reviewed with the ARC its risk assessments, materiality, scope and observations and conclusions in relation to Shell's CSRD disclosures.

Quarterly, the ARC meets privately with EY representatives without management (except for the Legal Director who may attend) being present in order to encourage open and transparent feedback from both parties. In addition, the Chair of the ARC meets separately with the external auditor on a regular basis.

As part of its oversight of the external auditor, the ARC annually assesses the performance and effectiveness of the external auditor and the audit process. This includes assessing the quality of the audit, how the auditor handled key judgements, and the auditor's response to the ARC's questions. The assessment also involves the ARC evaluating the objectivity and independence of EY and the quality and effectiveness of the external audit process.

The ARC's evaluation of the performance and effectiveness of the external auditor and the audit process includes the following key criteria:

- professionalism, competence, integrity and objectivity during the audit, including handling of areas involving judgement and estimates;
- EY's quality assurance procedures and internal quality control procedures;
- audit quality priorities and actions taken as part of maintaining a sustainable audit quality programme;
- constructive challenge of management and key judgements;
- efficiency, covering aspects such as service level and innovation in the audit process, use of data analytical and digital audit tools, and opportunities for improvement;
- quality of the audit team's leadership;
- the most recent EY Transparency Report;
- thought leadership and actions, especially in the areas of climate change; and
- compliance with relevant legislative, regulatory and professional requirements.

In addition to reflecting on its own experiences, including interactions with the external auditor throughout the year, the ARC considered and discussed the results of management's internal survey relating to EY's performance over the financial year 2024, which reflected a broadly comparable performance to 2023 and the views and recommendations from management and the Chief Internal Auditor.

As part of the current assessment of effectiveness, the ARC has taken into consideration the guidance issued by the FRC, including the guidance on oversight of the external audit set out in "Audit Committees and the External Audit: Minimum Standard".

Taking into account the above, the ARC is satisfied that EY continued to provide a high-quality and effective audit in its ninth year as auditor and maintained its objectivity, integrity and impartiality. As required under UK and US auditing standards, the ARC received a letter on independence-related matters from EY. EY also informed the ARC in writing of any significant relationships and matters that may reasonably be thought to affect its objectivity and independence. The ARC and EY discussed such relationships and matters and determined that they did not impair EY's objectivity, integrity and impartiality.

External Auditor
continued

Audit Committees and the External Audit: Minimum Standard

In May 2023, the FRC published "Audit Committees and the External Audit: Minimum Standard". This Audit and Risk Committee Report describes how the ARC has complied, to the extent applicable, with the provisions of the Minimum Standard during the year (in particular the "External Auditor" section of this report). There were no shareholder requests for certain matters to be covered in the audit during the year and there were no regulatory inspections of the quality of the Company's audit. An explanation of the Group's accounting policies is provided on pages 245-255.

Reappointment 2025

The ARC is responsible for considering whether there should be a rotation of the independent registered public accounting firm in order to ensure continuing auditor quality and/or independence, including consideration of the advisability and potential impact of conducting a tender process for the appointment of a different independent public accounting firm. The ARC is also responsible for making a recommendation to the Board, for it to put to the Company's shareholders for approval in the General Meeting, on the appointment, reappointment, or removal of the external auditor.

At the AGM in May 2024, shareholders approved a resolution to reappoint EY as external auditor until the conclusion of the next AGM. EY was first appointed at the AGM in May 2016 after a competitive tender process. The lead audit partner, Gary Donald, has been in post since the start of the 2021 audit. Under UK legal requirements, the Company may retain EY as its external auditor for 20 years (see External audit tender below). For the 2024 financial year, the Company has complied with The Statutory Audit Services for Large Companies Market Investigation (Mandatory Use of Competitive Tender Processes and Audit Committee Responsibilities) Order 2014.

In its oversight of the external audit, the ARC considered whether it would be appropriate to conduct an audit tender in respect of the 2025 audit.

The ARC reflected on:

- its continued satisfaction with the quality and independence of EY's audit;
- any new external auditor would need a transition period to develop sufficient understanding of the business given Shell's size and complexity;
- frequent changes of external auditor would be inefficient and could lead to increased risk and the loss of cumulative knowledge;
- a change in auditor would be expected to have a significant impact on Shell, including on the Finance function; and
- any change in auditor should be scheduled to limit operational disruption.

The ARC also considered EY's leadership and activities in the area of climate change.

After due consideration the ARC determined that it would not be appropriate to re-tender for the 2025 external audit at this time. The ARC has recommended to the Board that at the 2025 AGM the Board should propose that EY be reappointed as the external auditor of the Company for the year ending December 31, 2025. The ARC's recommendation is free from third-party influence and there are no contractual obligations that restrict the ARC's ability to make such a recommendation.

External audit tender

The ARC acknowledges the UK legal requirements relating to mandatory audit rotation and audit tendering (with a requirement to undertake a formal process after ten years). As EY was appointed in 2016, the Company was required to tender for the audit no later than the financial year commencing January 1, 2026. The tender process, led by the ARC, was commenced during 2023 and completed in 2024. The ARC believes that this timeline for the re-tender was in the best interests of shareholders in order to provide enough time for an orderly transition in the event that a new audit firm was selected. In conducting the tender process, the ARC considered the guidance on tendering set out in the FRC's "Audit Committees and the External Audit: Minimum Standard". All members of the ARC were involved throughout the external audit tender process.

Selection criteria

To enable an objective selection, weighted selection criteria were endorsed by the ARC in advance, with the choice of auditor being based on quality, including independence, challenge and technical competence and not price or perceived cultural fit. Minimum requirements which had to be met were independence; ethics and compliance; investigations by regulators; and legal terms and conditions. Whilst the audit fee was considered as part of the criteria, it was not a decisive factor, with the commercial scoping assessed subsequent to and separately from the quality assessment.

Selection process

The ARC gave careful consideration to the potential candidate firms which included UK challenger firms with a "public interest entity" auditor registration. A request for information (RFI) was submitted to six shortlisted firms in November 2023.

Following evaluation of the responses to the RFI, as well as the ARC having met in February 2024 with the proposed lead partners from firms which responded positively to the RFI, the ARC chose candidate firms for the next stage. This decision was based on quality, team and relevant experience for a company the size, scale and complexity as Shell.

External Auditor
continued

At its meeting in March 2024, the ARC discussed and endorsed the selection criteria and weighting for the audit tender. A Request for Proposal was issued to candidate firms in May 2024, followed by a series of management information sessions. The candidate firms had access to a data room, management across the organisation and visited various locations. The ARC met with representatives from the candidate firms in July 2024 to address any queries which the firms wished to raise and provide an opportunity for the ARC to raise any queries.

In September 2024, final proposals were submitted by the candidate firms. To support the ARC, scoring was performed on all criteria by a steering committee headed by the VP Group Appraisal and Reporting and Deputy Controller and comprising of (E)VPs of businesses and functions. The ARC received input from management, including on the scoring criteria, ahead of final meetings between the ARC and the candidate firms in December 2024. As part of the process, public reports published by the FRC and other regulators were also considered.

ARC Recommendation
Following the meetings and review of each of the candidate firms' proposals and presentations, the ARC made its selection on the basis of its assessment of the abilities of each of the candidate firms. At the Board meeting in December 2024, the ARC recommended two possible audit firm options to the Board, with the ARC's preference to appoint EY, and supporting justifications. The ARC's recommendation was accepted by the Board and a resolution proposing the appointment of EY as the external auditor for the financial year 2026 will be put forward to the shareholders for approval at the 2026 AGM.

Non-audit services
The ARC maintains an auditor independence policy (AIP) in respect of the provision of services by the external auditor. Under the AIP, the ARC will only approve services to be carried out by the external auditor or its affiliates where such services do not present a conflict of interest risk in fact or in appearance. The ARC regularly reviews this policy for necessary changes in response to changes in related standards and regulatory requirements.

This policy is designed to safeguard auditor objectivity and independence. It addresses the provision of audit services, audit-related services and other non-audit services and stipulates which services require specific prior approval by the ARC.

The policy also defines prohibited services in line with applicable rules and regulations. Our external auditors are not allowed to provide prohibited services due to independence concerns. For certain non-prohibited services, because of the knowledge and experience of the external auditor and/or for reasons of confidentiality, it may be more efficient or prudent for the external auditor to provide such services.

The ARC reviews quarterly reports from management on the audit and non-audit services reported in accordance with the policy or for which specific prior approval from the ARC is being sought. Under the AIP, no prior approval by the ARC is required for any additional audit service contract not individually exceeding $500,000. All non-audit services where the fee for an individual contract exceeds $100,000, including audit-related services, require individual prior approval by the ARC. For audit or non-audit service contracts that do not exceed the relevant threshold, the matter is approved by management by delegated authority from the ARC and is subsequently presented for approval by the ARC. The ARC is mindful of the overall proportion of fees for audit and non-audit services in determining whether to approve such services.

The scope of the non-audit services contracted with the external auditor in 2024 consisted mainly of interim reviews and other audit-related assurance services. The associated compensation for these audit-related services and other non-audit services amounted to 5% and 5%, respectively, of the external auditor's audit and audit-related remuneration.

Fees
After due consideration, the ARC approved the auditor's remuneration, satisfying itself that the level of fees payable in respect of the audit and non-audit services provided was appropriate and that an effective, high-quality audit could be conducted for such fees.

See Note 35 to the "Consolidated Financial Statements" on page 312 for details of the auditor's remuneration.

Directors' Remuneration Report

This report

The Directors' Remuneration Report for 2024 has been prepared in accordance with relevant UK corporate governance and legal requirements, in particular Schedule 8 of The Large and Medium-sized Companies and Groups (Accounts and Reports) Regulations 2008 (as amended). The Board has approved this report.

As in previous years, this report is split into three sections: Chair's letter, Annual Report on Remuneration and Directors' Remuneration Policy (Policy). The Policy was last approved by shareholders at the 2023 AGM with 94.6% support. No changes are being proposed to the Policy this year and it is reproduced in full on pages 208-215 for ease of reference, and to provide context to the decisions taken by the Remuneration Committee (REMCO) during the year.

"2024 saw a sharpened focus on performance, discipline and simplification."

Neil Carson
Chair of the Remuneration Committee

Dear Shareholders,

Almost two years ago, at Capital Markets Day 2023 (CMD23), we set out how we will deliver more value with less emissions through our guiding principles of performance, discipline and simplification. In 2024, Shell delivered another set of strong financial results, with income of $16.5 billion, cash flow from operations (CFFO) of $54.7 billion, our second best year on record, and free cash flow* (FCF) of $39.5 billion. These results have enabled us to deliver consistent distributions to shareholders, while also continuing to strengthen our financial resilience. We set four financial targets at CMD23, and have made progress against each of them, including reducing structural costs* by $3.1 billion since 2022 and delivering total shareholder distributions* of 41% of CFFO for the year, at the upper end of the 30-40% of CFFO range set out at CMD23.

Strong operational performance across our portfolio underpinned our financial results. In Integrated Gas and Upstream, performance has increased year-on-year. At Prelude and QGC in Australia, we achieved record availability, resulting in our highest ever production. In Chemicals, utilisation improved thanks to the ramp-up of operations at Shell Polymers Monaca in the USA. In Marketing, we achieved the strongest annual Adjusted Earnings* since 2020 at $3.9 billion.

We have continued to grow our LNG portfolio and made good progress against the commitment to bring projects online with a total peak production of more than 500 thousand barrels of oil equivalent a day by 2025. We have also focused on high-grading our mobility network, increased our margins in lubricants and, when it comes to power generation, focused on areas where we have a competitive advantage.

At Shell, safety is extremely important and we continually work to keep our people safe. I am saddened by the tragic incidents that occurred at Shell-operated ventures in 2024. One person lost their life in the Netherlands in 2024 and another in India in 2025, following an incident in 2024. In late 2023, an incident occurred in Nigeria which resulted in a fatality in early 2024. The REMCO agreed this would be assessed as part of 2024's reflections on safety. The REMCO reflected on all three tragic incidents and Shell's broader safety performance, as it always does, when it determined the final pay outcomes for 2024, and applied downward discretion to the annual bonus outcome.

* Non-GAAP measure (see page 445).

2024 remuneration outcomes

2024 annual bonus

The overall mathematical outcome of the annual bonus scorecard was above target at 1.66, adjusted to 1.64 to reflect a delayed tax payment due to a third-party error. After careful consideration of the factors leading to the tragic fatalities in respect of the year and reflection on Shell's overall performance in 2024, including safety performance, the REMCO used downward discretion to determine a final bonus outcome for Executive Directors of 1.61. Further information is on page 194.

See pages 193-195 for the complete scorecard with all targets, ranges and weightings, and a detailed discussion of performance against targets.

Vesting of the 2022 LTIP awards

Overall, the mathematical outcome of the Long-term Incentive Plan (LTIP) was 136% of target. The REMCO was satisfied that no windfall gain had arisen. The REMCO also believes the vesting outcome to be representative of Shell's performance over the period.

See page 196 for full details of LTIP targets and weightings, and a discussion of performance against targets.

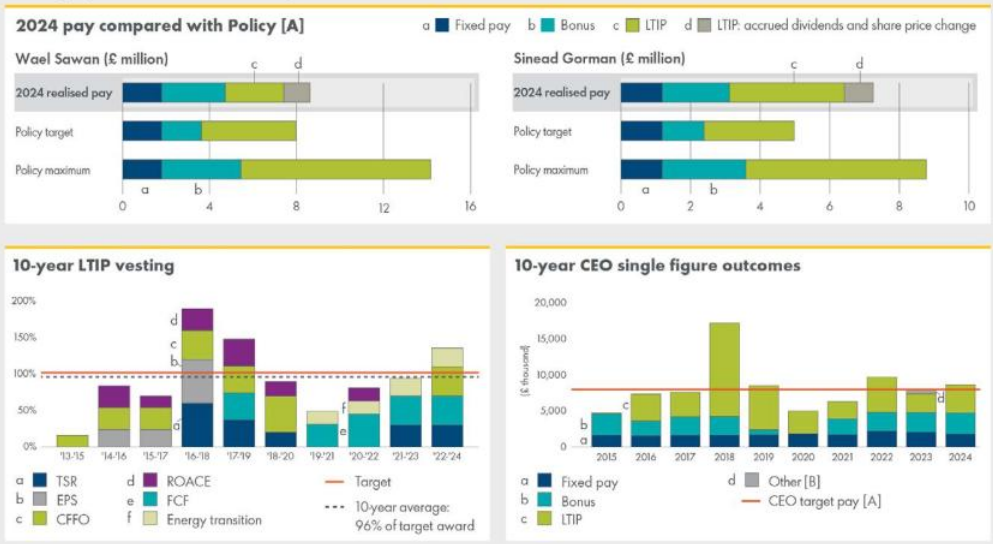
Finalising the 2024 pay outcomes

In finalising pay outcomes, the REMCO considered Shell's wider performance and context during 2024 and over the LTIP performance period, paying particular attention to:

- The strong financial performance in 2024, with CFFO of $54.7 billion and FCF* of $39.5 billion, which has enabled Shell to invest in its businesses, reduce debt and enhance shareholder distributions.
- The shareholder experience, including cash dividends of $8.7 billion and share repurchases of $13.9 billion in 2024, resulting in total shareholder distributions* of $22.6 billion for the year and $71.4 billion over the LTIP performance period (2022-2024), and absolute and relative total shareholder return (TSR) performance over the same periods.
- Shell's performance beyond the formulaic outcomes of the variable pay structures, including safety (and fatalities), reputation, ethics and compliance, and feedback from the Audit and Risk Committee (ARC) and the Sustainability Committee (SUSCO).
- Shareholders' views on remuneration matters, as shared with the REMCO during engagements in March 2024, including positive feedback on the safety framework.
- The employee experience, where the REMCO noted the above-target vesting outcome for 2024 under the Performance Share Plan (PSP), used to make discretionary share awards below Senior Executive level and the average employee salary increases.
- Comparisons between the 2024 outcomes and historical remuneration levels.
- The alignment of the 10-year average outcomes of the annual bonus scorecard (1.13) and LTIP (96% of target) to the target level, demonstrating the effective design of the structures and the integrity of the target-setting process.

This resulted in a single figure outcome of £8.6 million for the CEO and £7.3 million for the CFO. The REMCO was satisfied that the shareholder-approved Remuneration Policy had operated as intended, and these outcomes were appropriate in the context of Company performance and the target pay opportunity.

2024 pay outcomes summary



[A] Policy target and maximum based on the shareholder-approved 2023 Remuneration Policy in respect of the annual bonus and the LTIP. Salary, pension and benefits are based on latest data.
[B] Incremental remuneration in respect of 2022 for services as CEO Designate, in anticipation of becoming CEO in 2023.
* Non-GAAP measure (see page 445).

2025 remuneration

2025 salaries

Effective January 1, 2025, Wael Sawan and Sinead Gorman received a salary increase of 5.5%, and their salaries for 2025 are £1,535,000 and £1,014,000, respectively. In reviewing their salaries, the REMCO considered carefully the external environment, including the increases provided to Shell's workforce in the key markets of the UK (5.5%), the USA (3.0%) and the Netherlands (3.6%). The Executive Directors' increases for 2025 were positioned in line with the average UK increase. The REMCO also recognised the multiplier effect on total remuneration.

2025 annual bonus

The REMCO is satisfied that the current mix of financial and non-financial measures remains well aligned with Shell's strategic and operational priorities. No change is proposed for 2025.

2025 Performance Share Award performance conditions

From 2025, performance-related long-term incentive awards under the Shell Share Plan will be referred to as Performance Share Awards (PSA). Other than the name, the terms and conditions of the awards remain unchanged. The performance conditions and weightings will be unchanged for the 2025 awards. The measures will be cash generation, TSR, organic free cash flow (OFCF) and "Shell's journey in the energy transition", and they will be weighted equally. Cash generation and TSR performance will be measured against the energy majors as before, and OFCF will be measured on an absolute basis against annual operating plans.

2026 Remuneration Policy

The current Remuneration Policy (the Policy) was last approved at the 2023 AGM, and a new Policy will be put to a shareholder vote at the 2026 AGM. A new Policy provides an opportunity for the REMCO to reflect deeply on the nature of Shell's business and how to best position remuneration to support Shell's strategic objectives, including CMD25. Deliberations on Policy design have started, with discussions around structure, the appropriate level of quantum, and governance. The REMCO intends to begin engaging with shareholders this summer.

Looking ahead

The 2025 AGM will be my last as the REMCO Chair, as I will be stepping down from the REMCO following the AGM. It has been a privilege to chair the REMCO over the past five years, and I wish my successor, Cyrus Taraporevala, every success for the future.

I hope that you find that this report presents a clear account of the REMCO's decisions for the year. I thank shareholders for their support and am grateful for their ongoing dialogue.

Neil Carson
Chair of the Remuneration Committee
March 25, 2025

Annual Report on Remuneration

Remuneration at a glance

2024

Fixed pay and shareholding

Base salary

Wael Sawan (CEO)	Sinead Gorman (CFO)
£1,455,000	£961,000

Pension
The Executive Directors are eligible to participate in the defined contribution UK Shell Pension Plan with an employer contribution rate of 20% of salary or take this as a pension cash alternative, consistent with other new employees.

Benefits
Typically include car allowance, home-to-office transport, and medical insurance.

Shareholding

	Target levels, % of base salary	Actual levels, % of base salary at December 31, 2024
CEO	700%	454%
CFO	500%	272%

Annual bonus

2024 annual bonus

Wael Sawan	Sinead Gorman
£2,925,000	£1,930,000

2024 bonus scorecard outcome

Mathematical outcome: 1.66

Adjusted to 1.64 to reflect a delayed tax payment due to a third-party error.

Given the fatalities in respect of 2024, and a fatality in early 2024 following an incident in 2023, this was reduced to: **1.61**

No individual performance factor used in bonus calculation.

Bonus delivery

50% delivered in cash — 50% delivered in shares

Shares are subject to a three-year holding period which extends beyond an Executive Director's tenure.

Malus and clawback provisions apply.

Long-term Incentive Plan

2022 – 2024 LTIP vesting outcome

Wael Sawan	Sinead Gorman
£3,899,299	£4,135,682

Vesting outcome

Performance condition	Outcome	Vesting
CFFO growth	5 4 3 2 **1**	40%
TSR	5 4 3 **2** 1	30%
ROACE growth	5 **4** 3 2 1	0%
FCF		40%
Energy transition		26%
		136% (out of a 200% maximum)

Shares are subject to a three-year holding period which extends beyond an Executive Director's tenure.

Malus and clawback provisions apply.

2025

Fixed pay and shareholding

Base salary

Wael Sawan (CEO)	Sinead Gorman (CFO)
£1,535,000	**£1,014,000**
↑ 5.5%	**↑ 5.5%**

Pension
No change for 2025.

Benefits
No change for 2025.

Shareholding

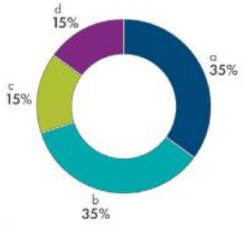
	Target levels, % of base salary	Actual levels, % of base salary at March 7, 2025
CEO	700%	624%
CFO	500%	531%

Annual bonus

Target % of base salary

	Wael Sawan	Sinead Gorman
Target	125%	125%
Maximum	250%	250%

Scorecard architecture



a **Cash flow from operations** (weighted 35%)

b **Operational excellence** (Asset management excellence 15%, project delivery excellence 10%, customer excellence 10%)

c **"Shell's journey in the energy transition"** (LNG volumes [A] 5%, Reducing operational emissions 5%, Supporting customer decarbonisation 5%)

d **Safety** (SIF-F 7.5%, Tier 1 and 2 process safety 7.5%)

[A] Equity liquefaction

Performance Share Awards

Target awards % of base salary

	Wael Sawan	Sinead Gorman
Target	300%	270%
Maximum	600%	540%

Performance conditions

a **Relative cash generation (CFFO/average capital employed)** (weighted 25%)

b **Relative TSR** (25%)

c **Absolute OFCF** (25%)

d **"Shell's journey in the energy transition"** (25%)

Performance against the relative performance conditions is assessed against other energy majors (bp, Chevron, ExxonMobil and TotalEnergies).

The Annual Report on Remuneration sets out:
- remuneration at a glance, page 191;
- the REMCO's responsibilities and activities, page 192;
- Directors' remuneration for 2024, pages 193 and 200; and
- the statement of the planned implementation of Policy in 2025, page 205.

The REMCO is not proposing any changes to the Policy this year. It is reproduced in full [A] over pages 208-215 for ease of reference and to provide context to the decisions taken by the REMCO.

[A] The Non-executive Directors' letters of appointment table was updated in early 2024.

The base currency in the Directors' Remuneration Report is British pound sterling (GBP), which is the base salary currency for the Executive Directors. Where amounts are shown in other currencies, an average exchange rate for the relevant year is used, unless a specific date is stated, in which case the exchange rate for the specific date is used.

REMCO membership and attendance for 2024

Neil Carson OBE

Jane Holl Lute

Dick Boer

Bram Schot

Cyrus Taraporevala

Biographies can be found on pages 152-156; and the REMCO meeting attendance is set out below:

REMCO member	Member since	Meetings attended	% of meetings attended
Neil Carson (Chair)	June 1, 2019	5/5	100%
Dick Boer	May 23, 2023	5/5	100%
Jane Holl Lute	May 23, 2023	5/5	100%
Bram Schot	May 24, 2022	5/5	100%
Cyrus Taraporevala	October 30, 2024	1/1	100%

The REMCO's key responsibilities include determining:

	Senior Management [A]		
	Executive Directors	Executive Committee	Company Secretary and EVP Controller
Performance framework	✓	×	×
Remuneration Policy	✓	✓	×
Actual remuneration and benefits	✓	✓	✓
Annual bonus and long-term incentive measures and targets	✓	✓	✓

[A] In the Directors' Remuneration Report, Senior Management is defined as Executive Directors, other EC members, Company Secretary, and EVP Controller.

The REMCO is also responsible for determining the Chair of the Board's remuneration. The REMCO monitors the level and structure of remuneration for senior executives below Senior Management. When setting the Policy for Executive Director remuneration, the REMCO reviews and considers workforce remuneration and related policies, and how pay and benefits align with culture. In exercising its responsibilities, the REMCO takes into account a variety of stakeholder considerations.

The REMCO operates within its Terms of Reference, which are reviewed annually (last reviewed in December 2024), and are available on shell.com.

A perspective on Shell was provided by:
- Chief Executive Officer (CEO);
- Chief Human Resources and Corporate Officer, who also acted as Secretary to the REMCO; and
- Executive Vice President Performance and Reward.

The Chair of the Board was consulted on remuneration proposals affecting the CEO. The CEO was consulted on proposals relating to the Chief Financial Officer (CFO) and Senior Management.

The REMCO met five times in 2024 and its activities included:
- determining vesting of the 2021 LTIP award for Senior Management;
- determining 2024 target bonus opportunities and 2024 LTIP awards for Senior Management;
- setting 2024 annual bonus and LTIP performance measures and targets;
- approving the 2023 Directors' Remuneration Report;
- reviewing 2025 bonus and PSA performance measures and targets;
- reviewing the Remuneration Policy ahead of renewal at the 2026 AGM;
- engaging with major shareholders and proxy bodies on remuneration matters;
- setting exit and appointment remuneration in relation to changes in the Executive Committee; and
- monitoring external developments and assessing the impact on remuneration decisions.

After a competitive tender process during the year, Ellason was chosen to provide external advice on developments in market practice around remuneration. The choice of Ellason was based on its knowledge of investors' expectations and familiarity with UK market practices. Ellason is a member of the Remuneration Consultants Group and operates according to that group's code of conduct when advising clients. The REMCO is satisfied that the advice provided was objective and independent. The total fees in relation to the advice were £38,770 (excluding value-added tax). The REMCO also reviewed market benchmarking data and analysis prepared by Shell's internal HR function on market developments in executive pay.

Directors' remuneration for 2024

Single figure of total remuneration for Executive Directors (audited)

£ thousand

	Wael Sawan [A]		Sinead Gorman	
	2024	2023	**2024**	2023
Salaries [B]	**1,455**	1,400	**961**	925
Taxable benefits [C]	**45**	378	**32**	197
Pension [D]	**291**	280	**192**	185
Total fixed remuneration	**1,791**	2,058	**1,186**	1,307
Annual bonus [E]	**2,925**	2,710	**1,930**	1,720
LTIP [F]	**3,899**	2,601	**4,136**	834
Total variable remuneration	**6,824**	5,311	**6,066**	2,554
Other [G]	**–**	571	**–**	–
Total remuneration	**8,615**	7,940	**7,251**	3,861
in US dollars	**11,012**	9,873	**9,269**	4,801
in euros	**10,177**	9,128	**8,566**	4,439

[A] Wael Sawan was appointed CEO and a Board Director effective January 1, 2023.
[B] Base salary: Wael Sawan's base salary for 2024 was set at £1,455,000 (+3.9% from 2023). Sinead Gorman's base salary for 2024 was set at £961,000 (+3.9% from 2023).
[C] Benefits: in respect of 2024, Wael Sawan's benefits included car allowance (£29,890) and travel-related benefits (£12,107). Sinead Gorman's benefits included car allowance (£29,890).
[D] Pension: Wael Sawan and Sinead Gorman received cash in lieu of pension contributions equal to 20% of base salary in 2024.
[E] Annual bonus: the full value of the bonus in respect of performance in 2024, comprising both the 50% delivered in cash and 50% bonus delivered in shares. For 2025, the market price of shares on February 26, 2025 for London-listed shares (£26.30) was used to determine the number of shares delivered, resulting in 29,479 ordinary shares for Wael Sawan and 19,451 ordinary shares for Sinead Gorman, net of tax.
[F] LTIP: the amounts reported for 2024 relate to the 2022 LTIP award, which vested on March 6, 2025, at the market price of €30.74 and £25.52 for Amsterdam-listed and London-listed ordinary shares, respectively. The value in respect of the LTIP is calculated as the product of: (i) the number of shares of the original award multiplied by the vesting percentage, plus accrued dividend shares, and (ii) the market price of ordinary shares at the vesting date. The market price of the Amsterdam-listed shares is converted into GBP using the exchange rate on the vesting date. Share price appreciation accounted for €887,645 for Wael Sawan and £362,888 for Sinead Gorman. The amount shown for Wael Sawan relates to an award made prior to his appointment to the Board, and is shown here for transparency. The performance measures are the same as those applying to LTIP awards made to Executive Directors.
[G] Incremental remuneration in respect of 2022 for services as CEO Designate, in anticipation of becoming CEO in 2023. Wael Sawan did not perform the role of CEO during the CEO Designate time period. Amount includes pro rata salary and performance bonus, plus time-limited relocation-related costs.

Notes to the table: Single figure of total remuneration for Executive Directors (audited)

Pension

During the year, Wael Sawan and Sinead Gorman were eligible to participate in the defined contribution UK Shell Pension Plan with an employer contribution rate of up to 20% of salary, or take this as a pension cash alternative. The UK Shell Pension Plan or associated pension cash alternative is available to new Shell employees in the UK at the same contribution levels and currently around two-thirds of UK employees participate in these arrangements. The majority of the remainder participate in a legacy defined benefit plan, which closed to new members in March 2013.

Annual bonus

The annual bonus is intended to reward the delivery of short-term targets derived from the Operating Plan. The REMCO reviews the bonus measures, weightings and targets annually to evolve with Shell's strategy and circumstances, and to ensure that the targets remain stretching but realistic. For 2024, the mathematical bonus outcome was 1.66, adjusted to 1.64 to reflect a delayed tax payment due to a third-party error. The REMCO reviewed performance against the scorecard, as below. Further information is on page 195.

Financial delivery (35% weighting): We delivered $54.7 billion of CFFO against our target of $46 billion, driven by strong operational performance and price impact. For the purpose of the scorecard, the CFFO for 2024 was reduced to $54.2 billion to reflect a delayed tax payment due to a third-party error. As a reminder, the REMCO has a long-standing policy of not adjusting CFFO to take account of changes in energy prices and currency fluctuations. This policy supports alignment between pay outcomes and the shareholder experience.

Operational excellence (35%): A key underpin of our performance, operational excellence ensures we deliver for our customers and drive financial performance:

- Asset management excellence: Upstream controllable availability was outstanding, particularly in Kazakhstan, Nigeria, Norway, Oman and the USA, partially offset by lower performance in the UK. Midstream availability was also outstanding, thanks to excellent performance in Australia, Qatar and Oman. Refining and Chemicals availability exceeded the plan, mainly due to improvements at Shell Polymers Monaca in the US and Bukom refinery in Singapore.
- Project delivery excellence: The overall score for project delivery was slightly above target. Highlights for the year include the successful start-up of 10 projects, half of which came on-stream ahead of schedule. This was offset by the project delivery on budget being below target.
- Customer excellence: Customer satisfaction index was above target, following our focus on prioritisation and continuous improvement of e-commerce platforms. Our Brand share preference continued to be outstanding, performing ahead of target in all regions.

Overall the outcome for operational excellence was above target.

"Shell's journey in the energy transition" (15%):
- LNG volumes [A]: Performance is measured based on liquefaction volumes. The score was above target, reflecting strong operational performance. This was driven mainly by volume increases in Australia and Atlantic LNG, partly offset by lower volumes in Nigeria and Egypt due to feedgas constraints.
- Reducing operational emissions: Performance is assessed based on GHG abatement projects that result in ongoing Scope 1 and 2 emission reductions such as flare reduction and energy efficiency projects, site closures, decommissioning and transformations, and increasing the use of renewable energy in our operations. This metric does not include the impact of divestments and acquisitions. We had an outstanding outcome, with 1,028 thousand tonnes of GHG emission reductions from abatement, renewable energy, and permanent shutdowns or conversions ('right-sizing'). This was mainly due to catalyst improvements at Pearl GTL in Qatar, the Forcados Yokri Gas Project in Nigeria, and optimisation of a liquefaction control system at QGC in Australia.
- Supporting customer decarbonisation: We have continued to grow our network of electric vehicle charge points, exceeding our 2024 scorecard target. In 2024, we added 19,100 charge points, which brings the total number to around 73,000.

[A] Equity liquefaction.

Overall the score on the "Shell's journey in the energy transition" measure was above target.

Safety (15%): It remains our priority to run our day-to-day operations safely and ensure the well-being of all our people.
- Process safety continues to be measured through the number of Tier 1 and 2 operational safety incidents. The score for 2024 was slightly ahead of target. There were 90 Tier 1 and 2 operational process safety events (compared with 63 in 2023).
- Personal safety SIF-F performance is assessed based on the number of serious incidents which might occur in Shell's businesses based on the work plan for the year and our knowledge of industry incident rates. Our ultimate goal is zero harm to people working for Shell. Overall, 2024 SIF-F performance showed an improvement compared with 2023, which is testament to the ongoing focus of our employees on keeping colleagues safe.

Overall, the score on the safety measure was above target. While the underlying safety performance was strong, we tragically lost colleagues during 2024. The REMCO reflected carefully on these events and Shell's broader safety performance and determined that the bonus outcome should be adjusted downwards to 1.61 (see "The REMCO's reflections on safety" below).

The REMCO's reflections on safety

Safety is Shell's first priority and our strategy is underpinned by this. It is critical that our operations run safely every day and that we strive to ensure the well-being of all of our people.

In 2024, Shell used serious injury, illness and fatality frequency (SIF-F) as our scorecard measure for personal safety performance. SIF-F tracks the frequency at which injuries with life-changing consequences occur under Shell operational control. This allows us to focus the attention of management and the organisation on the most serious incidents. To be clear, our ultimate goal has been and remains zero harm to people.

Following discussions with shareholders in 2023, the REMCO adopted a discretionary framework to guide its decisions regarding the impact of fatalities on remuneration. The framework takes account of multiple reflection points, as set out below. This framework supports holistic and detailed consideration of the circumstances of each incident, and consistent and fair judgement of safety performance over time.

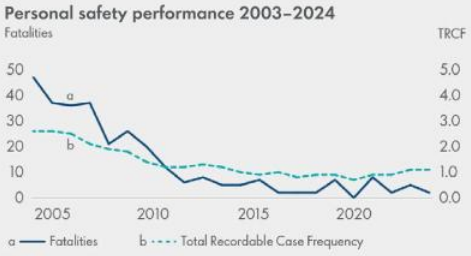
Circumstances

There were two recordable fatalities under Shell's operational control in respect of 2024. There was a fatal incident in the Netherlands at Shell Energy and Chemicals Park Moerdijk in June 2024, which remains under investigation. A colleague injured in a snake bite incident in India in May 2024 tragically died in January 2025. This incident also remains under investigation. Further, in Nigeria, a vessel crew member who was injured in a fire incident in December 2023 died in February 2024. There have been no regulatory consequences and the outcome of the investigation was that the incident was not considered a repetitive failure.

Wider safety context

Safety performance has improved significantly over time. The 2024 results support our belief that structural improvements have been made. The focus has continued to be on strengthening controls for routine activities, simplifying pre-work assessments, and leveraging technology for risk identification. Beyond the metrics, management has worked to continue to embed the Safety Refresh in Shell assets and businesses, and good results have been observed. There were no material safety events outside of the reporting framework.

Personal safety performance 2003–2024



Conclusions

The scorecard result on safety is a strong outcome which reflects the work throughout the organisation on the Safety Refresh, which promotes a learner mindset through deeper understanding of human performance principles and destigmatising errors. The sustained performance over the past few years demonstrates potentially lasting improvement. After careful consideration of Shell's holistic safety performance in 2024 including the outcome of the formal metrics, the in-year fatalities and the incident in December 2023, and Shell's long-term progress on safety, the REMCO has determined that the scorecard outcome for Executive Directors should be adjusted downwards to 1.61. The reduction in the bonus outcome as a result of the adjustment is equal to about 4% of salary for both Executive Directors.

Safety incidents that occur in 2025 will be assessed as part of the REMCO's considerations of performance outcomes for 2025.

The table below summarises the 2024 annual bonus scorecard measures including their weightings, targets and outcomes.

2024 annual bonus scorecard measures and weightings

Performance Measures		Weighting	Unit	Threshold (score of 0 out of 2)	Target (score of 1 out of 2)	Outstanding (score of 2 out of 2)	Outcome	Score (out of 2)
Financial delivery (35%)	Cash flow from operations [A]	35%	$bn	36	**46**	56	54	**1.82**
Operational excellence (35%)	Asset management excellence [B]	15%	%		**See note below**			**1.80**
	Project delivery excellence [C]	10%	%		**See note below**			**1.04**
	Customer excellence [D]	10%	Index		**See note below**			**1.70**
"Shell's journey in the energy transition" (15%)	LNG volumes [E]	5%	Million tonnes per annum	27.3	**28.7**	30.1	29.1	**1.29**
	Reducing operational emissions	5%	Thousand tonnes CO_2	525	**700**	875	1,028	**2.00**
	Supporting customer decarbonisation	5%	Number of EV charge points	60,000	**70,000**	80,000	72,800	**1.28**
Safety (15%)	Personal safety	7.5%	SIF-F cases per 100 million working hours	4.5	**3.6**	2.7	1.5	**2.00**
	Process safety	7.5%	Number of events	115	**92**	69	90	**1.09**
					Scorecard outcome			**1.64**
					Adjusted outcome			**1.61**

[A] In determining the CFFO outcome, a discretionary adjustment was made to reflect a tax payment scheduled for the end of December 2024, which was unintendedly delayed until early January 2025 due to a third-party error. This has a downward impact of 0.02 on the 2024 scorecard.
[B] Upstream controllable availability: 88.0% (Threshold 82.6%, Target 84.6%, Outstanding 86.6%); Midstream availability: 91.4% (Threshold 86.1%, Target 88.1%, Outstanding 90.1%); Chemicals and Refinery availability: 92.1% (Threshold 90.7%, Target 91.7%, Outstanding 92.7%). Performance assessment is equally weighted between Upstream, Midstream, and Chemicals and Refining.
[C] Projects delivered on schedule: 81% (Threshold 40%, Target 70%, Outstanding 100%); project delivery on budget: 104% (Threshold 108%, Target 102%, Outstanding 96%). Performance assessment is equally weighted between projects delivered on schedule and on budget.
[D] Customer Satisfaction Index: 8.3 (Threshold 7.6, Target 8.1, Outstanding 8.6); Brand Share Preference: 15.0% (Threshold 13.1%, Target 13.7-13.8%, Outstanding 14.5%). Performance assessment is equally weighted between Customer Satisfaction Index and Brand Share Preference.
[E] Equity liquefaction.

Accordingly, the REMCO decided the final bonus outcome should be 161% of target and 80.5% of maximum. This results in a bonus of £2,925,000 for Wael Sawan and £1,930,000 for Sinead Gorman.

2024 bonus outcome calculation

Wael Sawan

Target bonus:
£1,455,000 (base salary)
x 125% = **£1,818,750**

× 2024 scorecard result 1.61

= **£2,925,000** [A]

Sinead Gorman

Target bonus:
£961,000 (base salary)
x 125% = **£1,201,250**

× 2024 scorecard result 1.61

= **£1,930,000** [A]

[A] Rounded down to the nearest £5,000. Half was delivered in shares subject to a three-year holding period which extends beyond the Executive Director's tenure.

Long-term Incentive Plan vesting: 2022 LTIP

In 2022, Wael Sawan and Sinead Gorman were granted conditional share awards under the LTIP [A]. The table below summarises the performance conditions, weightings, targets and outcomes.

[A] Wael Sawan was not an Executive Director at the time of the award, but his award is disclosed here for transparency. Ben van Beurden, the CEO at the time, was also granted an award under the LTIP in 2022. The vesting of this award is discussed in the "Payments to past Directors" section on page 202.

2022 LTIP vesting outcomes – performance measures

Performance conditions		Weighting	Threshold	Target	Maximum	Outcome (out of the maximum 200%)	Vesting outcome (% of target award)
Relative Performance ranked against the other energy majors: bp, Chevron, ExxonMobil and TotalEnergies	CFFO growth	20%	Third		First	⑤④③②❶	200%	40%
	TSR [A]	20%	Third		First	⑤④③❷①	150%	30%
	ROACE growth	20%	Third		First	⑤❹③②①	0%	0%
Absolute Performance assessed against internal financial and strategic targets	FCF	20%	$54bn	$69bn	$94bn	$122.0bn	200%	40%
	Energy transition	20%		See below			130%	26%
								136%

[A] TSR over the performance period was 54.6%.

The REMCO reviewed Shell's broader performance over the performance period, and also reflected on the share price at award and on vesting, noting that the share price had increased by 28% in respect of the CEO's award, and that appreciation accounted for 19% of the total value of the CEO's LTIP at vesting, and was satisfied that no windfall gain had arisen.

The REMCO decided that the LTIP outcome was consistent with the target opportunity and intended operation of the plan under the Policy and appropriate, and therefore no adjustment to the vesting outcome was required. Accordingly, the REMCO decided that the LTIP should vest at 136% of target (equivalent to 68% of maximum).

2022 LTIP vesting outcome

Wael Sawan

Vesting outcome: [A]		Change in share price: [B]		Accrued dividends: [C]		Total LTIP Vesting:
98,000 x 136% = 133,280 ordinary shares **€3,209,382**	+	133,280 x €6.66 **€887,645**	+	18,251 ordinary shares **€561,038**	=	151,531 ordinary shares **€4,658,065** £3,899,299 [D]

Sinead Gorman

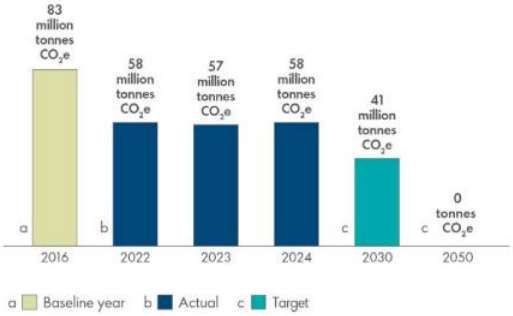
Vesting outcome: [A]		Change in share price: [B]		Accrued dividends: [C]		Total LTIP Vesting:
105,675 x 136% = 143,718 ordinary shares **£3,304,795**	+	143,718 x £2.53 **£362,888**	+	18,338 ordinary shares **£467,998**	=	162,056 ordinary shares **£4,135,682**

[A] Based on the share price at award of €24.08 for Wael Sawan and £23.00 for Sinead Gorman. For details of Ben van Beurden's 2022 LTIP award, see the "Payments to past Directors" section.
[B] Calculated based on the opening share price on March 6, 2025, (being the 2022 LTIP vesting date) minus the share price at the date of award. For Wael Sawan: €30.74 – €24.08 = €6.66; for Sinead Gorman: £25.52 – £23.00 = £2.53.
[C] Based on the opening share price on March 6, 2025, of €30.74 for Wael Sawan and £25.52 for Sinead Gorman.
[D] Converted from EUR to GBP using a spot exchange rate on March 6, 2025.

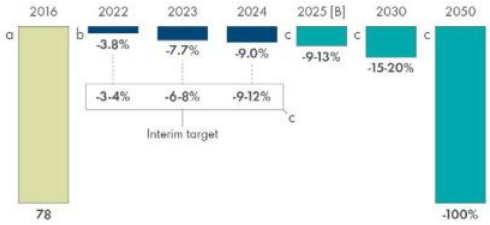
Our carbon targets

In 2024, we continued on our path to become a net-zero emissions energy business by 2050. At the end of 2024, we had reduced our Scope 1 and 2 operational emissions by 30%, and the NCI of our energy products by 9.0% from our 2016 baseline.

Net carbon emissions – Scope 1 and 2 operational emissions



Net carbon intensity (NCI) [A] (gCO_2e/MJ)



a Baseline year b Actual c Target

[A] Average intensity, weighted by sales volume, of the energy products we sell, on an equity boundary, net of carbon credits. Estimated total GHG emissions included in NCI reflect well-to-wheel emissions associated with energy products sold by Shell. This includes the well-to-tank emissions associated with the manufacturing of energy products by others that are sold by Shell. In 2024, we revised the 2016 baseline NCI values and other historical NCI values. As a result, the percentage reduction achieved in 2023 was revised from 6.3% to 7.7%. (See "NCI baseline and restatement policy" on page 98).

[B] Targets set by the REMCO. Shell continually evaluates and updates its energy transition strategy, including its interim targets.

2022 LTIP energy transition performance condition: outcome

Outcomes for the energy transition performance condition are determined by the REMCO based on quantitative performance and a qualitative assessment focused on Shell's short-term NCI reduction target and those elements that we understood at the time would make the most impact on achieving our goals over the three-year performance period relating to NCI: the growth of our power business, the growth of lower-carbon products, and the development of systems to absorb, capture and store carbon. This approach to the LTIP is intended to support experimentation and learning as to what actions will help deliver net-zero emissions in a profitable way. Accordingly, the REMCO uses the performance indicators as guidance, rather than applying a formulaic vesting outcome, when making its decisions.

Net carbon intensity (NCI) – performance indicator met

We achieved our short-term target for the 2022-2024 LTIP cycle to reduce our NCI by 9-12% compared with the 2016 baseline, with a 9.0% reduction by 2024, demonstrating strong year-on-year progress towards our longer-term targets. In making its decision, the REMCO reviewed how the target was met including changing product sales mix, the use of emission offsets, such as carbon credits, and the retirement of Renewable Energy Certificates, recognising the importance of these in the energy transition.

Growing the power business – performance indicator met

A key element of the early cycles of the LTIP was to encourage learning about how to profitably decarbonise and the REMCO paid close attention to how management has refined the strategy for renewable power generation, energy marketing, and gas and power trading over the performance period. The emphasis has changed from a focus on growing the customer base and creating renewable generation capacity to a capital-light, sales-led strategy focusing on the Trading and Energy Marketing business as drivers of value creation. We are applying a more selective and disciplined approach to investment, prioritising investments that enable our trading and optimisation capabilities, especially in the area of flexible power management. Shell has further developed its marketing (B2B) and power trading businesses in key markets in Europe, the USA, Australia and Brazil over the performance cycle. This focus has also seen Shell divest its consumer power retail business in Europe and step back from renewable power generation opportunities that no longer fit our strategy or deliver sufficient returns. In considering the vesting outcome, the REMCO noted the work done to pivot the renewable generation, energy marketing, and gas and power trading strategy to deliver value for shareholders, the steps taken to bring renewable electrons to market, as well as the outcomes of 306 TWh/yr of total power sales achieved against an original target of 310-380 TWh/yr, of which 21% was renewable power (target 21%-31%), and considered the target as met.

Growing new lower-carbon product offerings – performance indicator partially met

Shell is one of the world's largest energy traders and blenders of biofuels and is continuing to invest in low- and zero-carbon products such as hydrogen and biofuels, working closely with customers to identify the products they need to decarbonise. Metrics for the performance cycle were designed to encourage development across this range of offerings, with ambitious targets set for developing advanced biofuels and hydrogen. For advanced biofuels, the REMCO originally set a target of investment in five or six advanced biofuels projects by the end of the performance period. While two were achieved, the pipeline of opportunities did not convert into commercially viable projects as technology derisking proved costly and demand for these products did not materialise as expected. Shell continues to invest in new technologies, but with discipline and a focus on the most viable markets to ensure we deliver value for shareholders. The decision to pause on-site construction work at the biofuel facility at the Shell Energy and Chemicals Park Rotterdam (the Netherlands) is a reminder of the importance of ensuring we get the basics right. On hydrogen, the REMCO originally set a target of 750 MW of capacity to be achieved by the end of the performance period. The Holland Hydrogen I (the Netherlands) and Refhyne II (Germany) projects together provide 300 MW of production capacity and are important platforms for future hydrogen development. This is below the 750 MW target; however, in taking a balanced view on the outcome, the REMCO considered this a good result as the regulatory frameworks and business models for hydrogen continue to develop. An important element of the REMCO's deliberations has been reflection on the fact that the policy environment and market for many of these offerings are emerging more slowly than anticipated, which speaks to the overall pace of the energy transition. The REMCO needs therefore to find the right balance between holding management accountable to targets versus supporting commercial decision-making to ensure shareholder value creation. Overall, the REMCO assessed the outcome on this metric as partially met.

Develop emission sinks – performance indicator partially met
The development of systems that capture and store or absorb carbon is required as part of the global response to climate change to reduce and compensate for emissions where there are not currently scalable low-carbon alternatives. The REMCO originally set a target of 25-30 mtpa CO_2e offset by carbon credits through carbon-neutral customer offerings. The outcome was 2 mtpa, as low customer demand and also operational challenges contributed to a target miss on this sub-metric. Technologies related to carbon capture and storage are necessary to reduce emissions where there are few low-carbon alternatives and a target of four-five was also set for maturing CCS projects. This was achieved with four projects: Northern Lights Phase 1B (Norway), Porthos (the Netherlands), where Shell is a launch customer, Polaris, and Atlas (both Canada). The REMCO considered this a positive result and evidence of Shell developing the organisational capability to develop this type of large-scale project, which will play an important role in Shell decarbonising its operations. The REMCO considered the overall outcome on this metric to be partially met.

Overall, the REMCO determined that the energy transition measure (accounting for 20% of the award) should vest at 130% of target.

Consideration of 2024 single figure outcomes

In determining the final single figure outcomes for 2024, the REMCO also considered the personal performance of the Executive Directors.

Personal performance

2024 was another year of strong and decisive leadership from the Executive Directors. A key deliverable for the year was the Energy Transition Strategy 2024 (ETS24), published in March 2024, setting out the important role Shell intends to play in providing the energy the world needs today, and in helping to build the low-carbon energy system of the future. The Executive Directors played a pivotal role in the shaping of the strategy, and communicating it to our shareholders and other key stakeholders. The resolution was supported by 78% of shareholders who voted through an advisory vote at the 2024 AGM.

Performance, discipline and simplification continued to be our guiding principles during 2024, and the Executive Directors have modelled these values in their leadership, improving how we work across the organisation. Key successes are noted throughout this report, particularly on page 193 on the 2024 annual bonus and page 196 on the 2022 LTIP vesting outcome, and additional comments are provided below.

Wael Sawan has steered Shell through another successful year. The focus has been on delivering against the financial and climate targets set out at Capital Markets Day 2023 (CMD23), establishing a track record in consistently meeting our external commitments. In Integrated Gas and Upstream, we have seen improvement in operational performance and the successful start to a number of projects. In Downstream and Renewable Energy Solutions, there has been continuous high-grading of the portfolio to support a profitable energy transition. Wael Sawan has demonstrated clear and decisive leadership, driving growth where we have a competitive advantage, and making tough decisions to pause and address performance challenges where needed (for example, pausing the biofuels project in the Netherlands). By the end of 2024, key achievements included:

- delivery against CMD23 commitments, including total shareholder distributions* in 2024 of 41% of CFFO ($22.6 billion), at the upper end of the promised 30-40% of CFFO through the cycle, and structural cost reduction* of $3.1 billion since 2022 against the commitment of $2-3 billion by the end of 2025;
- continued high-grading of the portfolio, including agreement to sell our Energy and Chemicals Park in Singapore and our Nigerian onshore subsidiary, The Shell Petroleum Development Company of Nigeria Limited (SPDC);
- delivery of improved operational performance, including Prelude significantly increasing its controllable availability since its turnaround last year;
- final investment decisions made across a number of low-carbon projects, including the Polaris and Atlas (Phase 1) CCS projects in Canada, and the hydrogen project Refhyne II in Germany;
- continuing Shell's role in shaping the broader energy conversation through engagements at events including CERAWeek, ROG.e, ADIPEC, and the Center for Strategic and International Studies;
- continued focus on safety and climate performance, including the achievement of a 30% reduction of Scope 1 and 2 operational emissions, and a 9.0% reduction in NCI vs. the 2016 baseline; and
- driving Shell's performance, discipline and simplification, growing business empowerment across all organisational levels.

Working closely with the CEO, Sinead Gorman has continued to demonstrate her skills as a leader, helping to drive a high-performance culture and a learner mindset. The year is characterised by strong financial results, a healthy balance sheet and capital discipline. Sinead Gorman has steered the Finance function's disciplined capital stewardship and effective management of Shell's financial framework, allowing Shell to meet its organisational objectives and commitments to shareholders. By the end of 2024, Sinead Gorman's key achievements included:

- together with the CEO, delivery of strong financial results with net income of $16.5 billion, Adjusted Earnings* of $23.7 billion, and CFFO of $54.7 billion, our second best year on record, against plan target of $46 billion;
- strengthening the balance sheet by reducing net debt* to $38.8 billion, and enhancing the resilience of the Company;
- playing a critical role in shaping ETS24, securing the advisory vote from shareholders in support of this strategy at the 2024 AGM;
- continuing to drive capital discipline, with cash capital expenditure in 2024 below the target range for the year and creating a culture in which a focus on value creation is central; and
- continued focus on climate performance, including the achievement of a 30% reduction of Scope 1 and 2 operational emissions, and a 9.0% reduction in NCI vs. the 2016 baseline.

* Non-GAAP measure (see page 445).

The REMCO also considered a range of other factors in finalising its remuneration decisions for 2024, including:

- Shell's performance in 2024 and over the LTIP performance period 2022-2024, and the formulaic outcomes of the bonus and the LTIP performance conditions;
- the impact of fatalities on the formulaic scorecard outcome;
- absolute and relative TSR performance over the period;
- a range of factors that take account of Shell's performance beyond the formulaic outcomes of the variable pay structures, including safety, reputation, ethics and compliance, and feedback from the ARC and SUSCO; and
- the external environment and wider stakeholder experience, including shareholders' expectations with regard to executive pay decision-making and the employee experience;
- the Executive Directors' remuneration compared with the variable pay outcomes for the general workforce;
- the alignment of the Executive Directors with the shareholder experience through their high shareholding requirements; and
- the Executive Directors' remuneration compared with historical outcomes.

After reflecting on the above factors, the REMCO was satisfied with the single figure outcomes for the CEO and the CFO.

Malus and clawback
No malus or clawback provisions were applied during 2024.

2024 LTIP

Scheme interests awarded to Executive Directors in 2024 (audited)

In 2024, the Executive Directors were awarded conditional share awards under the LTIP as set out in the table below. In approving the awards, the REMCO considered Shell's historical share price, including the share price over the prior year, and noted that the share price at award was in line with that in 2023 and was higher than average historical levels. The REMCO determined that the risk of windfall gain was limited, and therefore no adjustment was made to the award size.

Scheme interest type	Type of interest awarded	End of performance period	Target award [A]	Potential amount vesting: Minimum performance (% of shares awarded) [B]	Potential amount vesting: Maximum performance (% of shares of the target award)
LTIP	Performance shares	December 31, 2026	Wael Sawan: 169,937 London-listed ordinary shares, equivalent to 3.0 x base salary or £4,200,000. Sinead Gorman: 101,051 London-listed ordinary shares, equivalent to 2.7 x base salary or £2,497,500.	0	Maximum number of shares vesting is 200% of the shares awarded, before dividends.

[A] The awards for both Executive Directors were made based on the closing market price on the date of award, February 2, 2024, for ordinary shares of £24.72.
[B] Minimum performance relates to the lowest level of achievement, for which there is no vesting.

The performance conditions and weightings applying to LTIP awards made in 2024 were: relative cash generation (25% weighting), relative TSR (25%), absolute OFCF (25%), and energy transition (25%).

Relative performance conditions
The relative performance conditions are based on our performance on key financial and external measures against our closest comparators.

Cash generation is defined as CFFO divided by average capital employed, and measures Shell's ability to generate the top-line cash flow to finance investment in our business and shareholder distributions.

TSR measures actual value created for shareholders (i.e. change in share price plus dividends) and, as in prior years, is calculated in US dollars using a 90-day averaging period.

Vesting under each relative performance condition is assessed independently, with the vesting outcome ranging from 0% to 200% of the target award in respect of the measure, in accordance with the following vesting schedule:

- ranking first equals 200% vesting;
- ranking second equals 150% vesting;
- ranking third equals 80% vesting; and
- ranking fourth or fifth equals 0% vesting.

Outperforming Shell's closest competitors on key financial metrics is challenging. The REMCO is aware that vesting for median performance is generally set at a limit of 25% of maximum for other UK companies, but notes that this is typically applied against a larger comparator group. A vesting outcome of 80% for median performance (40% of maximum) in a small comparator group is considered appropriate by the REMCO.

Absolute measures
Organic free cash flow (OFCF)
The OFCF performance condition supports the delivery of our cash flow priorities, which are to service and reduce debt, pay dividends, buy back shares and make future capital investments.

The performance targets for OFCF are set by reference to Shell's annual operating plans, based on the sum of plan OFCF targets over the three-year performance period, and updating the plan each year to reflect a changing price premise. The REMCO has a long-standing no-adjustments policy, and believes it is more appropriate to set the target based on the aggregation of the annual operating plans rather than setting a three-year target at the outset and making necessary adjustments at the end. OFCF targets are disclosed retrospectively and in aggregate, following the conclusion of the three-year period.

Under the OFCF performance condition, achievement of threshold performance will result in 40% of the target award (20% of maximum) in respect of the OFCF vesting, increasing to full vesting for achievement of outstanding performance. A straight-line vesting schedule will apply for performance between threshold and outstanding.

Energy transition
For the 2024 award, the REMCO's determination of the extent to which awards will vest will be based on its holistic assessment of progress towards reducing emissions from our operations and supporting customers to reduce their emissions. For more information, see the 2023 Directors' Remuneration Report. The key factors in the REMCO's decision will be disclosed at the end of the performance period (unless commercially sensitive).

For information on Shell's energy transition, see the Energy Transition Strategy 2024 on shell.com.

Performance update on OFCF
2023 LTIP award
At December 31, 2024, OFCF* performance was above target, with a strong outcome of $35.9 billion for 2023 (target $22.0 billion), and $37.5 billion for 2024 (target $24.0 billion). As one year of OFCF performance remains, and 75% of the award is subject to relative and energy transition performance conditions, this does not reflect the potential vesting of the award.

2024 LTIP award
At December 31, 2024, OFCF* performance was above target, based on $37.5 billion for 2024 (target $24.0 billion). As two years of OFCF performance remain, and 75% of the award is subject to relative and energy transition performance conditions, this does not reflect the potential vesting of the award.

Single figure of total remuneration for Non-executive Directors (audited)

£ thousand

	Fees		Taxable benefits [A]		Total	
	2024	2023	**2024**	2023	**2024**	2023
Dick Boer	**220**	192	**9**	20	**229**	212
Neil Carson	**177**	171	**9**	11	**186**	182
Ann Godbehere	**186**	184	**36**	68	**222**	252
Jane Holl Lute	**166 [B]**	164	**59**	35	**225**	199
Catherine Hughes	**196 [B]**	190	**31**	50	**227**	240
Sir Andrew Mackenzie	**850 [C]**	785	**1**	2	**851**	787
Sir Charles Roxburgh [D]	**165 [B]**	126	**116**	2	**281**	128
Bram Schot	**150**	150	**10**	15	**160**	165
Leena Srivastava [D]	**155 [B]**	120	**15**	–	**170**	120
Cyrus Taraporevala [E]	**168 [B]**	134	**44**	1	**211**	135

[A] UK regulations require the inclusion of benefits where these would be taxable in the UK, on the assumption that Directors are tax residents in the UK. On this premise, the taxable benefits include the cost of a Non-executive Director's occasional business-required partner travel. Shell also pays for travel between home and the head office, where Board and committee meetings are typically held, and related hotel and subsistence costs. For consistency, business expenses for travel between home and the head office are not reported as taxable benefits because for most Non-executive Directors this is international travel and hence would not be taxable in the UK.
[B] Fees disclosed are those in respect of 2024, of which £12,000 was paid in 2025.
[C] Fees disclosed are those in respect of 2024, of which £65,000 was paid in 2025.
[D] Appointed as a Director with effect from March 13, 2023.
[E] Appointed as a Director with effect from March 2, 2023.

* Non-GAAP measure (see page 445). The most comparable GAAP financial measure for organic free cash flow is cash flow from operating activities of $54.7 billion for 2024.

Statement of Directors' shareholding and share interests (audited)

Shareholding guidelines

The REMCO believes that Executive Directors should align their interests with those of shareholders by holding shares in Shell plc.

Only unfettered shares count towards an Executive Director's shareholding. Shares delivered that are subject to holding requirements also count towards the guidelines. The CEO and the CFO have five years from their respective appointment to the Board to achieve their respective shareholding requirements.

There is a Company-sponsored nominee account for each employee which allows for restrictions to be applied on the sale or transfer of shares that are subject to holding periods. The restrictions remain in force beyond the Executive Director's employment.

See page 210 for further details of the shareholding guidelines.

Directors' share interests

The interests, in shares of the Company or calculated equivalents, of the Directors in office during 2024, including any interests of their connected persons, are set out in the table below.

Directors' share and scheme interests (audited)

	Ordinary shares held at January 1, 2024	Ordinary shares held at December 31, 2024	Unvested and subject to performance conditions [A]	Shareholding guideline as % of salary	Current shareholding as % of salary [B]
Executive Directors					
Wael Sawan	179,406	266,533	476,070	700%	454%
Sinead Gorman	65,519	105,589	335,425	500%	272%
Non-executive Directors					
Dick Boer	10,000	10,000			
Neil Carson	16,000	16,000			
Ann Godbehere	10,000 [C]	10,000 [C]			
Jane Holl Lute	7,332 [D]	7,332 [D]			
Catherine Hughes	55,984 [E]	55,984 [E]			
Sir Andrew Mackenzie	37,175 [F]	37,175			
Sir Charles Roxburgh	2,000	5,000			
Bram Schot	–	–			
Leena Srivastava	–	–			
Cyrus Taraporevala	10,000 [G]	10,000 [G]			

[A] Includes unvested long-term incentive awards and notional dividend shares accrued at December 31, 2024. Interests are shown on the basis of the original awards, which can vest at between 0% and 200% based on performance. Dividend shares accumulate each year on an assumed notional LTIP award. Such dividend shares are disclosed and recorded on the basis of the number of shares conditionally awarded but, when an award vests, dividend shares will be awarded only in relation to vested shares as if the vested shares were held from the award date.
[B] Calculated using the £24.76 per share closing price on December 31, 2024, the last market day of 2024.
[C] Held as 5,000 ADS. Each ADS represents two ordinary shares.
[D] Held as 3,666 ADS. Includes purchases pursuant to a Dividend Reinvestment Scheme.
[E] Held as 50,984 ordinary shares and 2,500 ADS.
[F] Revised from 35,858 ordinary shares (as at December 31, 2023) in the 2023 Directors' Remuneration Report.
[G] Held as 5,000 ADS.

The changes to Directors' shareholdings as at March 7, 2025, are as follows:

- Wael Sawan's share interest increased by 108,275 ordinary shares after the delivery of the 2024 annual bonus shares and the vesting of the 2022 LTIP award; and
- Sinead Gorman's share interest increased by 105,341 ordinary shares after the delivery of the 2024 annual bonus shares and the vesting of the 2022 LTIP award.

At March 7, 2025, the Directors and Senior Management (pages 152 and 157) of the Company beneficially owned, individually and in aggregate (including shares under option), less than 1% of Company shares. These shareholdings are not considered sufficient to affect the independence of the Directors.

Dilution
In any 10-year period, no more than 5% of the issued ordinary share capital of the Company may be issued or issuable under executive (discretionary) share plans adopted by the Company, or 10% when aggregated with awards under any other employee share plan operated by the Company. To date, no shareholder dilution has resulted from these plans, although it is permitted under the rules of the plans, subject to these limits.

Payments for loss of office
There were no payments for loss of office to Executive Directors in 2024 (audited). During 2024, the former Company Secretary received €1,040,470 gross in voluntary severance payment, in line with local Dutch policy.

Payments to past Directors (audited)
Former CEO Ben van Beurden received an LTIP award of 209,131 ordinary shares in 2022, which has been pro-rated. The pro-rated award vested at 136% of target based on performance to December 31, 2024. Therefore, 161,777 ordinary shares (including accrued dividends) vested on March 6, 2025, with a value at vesting of £4,128,548. A three-year holding period applies, which remains in force after termination. In respect of 2024, Ben van Beurden also received taxable benefits totalling £18,532, including £8,362 in gross-up costs.

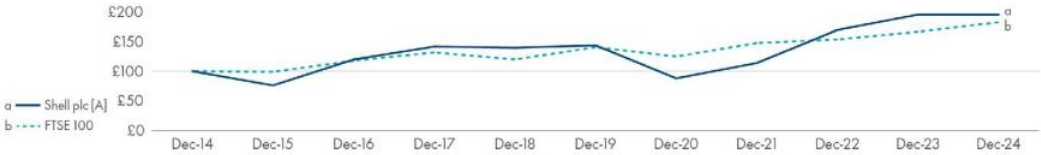
Former CFO Jessica Uhl received taxable benefits of £38,046 in respect of 2024, the majority of which related to gross-up costs.

Payments below £5,000 are not reported as they are considered de minimis.

TSR performance and CEO pay
Performance graph
The graph below compares the TSR performance of Shell plc over the past 10 financial years with that of the FTSE 100 Index. The Board regards this index as the most appropriate broad market equity index for comparison, following the move of Shell's headquarters to the UK.

CEO pay outcomes
The table below the graphs sets out (i) the single figure of total remuneration, (ii) the annual bonus outcome, and (iii) the LTIP vesting outcome for the CEO for the past 10 years.

Historical TSR performance
Value of hypothetical £100 holding



Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
CEO	Ben van Beurden								Wael Sawan	
Single figure of total remuneration (£000) [B]	4,049	7,046	7,811	17,817	8,746	5,197	6,344	9,698	7,940	8,615
Annual bonus award (% of maximum opportunity)	98%	66%	81%	79%	21%	–	64%	73%	78%	81%
LTIP vesting (% of maximum opportunity)	8%	42%	35%	95%	74%	45%	25%	41%	47%	68%

[A] Data shown are for the performance of RDS B shares prior to the assimilation of Shell's shares into a single line of ordinary shares on January 29, 2022.
[B] Prior to 2022, the CEO's remuneration was denominated in EUR. Each year's single figure of total remuneration has been converted to GBP using the 12-month average exchange rates for the year.

Percentage change in remuneration of the Directors and employees

The table below compares the remuneration of the Executive and Non-executive Directors of Shell plc with an employee comparator group consisting of local employees in the UK, the USA and the Netherlands. The local employee population of these countries is considered to be a suitable employee comparator group because: these are countries with a significant Shell employee base; a large proportion of senior managers come from these countries; and the REMCO considers remuneration levels in these countries when setting base salaries for Executive Directors. For the purposes of comparison, the change in employee remuneration is calculated by reference to the change in salary scale, benefits and annual bonus for a notional employee in each of the base countries, not by reference to the actual change in pay for a group of employees.

Taxable benefits are those that align with the definition of taxable benefits applying in the respective country. In line with the "Single figure of total remuneration for Executive Directors" table, the annual bonus is included in the year in which it was earned (rather than paid).

Percentage change in remuneration of Directors and employees [A]

	Salary/fees (% change)					Benefits (% change)					Annual bonus (% change)				
	2023-24	2022-23	2021-22	2020-21	2019-20	2023-24	2022-23	2021-22	2020-21	2019-20	2023-24	2022-23	2021-22	2020-21	2019-20
Employees [B]	3.7%	5.7%	2.4%	0.6%	3.0%	13.7%	(10.2%)	(8.4%)	0%	0%	7.5%	14.3%	(0.4%)	–	(100.0%)
Executive Directors															
Wael Sawan	3.9%	–	–	–	–	(88.2%)	–	–	–	–	7.9%	–	–	–	–
Sinead Gorman [C]	3.9%	37.0%	–	–	–	(83.5%)	(39.7%)	–	–	–	12.2%	45.8%	–	–	–
Non-executive Directors [D]															
Dick Boer	14.7%	25.4%	6.3%	70.4%	–	(58.0%)	389.8%	–	–	–					
Neil Carson	3.5%	–	3.6%	4.3%	85.6%	(19.4%)	593.0%	–	–	–					
Ann Godbehere	1.1%	–	0.8%	2.9%	15.8%	(46.8%)	829.4%	1286.7%	–	–					
Jane Holl Lute	1.1%	6.7%	80.4%	–	–	67.0%	155.0%	1893.8%	–	–					
Catherine Hughes	3.0%	4.6%	14.1%	2.8%	(10.0%)	(37.3%)	435.0%	868.8%	–	–					
Sir Andrew Mackenzie	8.3%	–	57.0%	1473.0%	–	(30.2%)	(57.5%)	(69.3%)	–	–					
Sir Charles Roxburgh	31.2%	–	–	–	–	5,453.1%	–	–	–	–					
Bram Schot	–	4.1%	10.1%	300.0%	–	(32.4%)	702.6%	–	–	–					
Leena Srivastava	29.0%	–	–	–	–	–	–	–	–	–					
Cyrus Taraporevala	25.1%	–	–	–	–	3139.1%	–	–	–	–					

[A] Where the value for the preceding year was zero or the individual was not in post and therefore no comparison data are available, '-' is recorded.
[B] Relates to change in pay for local employees in the UK, the USA and the Netherlands.
[C] Sinead Gorman was appointed as CFO effective April 1, 2022. The changes in remuneration shown for 2022-2023 are based on the period April 1, 2022 to December 31, 2022 for 2022, and a full year for 2023.
[D] Non-executive Directors do not receive any short-term incentives. The increases shown reflect the individuals' appointment to the Board part-way through the prior year, or additional fees payable for joining Board committees. For details of Board appointment and departure dates, see "Single figure of total remuneration for Non-executive Directors" on page 200.

Relative importance of spend on pay

The table below sets out distributions to shareholders by way of dividends and share buybacks, and remuneration paid to or receivable by employees for the last five years, together with annual percentage changes.

	Dividends and share buybacks [A]		Spend on pay (all employees) [B]	
Year	$ billion	Annual change	$ billion	Annual change
2024	22.6	(2)%	13.5	(1)%
2023	23.0	(11)%	13.6	(2)%
2022	25.8	183%	14.0	16%
2021	9.1	–	12.1	–
2020	9.1	(64)%	12.1	(8)%

[A] Dividends paid and repurchases of shares as reported in the "Consolidated Statement of Changes in Equity".
[B] Employee costs, excluding redundancy costs, as reported in Note 33 to the "Consolidated Financial Statements".

Spend on pay can be compared with the major costs associated with generating income by referring to the "Consolidated Statement of Income". Over the last five years, the average spend on pay was around 5% of the major costs of generating income. These costs are considered to be the sum of: purchases; production and manufacturing expenses; selling, distribution and administrative expenses; research and development; exploration; and depreciation, depletion and amortisation.

External appointments

Neither Wael Sawan nor Sinead Gorman held any external Non-executive Director positions during 2024.

Statement of voting at AGMs

Shell's 2024 AGM was held on May 21, 2024. The result of the poll in respect of the 2023 Annual Report on Remuneration was as follows:

Approval of 2023 Annual Report on Remuneration

Votes	Number	Percentage
For	3,837,712,517	94.83%
Against	209,399,986	5.17%
Total cast	4,047,112,503 [A]	100.00%
Withheld [B]	23,487,236	

[A] Representing 63.47% of issued share capital.
[B] A vote withheld is not a vote under UK law and is not counted in the calculation of the proportion of the votes for and against a resolution.

The 2023 Directors' Remuneration Policy was approved at the 2023 AGM. The result of the poll was as follows:

Approval of 2023 Directors' Remuneration Policy

Votes	Number	Percentage
For	3,931,530,222	94.60%
Against	224,454,202	5.40%
Total cast	4,155,984,424 [A]	100.00%
Withheld [B]	29,173,157	

[A] Representing 60.97% of issued share capital.
[B] A vote withheld is not a vote under UK law and is not counted in the calculation of the proportion of the votes for and against a resolution.

CEO pay ratio

	Option [A]	25th percentile pay ratio	Median pay ratio	75th percentile pay ratio
2024	A	83:1	61:1	40:1
Total pay and benefits:		£103,390	£141,334	£216,048
Salary:		£54,327	£88,049	£104,877
2023	A	80:1	58:1	39:1
Total pay and benefits:		£99,599	£136,066	£205,115
Salary:		£70,000	£76,444	£102,634
2022	A	134:1	80:1	50:1
Total pay and benefits:		£72,632	£121,847	£192,995
Salary:		£45,904	£56,302	£96,790
2021	A	97:1	57:1	37:1
Total pay and benefits:		£65,123	£111,912	£170,289
Salary:		£43,550	£68,238	£101,000
2020	A	93:1	57:1	38:1
Total pay and benefits:		£55,584	£90,972	£136,007
Salary:		£49,117	£75,365	£118,291
2019	A	147:1	87:1	54:1
Total pay and benefits:		£59,419	£100,755	£161,717
Salary:		£40,417	£56,721	£79,991
2018	A	202:1	143:1	92:1
Total pay and benefits:		£88,112	£124,459	£193,027
Salary:		£53,528	£80,407	£96,074

[A] Shell has chosen to use option A (as defined in UK reporting regulations) to calculate the CEO pay ratio in accordance with guidance from the UK government that this is the preferred approach and the most statistically accurate method for identifying the ratios. Under option A, a comparable single figure for all UK employees has been calculated in order to identify the employees whose pay and benefits are at the 25th, 50th (median) and 75th percentiles for comparison with the CEO. Employee pay has been calculated based on the total pay and benefits paid in respect of 2024 for all employees who were employed on December 31, 2024. For part-time workers and joiners in the year, pay and benefits have been annualised based on the proportion of their working time in the UK during the year. This is calculated with an approach consistent with the methodology for determining annual bonuses. The REMCO believes that this provides a fair and reasonable calculation of the pay ratios for Shell employees in the UK.

The ratio of the CEO's pay to the median UK employee is 61. The ratio at median for 2024 is higher than for 2023, reflecting higher variable pay outcomes. While variable pay outcomes have also increased for other UK employees, a higher proportion of the CEO's remuneration is variable, meaning the pay ratio is higher in years of higher variable pay outcomes. The REMCO believes the CEO pay ratio for 2024 is consistent with Shell's philosophy of pay for performance.

Directors' employment arrangements and letters of appointment

Executive Directors are employed for an indefinite period. Non-executive Directors, including the Chair, have letters of appointment. Details of Executive Directors' employment arrangements can be found in the Policy on pages 213-214.

Further details of Non-executive Directors' terms of appointment can be found in the "Other regulatory and statutory information" on page 223 and the "Governance framework" report on page 159.

Compensation of Directors and Senior Management

During the year ended December 31, 2024, Shell paid and/or accrued compensation totalling $46 million (2023: $57 million) to Directors and Senior Management for services in all capacities while serving as a Director or member of Senior Management, including $2 million (2023: $2 million) accrued to provide pension, retirement and similar benefits. The amounts stated are those recognised in Shell's income attributable to Shell plc shareholders on an IFRS basis. See Note 34 to the "Consolidated Financial Statements". Personal loans or guarantees were not provided to Directors or Senior Management.

Workforce engagement on remuneration matters

Workforce engagement

Our employees are fundamental to our success. Fostering a collaborative culture and reinforcing a learner mindset is central to delivering our strategy. The Board's view is that all Directors have a collective responsibility for workforce engagement, ensuring that employees' voices are heard on all business matters, including pay, and that the Company communicates effectively to employees on our remuneration policies and practices.

The Board and management regularly engage with the workforce through a range of formal and informal channels. These include webcasts and all-employee messages from our CEO and other senior leaders; town halls and team meetings; virtual coffee connects; interviews with senior management; internal social platforms; and focused engagements. During interactive sessions, employees have the opportunity to ask about any topic, including pay. The Board's preference is to build on existing, long-standing channels of engagement for discussions around remuneration. During the year, management engaged with the workforce on what the 2024 performance metrics meant for each of us, giving employees the opportunity to ask any questions on this topic. We also conduct annual employee surveys; further information is on page 117.

Wider employee context

The REMCO receives annual updates on workforce remuneration topics, including employees' views on pay matters; CEO pay ratio; workforce reward philosophy and principles; alignment of Shell values and behaviours with remuneration practices; and general employee salary planning and variable pay outcomes, taking into account the cost of living environment and the impact of this on our colleagues. The REMCO is also periodically updated on wider employee matters such as the UK gender and ethnicity pay gap analyses. In this way, the REMCO is able to satisfy itself that reward across Shell is aligned to our strategy, culture, and long-term sustainable success.

Shell adheres to its fair pay principles in all remuneration-related matters. Pay in Shell is market-competitive, free from bias, and provides security to our employees. Shell sets clear performance expectations, gives employees the opportunity to share in Shell's success through a variety of variable pay schemes, and is transparent and clear in its communication of remuneration. For more information, visit the "Careers" section of shell.com.

How executive remuneration aligns with wider Company pay policy

Executive remuneration structures in Shell are strongly aligned with the structures for the broader workforce, as set out in the table below.

Element	Comparison of Executive Director and wider workforce arrangements
Salary	The Executive Directors' salaries are reviewed with reference to the factors set out in the Policy, against defined comparator groups. The market-competitiveness of wider workforce salaries is assessed at a base country level.
Pension and benefits	The Executive Directors' pension benefits are aligned with those offered to employees who joined Shell from 2013 onwards in the UK. Shell does not operate separate executive pension arrangements. All Group employees participate in the relevant pension plan for their base country based on their date of joining. The Executive Directors are eligible to receive the same benefits available to the broader workforce.
Annual bonus	The Group scorecard applicable to Group employees is identical to that applicable to Executive Directors in terms of performance measures, weightings and targets. For the wider workforce, an additional multiplier applies based on individual performance during the year. No individual multiplier applies to Executive Directors, and further, 50% of the bonus is paid in shares, and the bonus is subject to malus and clawback provisions.
Long-term incentives	In 2025, Executive Directors and around 120 senior executives received Performance Share Awards (PSA) on the same terms. Executive Directors' awards are subject to a three-year holding period. Around 12,000 employees received a mix of PSAs and Restricted Share Awards, with the split based on seniority. Further information is on page 119.
Shareholding guidelines	The Executive Directors have the highest shareholding guidelines in the Company, which are set at 700% and 500% of salary for the CEO and the CFO, respectively. These guidelines continue post termination for a period of two years. Shareholding guidelines extend into the organisation to senior manager level. Employees are required to achieve their individual guideline within a specified timeframe, as is the case for Executive Directors.

Statement of planned implementation of Policy in 2025

A summary of how the shareholder-approved Policy will be applied to Directors' remuneration for 2025 is set out below.

Executive Directors

Comparator group

The benchmarking comparator group for 2025 remains consistent with that used in prior years, and consists of other oil majors (bp, Chevron, ExxonMobil and TotalEnergies) and a selection of major Europe-based companies. The oil majors are included in the comparator group as these represent our closest direct competitors operating in similar market conditions. The Europe-based companies are selected based on their size, complexity and global reach. The REMCO retains the right to alter the comparator group as it sees fit to ensure it remains an appropriate and relevant benchmark.

The REMCO uses benchmark data from these companies only as a guide to the competitiveness of the remuneration packages. The REMCO does not seek to position remuneration at any defined point against the comparator data.

European comparator group

Allianz	Glencore	Rio Tinto
AstraZeneca	GSK	Roche
BAT	Mercedes-Benz	Siemens
Bayer	Nestlé	Unilever
Diageo	Novartis	Vodafone

Salaries

Effective January 1, 2025, Wael Sawan and Sinead Gorman received a salary increase of 5.5%, and salaries for 2025 are £1,535,000 and £1,014,000, respectively.

In reviewing the Executive Directors' salaries, the REMCO carefully considered the external environment, and the increases provided to the Shell workforce in the key markets of the UK (5.5%), the USA (3.0%) and the Netherlands (3.6%). The Executive Directors' increases for 2025 were positioned in line with other UK employees and the REMCO recognised the multiplier effect on total remuneration. Executive Directors' salary increases for 2024 were positioned below that for other UK employees.

Annual bonus

The REMCO reviewed the bonus scorecard during the year and considered that it remained well aligned with our strategic and operational priorities. There are no changes for 2025, except that the personal safety metric will be renamed fatality and permanent impairment, replacing serious injury, illness and fatality frequency. This is part of Shell's commitment to transition to industry standards defined by the industry association, International Oil & Gas Producers. The scope and definition of the metric remain unchanged.

Some shareholders have commented on the use of LNG in the energy transition performance measure in the bonus. The REMCO reviewed this matter during the year. LNG has a critical role to play in Shell's energy transition strategy by producing less carbon emissions than coal when used to generate electricity, helping to maintain grid stability as the share of renewable energy grows, increasingly powering transport and shipping, and providing energy security in the coming decades. Therefore, the REMCO believes it is important that LNG is appropriately captured in the scorecard.

2025 annual bonus measures, weightings, and link to strategy

Performance measure	Weighting
Financial delivery	35%
Operational excellence	35%
"Shell's journey in the energy transition"	15%
Safety	15%

	Link to strategy
Financial delivery • Cash flow from operating activities (35%)	Supports our financial priority to generate cash to fund shareholder distributions and capital investment.
Operational excellence • Asset management excellence (15%) • Project delivery excellence (10%) • Customer excellence (10%)	Underpins delivery of our financial framework and ambitions to progress in the energy transition.
"Shell's journey in the energy transition" • LNG volumes [A] (5%) • Reducing operational emissions (5%) • Supporting customer decarbonisation (5%)	Drives a direct focus on Shell's plans for the energy transition.
Safety (15%) • Fatality and Permanent Impairment (7.5%) • Tier 1 and 2 process safety (7.5%)	Drives an ongoing focus on personal and process safety.

[A] Equity liquefaction.

Scorecard targets will be disclosed in the subsequent Directors' Remuneration Report when they are no longer deemed to be commercially sensitive.

Performance Share Awards

On January 31, 2025, Performance Share Awards (PSA) were made to the Executive Directors resulting in 162,964 Shell plc shares being awarded to Wael Sawan and 96,871 to Sinead Gorman. The awards had a face value of 300% (maximum performance outcome 600%) of salary for Wael Sawan and 270% (maximum performance outcome 540%) of salary for Sinead Gorman, excluding potential share price appreciation and dividends. The 2025 PSAs to Executive Directors are based on salaries as at December 31 of the prior year, consistent with the rest of the organisation.

The REMCO reviewed the award levels in the context of share price movement over the year prior to award, and determined that the risk of windfall gain was limited and therefore no adjustment was made.

Performance is measured over the three-year period January 1, 2025, to December 31, 2027. The performance measures, weightings and link to strategy for the 2025 award are set out on this page.

2025 PSA performance conditions, weightings, and link to strategy

Performance condition	Weighting
Cash generation [A]	25%
TSR [A]	25%
Organic free cash flow [B]	25%
"Shell's journey in the energy transition" [B]	25%

[A] ☐ Relative measures [B] ☐ Absolute measures

Link to strategy	Vesting schedule (% of initial award)
Cash generation (defined as CFFO/average capital employed) Measurement of Shell's ability to generate the top-line cashflows to finance investment in our business and shareholder distributions.	1st – 200% 2nd – 150% 3rd – 80% 4th or 5th – 0%
TSR Assessment of actual value created for shareholders.	Performance ranked against the other energy majors: bp, Chevron, ExxonMobil and TotalEnergies.
Organic free cash flow Recognition of the importance of generating cash after net capital expenditure to service and reduce debt, pay dividends, buy back shares and make future capital investments.	Maximum – 200% Target – 100% Threshold – 40% Below threshold – 0% OFCF targets are set annually for each annual operating plan.
"Shell's journey in the energy transition" Measures focused on Shell's plans for the energy transition.	Performance assessment will be based on the REMCO's holistic assessment of progress towards reducing Shell's operational emissions and supporting our customers to reduce emissions.
Holding period Three-year holding period, which remains in force post tenure.	

Performance framework for the 2025 PSA "Shell's journey in the energy transition" performance condition

The REMCO's determination of the vesting outcome will be based on its holistic assessment of progress towards reducing emissions from our operations and supporting our customers to reduce their emissions. This will be based on our journey to net-zero climate targets for our own operations of:

- halving Scope 1 and 2 emissions by 2030 under operational control on a net basis (2016 baseline);
- eliminating routine flaring from Upstream operations by 2025 [A]; and
- maintaining methane emissions intensity below 0.2% and achieving near-zero methane emissions by 2030 [B].

[A] This target was subject to the completion of the sale of The Shell Petroleum Development Company of Nigeria Limited (SPDC). With effect from January 1, 2025, SPDC ceased routine flaring. As detailed elsewhere in this report, on March 13, 2025, Shell completed the sale of SPDC to Renaissance.
[B] On an intensity basis.

The REMCO will also take account of progress in developments that support the energy transition to 2030 and beyond, such as the development of our Power business (including renewables), lower-carbon LNG, biofuels, electric vehicle charging, hydrogen and CCS.

We will take into account progress towards achieving a 15-20% reduction in NCI by 2030 (2016 baseline), a 15-20% reduction in customer emissions from the use of our oil products by 2030 (2021 baseline) [A], as well as Shell's wider performance in accelerating the energy transition, e.g. demonstrating leadership and advocacy in standard setting, alongside any other factors that the REMCO considers relevant.

[A] This ambition was set in March 2024. Customer emissions from the use of our oil products (Scope 3, Category 11) were 517 million tonnes CO_2e in 2023 and 569 million tonnes CO_2e in 2021.

The REMCO will provide a full disclosure of all material factors, both quantitative and qualitative, that it took into account in reaching the vesting decision.

Malus and clawback

The annual bonus is subject to malus provisions before it is delivered, and to clawback thereafter for a period of three years. The PSA is subject to malus provisions before vesting, and to clawback provisions thereafter for a period of three years. Shell's chosen malus and clawback periods align with the performance and holding periods, respectively, for simplicity. A full description of the circumstances under which malus and clawback might be applied to a variable pay award is set out in the Policy.

Pension

There are no changes to pension benefits for 2025.

Benefits

Executive Directors are provided with a chauffeured car for business travel, including home-to-office commuting. Other benefits, such as medical and other risk benefits are in line with those provided to the general workforce.

Non-executive Directors' fees

2025 Non-executive Directors' fees

	£	Other fees
Chair of the Board	850,000	Non-executive Directors receive an additional fee of £4,000 for any Board meeting involving intercontinental travel – except for one meeting a year held in a location other than London.
Non-executive Director	120,000	
Senior Independent Director	49,000	
Audit and Risk Committee		
Chair [A]	55,000	
Member	25,000	
Sustainability Committee		
Chair [A]	31,000	
Member	15,000	
Nomination and Succession Committee		
Chair [A]	22,000	
Member	11,000	
Remuneration Committee		
Chair [A]	42,000	
Member	15,000	

[A] The chair of a Committee does not receive an additional fee for membership of that Committee.

The Company Chair fee is determined by the REMCO, and for 2025 remains £850,000. The Chair of the Board does not receive any additional fee for chairing the Nomination and Succession Committee or attending any other Board Committee meeting.

The Non-executive Directors receive a basic fee. There are additional fees for the Senior Independent Director, a Board Committee chair or a Board Committee member, and for most Board meetings involving intercontinental travel. Business expenses (including transport between home and office and occasional business-required partner travel) and associated tax are paid or reimbursed by Shell.

The Board reviews Non-executive Directors' fees periodically to ensure that they are aligned with those of other major listed companies. During these reviews the Board considers fees in the top 30 companies within the FTSE 100 index and the European comparator group as its primary points of reference. For 2025, fees remain unchanged.

Directors' Remuneration Policy

The Directors' Remuneration Policy sets out:

- A summary of shareholder-approved changes to the Directors' Remuneration Policy, page 208.
- Executive Directors' Remuneration Policy, page 209.
- Non-executive Directors' Remuneration Policy, page 214.

This section describes the Directors' Remuneration Policy (the Policy) which, following shareholder approval at the 2023 Annual General Meeting (AGM), came into effect from May 23, 2023, and will be effective until the 2026 AGM, unless a revised Policy is proposed by the Company and approved by shareholders in the meantime.

The principles underpinning the REMCO's approach to executive remuneration are the foundation for everything we do and are:

- Alignment with Shell's strategy and sustainability: the Executive Directors' compensation package should promote the long-term, sustainable success of Shell, and be strongly linked to the achievement of stretching targets that are indicators of the execution of Shell's strategy.
- Pay for performance: the majority of the Executive Directors' compensation, (excluding benefits and pensions), should be linked directly to Shell's performance through variable pay instruments.
- Competitiveness: remuneration levels should be determined by reference internally against Shell's Senior Management and externally against companies of comparable size, complexity and global scope.
- Long-term creation of shareholder value: Executive Directors should align their interests with those of shareholders by holding shares in Shell.
- Consistency: the remuneration structure for Executive Directors should generally be consistent with the remuneration structure for Shell's Senior Management. This consistency builds a culture of alignment with Shell's purpose and a common approach to sharing in Shell's success.
- Risk assessment: decisions should be made in the context of the Shell General Business Principles and Code of Conduct. The remuneration structures and rewards should meet risk assessment tests to ensure that shareholders' interests are safeguarded and that inappropriate actions are avoided.

The Executive Directors' remuneration structure is made up of a fixed element of basic pay and two variable elements: the annual bonus (50% delivered in shares) and the Long-term Incentive Plan (LTIP). Variable pay outcomes are conditional on the successful execution of the Operating Plan in the short term, and the delivery of strategic goals and financial and share price outperformance over the longer term. The award of shares under the bonus and LTIP, along with significant shareholding requirements, are intended to ensure executives have a sizeable shareholding in the Company and experience the same outcomes as our shareholders.

During 2022, the REMCO reviewed the Policy to ensure that it continued to support Shell's strategy. The REMCO determined that the 2020 Policy remained appropriate in most respects, and required changes only to reflect the transition of our Executive Directors to the UK to align with market practice and for simplification. For each area of the Policy, the REMCO reviewed the alignment with strategy, market practice, the corporate governance environment, and feedback from shareholders, and additionally spent time updating the selection and calibration of performance metrics in variable pay schemes. Any potential conflict of interest was mitigated by the independence of the REMCO members and the REMCO Terms of Reference. The REMCO also considered the provisions of the UK Corporate Governance Code when reviewing the Policy, and sought to reflect the principles of clarity, simplicity, risk management, predictability, proportionality and alignment with culture.

A comparison of the 2023 and 2020 Policies is set out below.

Remuneration element	Changes to 2020 Policy	Rationale for the change
Executive Directors		
Base salary	◦ Salary cap amended from €2 million to £2 million.	◦ To reflect the transition of the Executive Directors to the UK.
Pension	◦ Move from base country arrangements to defined contribution pension arrangements applicable to the wider Shell workforce in the UK.	
Severance policy	◦ New service contracts under which both the employee and the employer can terminate employment by giving 12 months' written notice, replacing the previous provision which reflected Dutch statutory provisions.	
Annual bonus and LTIP rules	◦ REMCO discretion to suspend annual bonus or share award vesting pending the outcome of an investigation in exceptional circumstances.	◦ To allow sufficient time for investigation, as required.
Leaver treatment	◦ REMCO discretion to waive remaining bonus/LTIP holding period in exceptional circumstances (primarily death).	◦ To align with market practice.
TSR underpin in LTIP	◦ TSR underpin to be removed from the LTIP.	◦ To simplify the plan and align with market practice.
Non-executive Directors		
Retirement gift	◦ Maximum value amended from €300 to £300.	◦ To reflect the transition to the UK.

Executive Directors' Remuneration Policy table

Purpose and link to strategy	Maximum opportunity	Operation and performance measurement
Base salary		
Provides a fixed level of earnings to attract and retain Executive Directors.	£2,000,000	Reviewed annually with adjustments effective from January 1. In making salary determinations, the REMCO will consider: ◦ the market positioning of the compensation packages; ◦ comparison with Senior Management salaries; ◦ the employee context, and planned average salary increase for other employees across the UK, the Netherlands and the USA; ◦ the experience, skills and performance of the Executive Director, or any change in the scope and responsibility of their role; ◦ general economic conditions, Shell's financial performance and governance trends; and ◦ the impact of salary increases on pension benefits and other elements of the package.
Benefits		
Provides benefits, typically in line with those applicable to the wider workforce, in order to attract and retain Executive Directors.	Determined by the nature of the benefit itself and costs of provision, and may depend on external factors, such as insurance costs.	Typical benefits include car allowances, home-to-office transport, risk benefits (for example ill health, disability or death-in-service), security provision, and employer contributions to insurance plans (such as medical) including Directors' liability insurance. In the event an international relocation is required either prior to appointment or while appointed, Shell's mobility policies may apply and the REMCO may offer appropriate provisions in respect of items including, but not limited to, relocation, assistance with visa/immigration/tax issues, and tax return support. It may also provide housing and education assistance for a specified period of time, expected to be no more than two years. Tax equalisation related to expatriate employment prior to Board appointment, or in other limited circumstances to offset double taxation, may also be provided. Precise benefits will depend on the Executive Director's specific circumstances and may include any tax liabilities relating to business-related benefits such as in the case of security or relocation provisions. The REMCO may adjust the range and scope of the benefits offered in the context of developments for other employees in the country which the Executive Director is based. Personal loans or guarantees are not provided to Executive Directors.
Pension		
Provides a competitive defined contribution pension provision applicable to the wider workforce in the UK to attract and retain Executive Directors.	Determined by the rules of the defined contribution UK pension arrangements.	Executive Directors' retirement benefits are maintained in line with those of the wider Shell workforce in the UK. Only base salary is pensionable, unless plan regulations specify otherwise and cannot legally be disapplied. The rules of the relevant plan detail the pension benefits which members can receive. The REMCO retains the right to amend the form of any Executive Director's pension arrangements where appropriate, for example in response to changes in legislation to ensure the original objective of this element of remuneration is preserved. New Executive Directors based in the UK, whether internal appointees or external hires, will be provided with the defined contribution arrangement, applicable to the wider Shell workforce in the UK, which currently includes the flexibility to take this as a pension cash alternative.
Annual bonus		
Rewards the delivery of short-term operational targets as derived from Shell's Operating Plan. Aligns the interests of Executive Directors and shareholders, and supports retention, through long-term holding in shares.	Target bonus: 125% of base salary. Maximum bonus: 200% of target.	◦ The bonus is determined by reference to performance from January 1 to December 31 each year. ◦ Annual bonus = base salary x target bonus % x scorecard result (0–2). ◦ The scorecard is reviewed each year, taking account of Shell's operating plan, to ensure that the performance measures, targets and weightings are appropriate. Performance measures typically relate to financial delivery, operational excellence, progress in the energy transition, and safety, with indicative weightings of 35%, 35%, 15% and 15% respectively. This helps to balance short-term financial performance with the achievement of a broader set of strategic and operational objectives to support long-term shareholder value creation. The REMCO retains the flexibility to adjust performance measures, weightings and targets on a year-by-year basis, within the terms of the Policy. ◦ Scorecard targets are disclosed on a retrospective basis in a subsequent Annual Report on Remuneration, when they are no longer deemed commercially sensitive. ◦ To reinforce alignment with shareholder interests, 50% of any bonus earned is delivered in cash and 50% is delivered in net-of-tax shares. The shares are subject to a three-year holding period from the end of the performance period the award relates to, which applies beyond an Executive Director's tenure. The REMCO retains discretion to waive any part of this holding period in exceptional circumstances (primarily death). ◦ The bonus is subject to malus provisions before it is delivered, and to clawback thereafter for a period of three years.

Executive Directors' Remuneration Policy table continued

Purpose and link to strategy	Maximum opportunity	Operation and performance management
Long-term Incentive Plan (LTIP)		
Rewards longer-term value creation linked to Shell's strategy. The measures focus on financial performance, capital discipline and the achievement of Shell's ambitions in the energy transition. Aligns the interests of Executive Directors and shareholders, and supports retention through long-term holding in shares.	Target award: 300% of base salary. Awards may vest at up to 200% of the shares originally awarded, plus dividends.	◦ Award levels are determined in respect of any financial year by the REMCO within the Policy maximum. ◦ Awards may vest at between 0% and 200% of the initial award, depending on Shell's performance, assessed over a three-year performance period, on an absolute basis and/or on a relative basis against an appropriate comparator group. ◦ Performance measures and weightings are reviewed and set by the REMCO at the beginning of each three-year performance period, taking account of Shell's strategic priorities. ◦ Notional dividends accrue over the vesting period in respect of awards that vest. ◦ To reinforce alignment with shareholder interests, net of tax shares delivered from vested awards are subject to a three-year holding period from the end of the performance period the award relates to, which applies beyond an Executive Director's tenure. The REMCO retains discretion to waive any part of this holding period in exceptional circumstances (primarily death). ◦ Dividends accrue over the vesting period in respect of awards that vest. ◦ The award is subject to malus provisions before vesting, and to clawback provisions thereafter for a period of three years.
Discretion, malus and clawback		
Enables the management of risks from behaviour-based incentive schemes and the REMCO to manage the range of pay outcomes.	Adjustment events exist for the purposes of applying malus and clawback. The REMCO retains discretion to adjust pay outcomes.	◦ The REMCO retains the discretion to adjust mathematical outcomes of the annual bonus scorecard and/or LTIP vesting for any Executive Director if and to the extent that it considers this appropriate at their sole discretion. ◦ The REMCO may adjust pay outcomes for the purposes of managing quantum. This would be done at the REMCO's discretion after considering single figure outcome for the year, taking into account Shell's performance, the operation of the remuneration structures and any other relevant considerations. ◦ In exceptional circumstances, the REMCO may determine that the vesting of an annual bonus or a share award should be suspended pending the outcome of an investigation. The suspension may be for such period as the REMCO considers sufficient to permit the investigation to be concluded. ◦ The use of any discretion will be disclosed and explained.
Shareholding requirements		
Aligns interests of Executive Directors with those of shareholders by creating a connection between individual wealth and Shell's long-term performance.	Shareholding (% of base salary): ◦ CEO: 700% ◦ CFO: 500%	◦ Executive Directors are expected to build up their shareholding to the required level over a period of five years from appointment and, once reached, to maintain this level for the full period of their appointment. The intention is for the shareholding guideline to be reached through retention of vested shares from share plans. The REMCO will monitor progress and retains the ability to adjust the guideline in special circumstances on an individual basis. ◦ In the event of an increase to the guideline, this timeframe is increased by one year for every additional multiple of salary required, subject to a maximum of five years from the date of the change. ◦ The Executive Director will be required to maintain their shareholding requirement (or existing shareholding if lower) for a period of two years from the date they cease to be an employee. Post-termination holding is enforced through the arrangements put in place with the employee on termination. ◦ In the event that another Executive Director joins the Board, the REMCO will determine their shareholding requirement level, which will not be less than 200% of salary, in line with corporate governance best practice. ◦ Vested shares from incentive plans (including bonus and LTIP shares subject to holding period) count towards the requirement. The REMCO monitors individual progress and retains the ability to adjust the guideline in special circumstances on an individual basis.

Notes to the Policy table

Executive Directors outside of the UK

In respect of salary, benefits and pension, in the event that an Executive Director is based outside of the UK, the REMCO reserves the right to determine the individual's remuneration arrangements in line with their base or host country, within the spirit of the Policy.

Payments from previously agreed remuneration arrangements

The REMCO reserves the right to make any remuneration payments where the terms of the payment were agreed: (i) before the Policy came into effect, or (ii) at a time when the relevant individual was not a Director of the Company and, in the opinion of the REMCO, the payment was not in consideration for the individual becoming a Director of the Company. The REMCO also reserves the right to honour pre-existing contractual obligations in accordance with the terms of the service contract and relevant incentive plan. Details of any such payments will be set out in the Annual Report on Remuneration as they arise.

Selection of performance measures

For the 2023 performance year, the annual bonus scorecard will consist of financial delivery (35%), operational excellence (35%), progress in the energy transition (15%), and safety (15%). Targets are derived from the annual business plan. These measures are designed to drive focus on the financial and operational performance critical to our success in delivering our strategy. The REMCO believes it is important for annual variable pay to remain balanced, with short-term operational components complementing the LTIP's focus on longer-term financial and strategic outcomes. The same annual bonus scorecard applies to the majority of Group employees, supporting consistency of remuneration and alignment of objectives across employees and senior management.

For 2023 LTIP awards, performance will be assessed based on 75% financial metrics (relative CFFO divided by average capital employed, relative TSR, absolute OFCF, equally weighted) and 25% on a strategic measure focused on Shell's journey in the energy transition. These metrics are designed to support our strategic ambition of accelerating our transition to be a net-zero emissions business while creating value for our shareholders.

For the relative measures, 200% vests for first position, 150% for second, 80% for third, and 0% for ranking fourth or fifth. The comparator group consists of four of the strongest companies in our industry (bp, Chevron, ExxonMobil and TotalEnergies). Outperforming Shell's closest competitors on key financial metrics is challenging. A vesting outcome of 80% of target (40% of maximum) for median performance in a small comparator group is considered appropriate by the REMCO. The REMCO is aware that vesting for median performance is generally set at a limit of 25% of maximum for other UK companies. However, these are typically applied against a larger comparator group.

To simplify the plan and align with market practice, the TSR underpin has been removed from the plan effective from 2024 awards.

Discretion

There are a number of specific areas in which the REMCO may exercise discretion, including:

- To review the specific measures, weightings and targets for the annual bonus scorecard and LTIP award annually and adjust accordingly to evolve with Shell's strategy and circumstances to ensure that the targets remain stretching but realistic. If the REMCO were to propose any material changes to the LTIP performance metrics, it would consult with major shareholders.
- To adjust mathematical variable pay outcomes if and to the extent that it considers this appropriate. This power to adjust the outcomes is broad and includes adjusting the outcomes to zero. For example, an adjustment might be made if the REMCO considers:
  - the mathematical outcomes do not reflect the wider financial or non-financial performance of the Company or the participant over the performance period;
  - the LTIP vesting percentage is not appropriate in the context of circumstances that were unexpected or unforeseen at award; and
  - there is any other reason why an adjustment is appropriate.

It is not anticipated that discretion would be used for upwards adjustment. If, in exceptional circumstances, it was considered, this would be done only after consultation with major shareholders.

Performance outcomes and/or share price movements make it difficult to predict the final amounts delivered under the LTIP at the time of award. Each year, the REMCO reviews the LTIP vesting values and single figure outcomes for the Executive Directors to ensure that they are appropriate. The REMCO will review the formulaic single figure outcomes relative to the quality of performance outcomes and adjust these, taking into account Shell's performance, shareholder experience, the operation of the remuneration structures and any other relevant factors to ensure that the highest variable pay outcomes are only achieved in years with the highest quality performance. In years where the vesting outcome makes the total remuneration inappropriate for any Executive Director, the REMCO will consider an adjustment to the annual bonus outcome and/or the LTIP vesting outcome for the purposes of managing remuneration quantum. In making any adjustment to the annual bonus and/or LTIP vesting outcome for this purpose, REMCO will consider the overall level of remuneration for the Executive Director, the operation of the annual bonus, the operation of the LTIP, the wider performance of Shell over the performance periods, as well as the internal context for other employees. An explanation of any discretionary adjustment would be set out in the relevant year's Directors' Remuneration Report.

Malus and clawback

Variable pay awards may be made subject to adjustment events. At the discretion of the REMCO, such an award may be adjusted before delivery (malus) or reclaimed after delivery (clawback) if an adjustment event occurs.

Adjustment events will be specified in award documentation and it is intended that they will, for example, relate to restatement of financial statements due to material non-compliance with a financial reporting requirement; misconduct by an Executive Director or misconduct through their direction or non-direction; any material breach of health and safety or environment regulations; serious reputational damage to Shell; material failure of risk management; corporate failure; or other exceptional events as determined at the discretion of the REMCO. The REMCO retains the right to alter the list of adjustment events in respect of future awards.

Differences in Remuneration Policy for Executive Directors from that for other employees

The remuneration policies, structure, and approach to setting remuneration levels are consistent across organisational levels at Shell, with consideration given to location, seniority and responsibilities. A higher proportion of total remuneration is tied to variable pay for Executive Directors and members of Senior Management, to reflect these individuals' positions of influence and accountability.

Detailed discussion of how executive remuneration aligns with wider Company pay policy may be found in the "Workforce engagement on remuneration matters" section of the Annual Report on Remuneration on page 204.

Illustration of potential remuneration outcomes

The charts on this page illustrate the potential future value and composition of the Executive Directors' total remuneration opportunities under four performance scenarios ("Minimum", "On-target", "Maximum" and "Maximum +50% share price appreciation between award and vest"). The remuneration opportunities are based on those set out in the Policy table, applied to 2023 base salaries. The majority of the Executive Directors' remuneration is delivered through variable pay elements, which are conditional on the achievement of stretching performance targets.

For simplicity, the charts exclude dividend accrual, and exclude the effect of any Company share price movement except in the "Maximum +50%" scenario.

Performance scenarios

	Minimum	Target	Maximum
Base salary (2023)	✓	✓	✓
Benefits (2022 actual) [A]	✓	✓	✓
Pension (2023)	✓	✓	✓
Bonus (2023)	NIL	125% CEO	250% CEO
		120% CFO	240% CFO
LTIP (2023)	NIL	300% CEO	600% CEO
		270% CFO	540% CFO

[A] Excluding one-off benefits related to the move to the UK.

CEO pay scenarios (£ million)

CFO pay scenarios (£ million)

Recruitment

The REMCO determines the remuneration package for new Executive Director appointments. These appointments may involve external or internal recruitment, or reflect a change in role of a current Executive Director.

When determining remuneration packages for new Executive Directors, the REMCO will seek a balanced outcome which allows Shell to:

- attract and motivate candidates of the right quality;
- take into account the individual's current remuneration package and other contractual entitlements;
- seek a competitive pay position relative to our comparator group, without overpaying;
- encourage relocation if required; and
- honour entitlements (for example, variable remuneration) of internal candidates before their promotion to the Board, with the exception of any previous pension arrangements.

The REMCO will follow the approach set out below when determining the remuneration package for a new Executive Director.

Component	Approach	Maximum
Ongoing remuneration	The salary, benefits, annual bonus, long-term incentives and pension benefits will be positioned and delivered within the framework of the Policy.	As stated in the Executive Directors' Remuneration Policy table, and notes to the table.
Compensation for the forfeiture of any awards under variable remuneration arrangements	To facilitate external recruitment, one-off compensation in consideration for forfeited awards under variable remuneration arrangements entered into with a previous employer may be required. The REMCO will use its judgement to determine the appropriate level of compensation by matching the value of any lost awards under variable remuneration arrangements with the candidate's previous employer. This compensation may take the form of a one-off cash payment or an additional award under the LTIP. The compensation can alternatively be based on a newly created long-term incentive plan arrangement where the only participant is the new Director. The intention is that any such compensation would, as far as possible, align to the duration and structure of the award being forfeited. Where appropriate, performance conditions, holding periods, and malus and clawback provisions will apply.	An amount equal to the value of the forfeited variable remuneration awards, as assessed by the REMCO. Consideration will be given to appropriate performance conditions, performance periods and clawback arrangements.

Component	Approach	Maximum
Replacement of forfeited entitlements other than any awards under variable remuneration arrangements	There may also be a need to compensate a new Executive Director in respect of forfeited entitlements other than any awards under variable remuneration arrangements. This could include, for example, contractual entitlements or other benefits. On recruitment, these entitlements may be replicated within the Executive Director's remuneration package or valued by the REMCO and compensated in cash. In cases of internal promotion to the Board, any commitments made which cannot be effectively replaced within the Executive Director's remuneration package may, at the REMCO's discretion, continue to be honoured.	An amount equal to the value of the forfeited entitlements, as assessed by the REMCO.
Exceptional recruitment incentive	Apart from the ongoing annual remuneration package and any compensation in respect of the replacement of forfeited entitlements, there may be circumstances in which the REMCO needs to offer a one-off recruitment incentive in the form of cash or shares to ensure the right external candidate is attracted (e.g. to the industry). The REMCO recognises the importance of internal succession planning but it must also have the ability to compete for talent with other global companies. The necessity and level of this incentive will depend on the individual's circumstances. The intention will be that this is only used in genuinely exceptional circumstances.	A one-off amount up to the limits set out in the Executive Directors' Remuneration Policy table, in addition to the ongoing package.
Relocation	In the event that an internal or external candidate were required to relocate internationally to take up the Executive Director position, the REMCO may offer appropriate relocation provisions in respect of items including, but not limited to, relocation, assistance with visa/immigration issues, housing, and education assistance. If provided, these will be for a specified period of time, expected to be no more than two years.	The level of such benefits would be set at an appropriate level by the REMCO, taking into account the circumstances, provisions applicable to the wider internationally mobile workforce, and typical market practice.

Executive Directors' service contracts and end of employment arrangements (including change of control provisions)

Provision	Policy
Service contracts	Executive Directors are employed for an indefinite period. Executive Directors based in the UK will be employed on service contracts governed by the laws of England and Wales.
Notice period	The Executive Director or the Company may terminate employment by giving 12 months' written notice. The Company may require the Executive Director to be on garden leave during all or any of the notice period (whether notice is given by the Company or the Executive Director).
Payment in lieu of notice (PILON)	The Company may terminate an Executive Director's service contract at any time with immediate effect and pay a sum in lieu of the unexpired portion of any notice period to the value of no more than 12 months' fixed pay (salary and regular allowances) and other benefits (unless statutory requirements to pay additional sums apply). The Company has the contractual right to make any PILON in monthly instalments in its discretion. Once the right to make a PILON is exercised, its delivery in instalments is mitigated by a contractual obligation on the Executive Director to seek alternative employment.
Compensation for loss of office	Executive Directors will not usually receive additional payments for loss of office, other than, as appropriate, payments in lieu of notice as described above or payments in respect of damages if the Company terminates an Executive Director's employment in breach of contract (taking into account, as appropriate, the Executive Director's responsibility to mitigate any losses). The REMCO reserves the right to make payments it considers reasonable in settlement of potential legal claims taking into account contractual provisions, applicable law, corporate governance provisions, the applicability of any statutory compensation and the best interests of Shell and shareholders as a whole.
Dismissal	The Company may terminate employment immediately in particular defined circumstances such as gross misconduct, with no further payment or PILON.
Annual bonus accrued prior to termination	The following provisions will normally apply: ◦ In the event of death, disability, injury or ill health, retirement, redundancy, completion of a fixed-term contract, and other circumstances at the REMCO's discretion, any annual bonus in the year of departure is pro-rated based on service. Depending on the timing of the departure, the REMCO may consider the latest scorecard position or defer payment until the full-year scorecard result is known. ◦ In the event of a change of control, the REMCO will assess the most appropriate treatment for the outstanding bonus period according to the circumstances. ◦ Bonuses delivered in shares represent the bonus which a participant has already earned, and carry no further performance conditions. Therefore, these shares will normally be unrestricted at the conclusion of the normal holding period otherwise, and no pro-ration will apply. ◦ In other circumstances (including resignation), no award will be made unless statutory requirements apply. ◦ The REMCO retains discretion to waive any part of a bonus holding period in exceptional circumstances (primarily death).

Provision	Policy
LTIP awards	Share awards will be treated in accordance with the relevant plan rules. The following provisions will normally apply: ◦ In the event of disability, injury or ill health, retirement, redundancy, completion of a fixed-term contract, and other circumstances at the REMCO's discretion: outstanding awards are reduced pro-rata (on a monthly basis) for time elapsed during the performance period. They will generally survive the end of employment and remain subject to the same vesting performance conditions, holding period and malus and clawback provisions, as if the Executive Director had remained in employment. The extent to which awards vest will be determined by the REMCO, taking into account the extent to which the performance conditions have been satisfied. ◦ In the event of death: the award will vest in full on the date of death or, if there is a target level set out in the performance condition, then at that target level, unless the REMCO determines otherwise. ◦ Change of control: awards will be exchanged for equivalent new awards issued by the acquirer, if agreed to by the acquirer and the Board. If there is no agreement to exchange awards, awards will (i) vest immediately in full if there is no performance condition, or (ii) vest immediately to the extent that any performance condition has been satisfied to the date of vesting. Such awards will be reduced pro-rata for time elapsed during the performance period unless agreed otherwise. ◦ Other circumstances (including resignation): awards will lapse on cessation of employment unless statutory requirements apply. ◦ The REMCO retains discretion to waive any part of a holding period in exceptional circumstances (primarily death).
Other	The provision of end-of-employment benefits such as a contribution to the Executive Director's legal fees for the review of any settlement agreement, repatriation costs, and outplacement support may also be included, as deemed reasonable by the REMCO. The Executive Director may also remain eligible for other benefits, such as security provision or tax return preparation, in line with policies for the wider workforce. The Company may pay the Executive Director's tax on such benefits. The REMCO may adjust the range and scope of the benefits offered in the context of developments for other employees in relevant countries.

In the event an Executive Director is based outside of the UK, the REMCO will determine the appropriate service contract and end of employment arrangements.

The table below sets out the effective dates of the Executive Directors' service contract.

Executive Director	Date of contract
Wael Sawan	January 1, 2023
Sinead Gorman	April 1, 2022

Executive Directors' employment arrangements are available for inspection at the AGM or on request. For further details on the appointment and re-appointment of Directors, see "Governance Framework" on page 159 and "Other regulatory and statutory information" on page 223.

Non-executive Directors' Remuneration Policy table

Fee structure	Approach to setting fees	Other remuneration
Non-executive Directors (NEDs) receive a fixed annual fee for their Directorship. The Chair receives a Chair of the Board fee, and other NEDs receive a base fee for membership of the Board. Additional annual fees are payable to any NED (other than the Chair of the Board) who serves as Senior Independent Director, a Board Committee Chair, or a Board committee member. Any individual receives either a Chair or member fee in respect of each committee they sit on. The Chair of a committee does not receive both fees. NEDs receive an additional fee for any Board meeting involving intercontinental travel, with the exception of one meeting a year held in a location other than London.	The Chair of the Board fee is determined by the REMCO. The Board determines the fees payable to NEDs. The maximum aggregate annual fees will be within the limit specified by the Articles of Association and in accordance with the NEDs' responsibilities and time commitments. The Board reviews NED fees periodically to ensure that they are appropriate in the context of fee levels at other major listed companies.	Business expenses incurred in respect of the performance of their duties as a NED will be paid or reimbursed by Shell. Such expenses could include transport between home and office, and occasional business-required partner travel. NEDs may receive a token of recognition on retirement from the Board. The maximum value for this is £300. The REMCO has the discretion to offer other benefits as appropriate to the circumstances. Where business expenses or benefits create a personal tax liability to the NED, Shell may cover the associated tax. The Chair and other NEDs are not eligible to receive awards under any incentive or performance-based remuneration plans, and personal loans or guarantees are not granted to them. NEDs do not accrue any retirement benefits as a result of their Non-executive Directorships with Shell. NEDs are encouraged to hold Shell shares with a value equivalent to 100% of their annual base fee and maintain that holding during their tenure.

Non-executive Directors' letters of appointment

NEDs, including the Chair of the Board, have letters of appointment. NEDs' letters of appointment are available for inspection at the AGM or on request. The table below shows the effective dates for the NEDs' appointments:

Non-executive Director	Effective date of appointment
Sir Andrew Mackenzie	October 1, 2020
Dick Boer	May 20, 2020
Neil Carson	May 21, 2019
Ann Godbehere	May 23, 2018
Jane Holl Lute	May 19, 2021
Catherine J. Hughes	June 1, 2017
Sir Charles Roxburgh	March 13, 2023
Bram Schot	October 1, 2020
Leena Srivastava	March 13, 2023
Cyrus Taraporevala	March 2, 2023

See "Governance framework" on page 159 and "Other regulatory and statutory information" on page 223 for further details on the appointment and re-appointment of NEDs.

Non-executive Director recruitment

The remuneration package for new NEDs is determined within the confines of the Policy table for NED fees, and subject to the Articles of Association. NEDs are not offered variable remuneration or retention awards.

When determining the benefits for a new Chair of the Board, the individual circumstances of the future Chair will be taken into account.

Non-executive Director termination of office

No payments for loss of office will be made to NEDs.

Consideration of wider employee views

The REMCO takes account of the pay and employment conditions of the broader workforce when setting the Policy for Executive Directors.

While no specific employee groups were consulted as part of the 2023 Policy review, Shell promotes and maintains good relations with employee representative bodies as part of its employee engagement programme, and operates multiple forums through which employees can engage on various business matters, including pay.

When determining Executive Directors' remuneration structure and outcomes, the REMCO reviews a set of information, including relevant reference points and trends, which includes internal data on employee remuneration (for example, employee relations matters in respect of remuneration, and average salary increases applying in the Netherlands, the UK and the USA). During the Policy review, pay and employment conditions of the wider Shell employee population were taken into account by adhering to the same performance, rewards and benefits philosophy for the Executive Directors, as well as overall benchmarking principles. Furthermore, any potential differences from other employees (see "Differences in Remuneration Policy for Executive Directors from that for other employees") were taken into account when providing the REMCO with advice in the formation of the Policy.

The REMCO is kept informed by the CEO, the Chief Human Resources and Corporate Officer, and the Executive Vice President Performance and Reward on the bonus scorecard and any relevant remuneration matters extending below the Board and Executive Committee.

See "Workforce engagement on remuneration matters" in "Annual Report on Remuneration" on page 204 for more information on how Shell considers and engages with the broader workforce on remuneration matters.

Consideration of shareholder views

The REMCO engages with major shareholders regularly throughout the year. Such engagement allows the REMCO to hear shareholders' views on Shell's approach to executive remuneration, and test proposals when developing or evolving the Policy. In recent years, the REMCO has responded to shareholder views, including the approach to energy transition metrics in the LTIP, the quantum of executive pay and the broader use of discretion to manage remuneration outcomes. In developing the proposed Policy, the REMCO again consulted with shareholders and received a diverse range of views that have helped to determine which proposals to refine and which to discard. For example, as a result of shareholder feedback in the fourth quarter of 2022, the REMCO determined not to proceed with seeking support for recruitment provision that would permit an extended notice period on hiring. Shareholders have been helpful in emphasising the need for balanced metrics in the LTIP to help avoid unintended consequences as Shell progresses through the energy transition. In 2022, the continued interest in the energy transition LTIP measure directly influenced increased transparency in Shell's reporting on the progress of its energy transition journey.

It was clear to the REMCO that while there were inevitably contrasting views around the different aspects of the Policy, shareholders are supportive of Shell's overall approach to remuneration and the REMCO's careful deliberations in decision-making. The REMCO will continue to review the Policy regularly to ensure it continues to reinforce Shell's long-term strategy and closely aligns with shareholders' interests.

Additional Policy statement

The REMCO reserves the right to make payments outside of the Policy in limited, exceptional circumstances, such as for regulatory, tax or administrative purposes, or to take account of a change in legislation or exchange controls, and only where the REMCO considers such payments are necessary to give effect to the intent of the Policy.

Signed on behalf of the Board

/s/ Sean Ashley

Sean Ashley
Company Secretary
March 25, 2025

Other regulatory and statutory information

The Directors' Report comprises pages 149-223 and 442-444 of this report, together with the sections of the Annual Report incorporated by cross reference. This section of the Directors' Report contains the remaining information which the Directors are required to report on each year and for the year ended December 31, 2024. There are other matters that are required to be reported on and that have been disclosed in other sections of the Annual Report, as summarised below. This includes certain disclosures which are required to be contained in the Directors' Report which have, as permitted by legislation, been included in the Strategic Report, and are incorporated by cross reference, including certain disclosures required under Schedule 7 of the Large and Medium-sized Companies and Groups (Accounts and Reports) Regulations 2008).

Management Report	This Directors' Report, together with the Strategic Report, serves as the Management Report for the purpose of Disclosure Guidance and Transparency Rule (DTR) 4.1.8R. Both the Directors' Report and Strategic Report have been presented in accordance with and reliance on English law, and the liabilities of the Directors in connection with those reports shall be subject to the limitations and restrictions provided by such law.	Directors' Report: pages 149-223 and 442-444 Strategic Report: pages 1-148
Corporate governance	The Company's statement on corporate governance, as required by DTR7.2.3R.	Directors' Report: pages 149-223 and 442-444
Business relationships	A statement, summarising the Directors' business relationships with suppliers, customers and others.	Strategic Report: pages 1-148
Employee engagement	Information on how Directors have engaged with employees.	Workforce engagement: pages 167-168
Directors' interests [A]	The interests (in shares of the Company or calculated equivalents) of the Directors in office at the end of the year, including any interests of a "connected person". Changes in Directors' share interests during the period from December 31, 2024, to March 7, 2025.	Annual Report on Remuneration: pages 191-207
Likely future developments	Information relating to likely future developments.	Provided throughout the Strategic Report: pages 1-148
Research and development	Information relating to Shell's research and development, including expenditure.	Shell's strategy: pages 6-17
Diversity, equity and inclusion	Information concerning diversity, equity and inclusion. This includes information on the equal opportunities in recruitment, career development, promotion, training and rewards for all our people, including those with disabilities.	Powering lives: pages 114-121
Employee communication and involvement	Information concerning employee communication and involvement.	Powering lives: pages 114-121
Corporate social responsibility	A summary of Shell's approach to corporate social responsibility. Further details are available on shell.com.	Powering lives: pages 114-121
Branches	A list of our subsidiaries, joint ventures and associates. Our activities and interests are operated through subsidiaries, branches of subsidiaries, joint ventures and associates which are subject to the laws and regulations of many different jurisdictions.	Additional Information, Appendix 1: pages 454-475
Greenhouse gas emissions	Information relating to greenhouse gas emissions.	Our journey to net zero: pages 76-108
Risk management	Detail on risk factors. Information on emerging risks.	Risk management and risk factors: pages 134-144 Other regulatory and statutory information: pages 216-223
Financial risk management, objectives and policies	Descriptions of the use of financial instruments and Shell's financial risk management objectives and policies, and exposure to market risk (including price risk), credit risk and liquidity risk.	Consolidated Financial Statements: Note 26, pages 298-304
UK Listing Rule (UKLR) information [B]	Information concerning the amount of interest capitalised by Shell.	Consolidated Financial Statements: Note 10, page 274
Significant shareholdings	Information concerning significant shareholdings.	Shareholder information: pages 442-444

[A] "Connected person" has the meaning given to "person closely associated" within the Market Abuse Regulation.
[B] This information is given in accordance with UKLR 6.6.1R. Further information in connection with UKLR 6.6.1R is contained in the remainder of "Other regulatory and statutory information".

Modern Slavery Act Statement

We procure goods and services from local and international suppliers who meet the standards we require. The standards include those relating to human rights, labour practices and business integrity and are governed by the Shell Supplier Principles. Monitoring is undertaken centrally in connection with the preparation of the Shell Group's Modern Slavery Act (MSA) Statement which is prepared by taking proposed inputs from Shell companies in scope of the MSA as to their steps taken to ensure modern slavery does not occur in their supply chain or organisation. The Shell Group Statement is approved by the Board of Shell plc, after approval by the boards of Shell companies which are in scope of the MSA.

Disclosure of information to auditors

In accordance with section 418 of the Companies Act 2006, each of the persons who is a Director at the date of approval of this Report confirms that, so far as the Director is aware, there is no relevant audit information of which the Company's auditor is unaware. The Director has taken all steps that he or she ought to have taken as a Director in order to make himself or herself aware of any relevant audit information and to establish that the Company's auditor is aware of that information.

Financial Statements, Dividends and Dividend Policy

The "Consolidated Statement of Income" and "Consolidated Balance Sheet" can be found on pages 241 and 242 respectively.

Subject to Board approval, Shell aims to grow the dividend per share by 4% per annum. As announced as part of Capital Markets Day 2025, in total, Shell targets the distribution of 40-50% of cash flow from operations through the cycle to shareholders. The Board may choose to return cash to shareholders through a combination of dividends and share buybacks.

When setting the level of shareholder distributions, the Board looks at a range of factors, including the macro environment, the earnings and cash flow of the Group, the balance sheet strength, future investment, acquisition and divestment plans, and existing commitments.

The Board currently resolves to pay interim dividends on a quarterly basis. Shell does not currently pay a "final" dividend, which would need to be voted on by shareholders, requiring the introduction of a resolution at the AGM. This would delay the payment of the fourth quarter dividend (currently paid in late March) until after the AGM. This approach to dividend payments is not uncommon for companies distributing returns to shareholders on a quarterly basis.

Shell pays its dividend in USD, EUR or GBP fully electronically either in CREST or via interbank transfers.

The Directors have announced a fourth quarter interim dividend payable on March 24, 2025, to shareholders on the Register of Members at the close of business on February 14, 2025. The closing date for dividend currency elections was February 28, 2025 [A] and the euro and sterling equivalents announcement date was March 10, 2025.

[A] A different dividend currency election date may apply to shareholders holding shares in a securities account with a bank or financial institution ultimately through Euroclear Nederland. This may also apply to other shareholders who do not hold their shares either directly on the Register of Members or in the corporate sponsored nominee arrangement. Such shareholders can contact their broker, financial intermediary, bank or financial institution for the election deadline that applies.

2024 Viability Statement and Going Concern Statement

The "Strategic Report" includes information about Shell's strategy, financial condition, cash flows and liquidity, as well as the factors, including the principal risks, likely to affect Shell's future development. It also describes Shell's business model, including competitive advantages and key strengths. The Directors assess Shell's prospects both at an operating and strategic level, each involving different time horizons. To this end, the Directors assess Shell's portfolio and strategy against a wide range of outlooks, including assessing the potential impacts of various possible energy transition pathways and scenarios for changes in societal expectations in relation to climate change. Shell recognises in its strategy that the world is transitioning to a low-carbon energy system.

See "Our journey to net zero" on pages 76-108.

The "Risk management and risk factors" section (see pages 134-144) provides an overview of the principal risks Shell is exposed to in its operations. We have assessed which scenarios linked to the principal risks could lead to a severe but possible outcome. Consideration was given to the climate change and energy transition risk, however the associated material impacts are of a longer-term nature, outside the three-year viability statement period. Therefore, it was not assessed as a stress case scenario for the viability statement. However, it is worth noting that key assumptions that underpin the amounts recognised in the Consolidated Balance Sheet, such as future oil and gas prices, discount rates, future costs of decommissioning and restoration, and tax rates, all go well beyond three years and do take climate change and energy transition into account.

Viability Statement Process

Throughout the year, the Board received regular updates on the financial framework

↓

The Board approved the detailed three-year operating plan which includes Shell's cash flows and ability to service financing requirements [B]

↓

We identified and modelled three severe but possible scenarios that could potentially impact Shell's viability

↓

We assessed and concluded on the long-term viability of the Company (we have deemed a three-year period of assessment to be appropriate)

[B] Shell's three-year Operating Plan contains assumptions in relation to internal and external parameters. Some of the key assumptions include the impact of commodity prices, exchange rates, future carbon costs, agreements like LNG contract renewals, production levels and product demand and schedules of growth programmes.

Scenarios and risks

Scenario	Link to principal risks	Impact severity prior remediation
Unplanned shutdown of a major cash-generating asset (for the viability statement period i.e. three years)	[A]	Low
Global macroeconomic uncertainties (including those from a pandemic) - low oil and gas price environment, negative impact on oil product and chemical margins, and long-term demand reduction	[B] and [C]	High
A significant HSSE event and a low oil and gas price environment	[A] and [B]	High

[A] Health, safety, security and environment.
[B] Portfolio risks.
[C] Trading risks.

Conclusion

Taking account of Shell's position and principal risks at December 31, 2024, the Directors have a reasonable expectation that Shell will be able to continue in operation and meet its liabilities as they fall due over its three-year Operating Plan period.

Going concern

In assessing the appropriateness of the going concern assumption over the period to June 30, 2026 (the "going concern period"), management have stress-tested Shell's most recent financial projections to incorporate a range of potential future outcomes by considering Shell's principal risks, further potential downside pressures on commodity prices and cash preservation measures, including reduced future capital expenditure and shareholder distributions. This assessment confirmed that Shell has sufficient cash, other liquid resources and undrawn credit facilities to enable it to meet its obligations as they fall due in order to continue its operations during the going concern period. Therefore, the Directors consider it appropriate to continue to adopt the going concern basis of accounting in preparing the audited Consolidated Financial Statements. See Note 1 to the "Consolidated Financial Statements" on page 245.

Repurchases of shares

As announced as part of Capital Markets Day 2025, Shell targets the distribution of 40-50% of our cash flow from operations through the cycle to shareholders. The Board may choose to return cash to shareholders through a combination of dividends and share buybacks. For all share buyback programmes mentioned below, Shell entered into irrevocable, non-discretionary arrangements with a broker in order to reduce the issued share capital of the Company.

On November 2, 2023, under shareholder authorities granted at the 2023 AGM, Shell announced the commencement of a $3.5 billion share buyback programme which was completed on January 26, 2024. On February 1, 2024, Shell announced the commencement of a share buyback programme of a further $3.5 billion which was completed on April 26, 2024; and on May 2, 2024, Shell announced the commencement of a share buyback programme of a further $3.5 billion which was completed on July 26, 2024.

At the May 21, 2024, AGM, shareholders granted the Company the authority to repurchase (i) up to 644.2 million ordinary shares "on-market" (excluding any treasury shares), less any "off-market" purchases made under the authority in (ii); and (ii) up to 644.2 million ordinary shares off-market (excluding any treasury shares), less any on-market purchases made under the authority in (i). The authorities for both on-market and off-market purchases will expire at the earlier of the close of business on August 20, 2025, and the end of the AGM of the Company to be held in 2025. On August 1, 2024, Shell announced the commencement of a $3.5 billion share buyback programme which was completed on October 25, 2024; on October 31, 2024, Shell announced the commencement of a $3.5 billion share buyback programme which was completed on January 24, 2025; and on January 30, 2025, Shell announced the commencement of a share buyback programme of a further $3.5 billion which is expected to be completed by May, 2025. This means that, as at close of March 4, 2025, approximately 390 million further shares could still be repurchased under the current AGM authorities.

More information, including the number and nominal value of the shares repurchased in 2024, can be found in Note 27 to the "Consolidated Financial Statements".

The Board continues to regard the ability to repurchase issued shares in suitable circumstances as an important part of Shell's financial management. New resolutions will be proposed at the 2025 AGM to renew the authorities for the Company to purchase its own share capital, up to specified limits, for a further year. These proposals will be described in more detail in the 2025 Notice of Annual General Meeting.

Board of Directors

The names of the Directors who held office during the year can be found on pages 152-156. Information on the Directors who are seeking reappointment is included in the Notice of Annual General Meeting.

Disclosures required under UKLR 6.6.6R(10) as at December 31, 2024

In accordance with UKLR 6.6.6R(10), the gender identity and ethnicity data of the Board and executive management (which includes the Company Secretary, as required by UKLR 6.6.6R(10)) in the format prescribed by UKLR 6 Annex 1 are set out in the below table. Questionnaires are routinely circulated to the Board and Executive Committee members at the end of each financial year, requesting certain declarations and confirmations. For the purposes of UKLR 6.6.6R(9) and (10), the Board and Executive Committee were asked to confirm as part of this annual questionnaire with which of the below categories they identify.

	Number of board members	Percentage of the board	Number of senior positions on the board (CEO, CFO, SID and Chair)	Number in executive management	Percentage of executive management
Men	7	58%	3	4	50%
Women	5	42%	1	4	50%
Not specified / prefer not to say	–	–	–	–	–

	Number of board members	Percentage of the board	Number of senior positions on the board (CEO, CFO, SID and Chair)	Number in executive management	Percentage of executive management
White British or other White (including minority-white groups)	9	75%	3	6	75%
Mixed / Multiple ethnic groups	–	–	–	–	–
Asian / Asian British	2	17%	–	–	–
Black / African / Caribbean / Black British	–	–	–	–	–
Other ethnic group	1	8%	1	1	12.5%
Not specified / prefer not to say	–	–	–	1	12.5%

The Board met each of the UKLR and FTSE Women Leaders Review targets of maintaining a minimum of 40% female representation on the Board. The Company meets the targets set out in UKLR 6.6.6(9) as the Board was 42% female. The CFO and a senior position on the Board is a woman, and the Board has three Directors from minority ethnic backgrounds.

Qualifying third-party indemnities

The Company has entered into a Deed of Indemnity (Deed) with each Director of the Company who served during the year. The Deeds were in force during the 2024 financial year and are currently in force. The terms of each of these Deeds are identical and they reflect the statutory provisions on indemnities contained in the Companies Act 2006 (CA 2006). Under the terms of each Deed, the Company has agreed to indemnify the Director, to the fullest extent permitted by the CA 2006, against any loss, liability or damage, howsoever caused (including in respect of a Director's own negligence), suffered or incurred by a Director in respect of their acts or omissions while or in the course of acting as a Director or employee of the Company, any associated company or affiliate (within the meaning of the CA 2006). In addition, the Company shall lend funds to Directors as required to meet reasonable costs and expenses incurred or to be incurred by them in defending any criminal or civil proceedings brought against them in their capacity as a Director or employee of the Company, associated company or affiliate, or, in connection with certain applications brought under the CA 2006. The provisions in the Company's Articles of Association (Articles) relating to arbitration and exclusive jurisdiction are incorporated, mutatis mutandis, into the Deeds entered into by each Director and the Company.

The Company has provided both indemnities and Directors' and Officers' insurance to the Directors in connection with the performance of their responsibilities, both of which were in force during the 2024 financial year and are currently in force. Copies of these indemnities and the Directors' and Officers' insurance policies are open to inspection. A copy of the form of these indemnities is filed with the US Securities and Exchange Commission.

Related party transactions

Other than disclosures given in Notes 14 and 34 to the "Consolidated Financial Statements" on pages 280 and 311, there were no transactions or proposed transactions that were material to either the Company or any related party. Nor were there any transactions with any related party that were unusual in their nature or conditions.

Political contributions

No payments were made by Shell companies to political parties, organisations or their representatives during the year. Shell USA, Inc. administers the non-partisan Shell USA, Inc. Employees' Political Awareness Committee (SEPAC), a political action committee registered with the US Federal Election Commission. Eligible employees may make voluntary personal contributions to the SEPAC. All employees' contributions comply with federal and state law and are publicly reported in accordance with US election laws. Shell USA, Inc. does not exercise control over SEPAC's funding decisions.

Recent developments and post-balance sheet events

See Note 36 to the "Consolidated Financial Statements" on page 312.

Share capital

The Company's issued share capital at December 31, 2024, is set out in Note 27 to the "Consolidated Financial Statements" on page 305. The percentage of the total issued share capital is given below.

Share capital percentage as at December 31, 2024

Share class	%
Ordinary	100

Transfer of securities
There are no restrictions on transfer or limitations on the holding of the ordinary shares other than under the Articles, restrictions imposed by law or regulation (for example, insider trading laws) or pursuant to the Company's Share Dealing Code.

Share ownership trusts and trust-like entities
Shell has three primary employee share ownership trusts and trust-like entities: a Dutch foundation (stichting) and two US Rabbi Trusts. The shares held by the Dutch foundation are voted by its Board and the shares in the US Rabbi Trusts are voted by the Voting Trustee, Newport Trust Company. Both the Board of the Dutch foundation and the Voting Trustee are independent of Shell.

The UK Shell All Employee Share Ownership Plan has a separate related share ownership trust. Shares held by the trust are voted by its trustee, Computershare Trustees Limited, as directed by the participants.

An evergreen dividend waiver is in place in respect of 20 unallocated shares held in a legacy employee share trust.

Auditor
A resolution relating to the appointment of Ernst & Young LLP as auditor for the financial year 2025 will be proposed at the 2025 AGM.

Annual General Meeting
The AGM will be held on May 20, 2025, at the Sofitel London Heathrow Hotel - Terminal 5, London Heathrow Airport, London TW6 2DG, United Kingdom. The Notice of Annual General Meeting will include details of the business to be put to shareholders at the AGM.

Conflicts of interest
In accordance with CA 2006 and the Company's Articles, the Board may authorise any matter that otherwise may involve any Directors breaching their duty to avoid conflicts of interest. The Board has adopted a procedure to address these requirements. Detailed conflict of interest questionnaires are reviewed by the Board and, if considered appropriate, authorised. Conflicts of interest as well as any gifts and hospitality received by and provided by Directors are kept under review by the Board. Further information relating to conflicts of interest can be found in the Articles, available on the Shell website.

Significant commitments of the Chair
The Chair's other significant commitments are given in his biography on page 152.

Shell General Business Principles
The Shell General Business Principles define how all employees and contractors and those working in joint ventures we operate, are expected to conduct their affairs and are underpinned by the Shell core values of honesty, integrity and respect for people. These principles include, among other things, Shell's commitment to support fundamental human rights in line with the legitimate role of business and to contribute to sustainable development. They are designed to mitigate the risk of damage to our business reputation and to prevent violations of local and international legislation. They can be found at shell.com/sgbp.

See "Risk management and risk factors" on pages 134-144.

Shell Code of Conduct
Directors, officers, employees and contract staff are required to comply with the Shell Code of Conduct, which instructs them on how to behave in line with the Shell General Business Principles. This Code clarifies the basic rules and standards they are expected to follow and the behaviour expected of them. These individuals must also complete mandatory Code of Conduct training. Designated individuals are required to complete additional mandatory training on antitrust and competition laws, anti-bribery, anti-corruption and anti-money laundering laws, financial crime, data protection laws and trade compliance requirements.

See "Risk management and risk factors" on pages 134-144.

See shell.com/codeofconduct.

Code of Ethics
Executive Directors and Senior Financial Officers of Shell must also comply with the Code of Ethics. In 2024 we updated the conflict of interest reporting lines and made other non-substantive revisions to the Code of Ethics. This Code is specifically intended to meet the requirements of Section 406 of the Sarbanes-Oxley Act. It can be found at shell.com/codeofethics.

Malus and Clawback Policy
In compliance with US SEC rules, the REMCO adopted a Malus and clawback policy for Executive Directors and other Executive Committee members in 2023.

Independent professional advice
All Directors may seek independent professional advice in connection with their role as a Director. All Directors have access to the advice and services of the Company Secretary. The Company has provided both indemnities and Directors' and Officers' insurance to the Directors in connection with the performance of their responsibilities. Copies of these indemnities and the Directors' and Officers' insurance policies are open to inspection. A copy of the form of these indemnities has been previously filed with the US Securities and Exchange Commission.

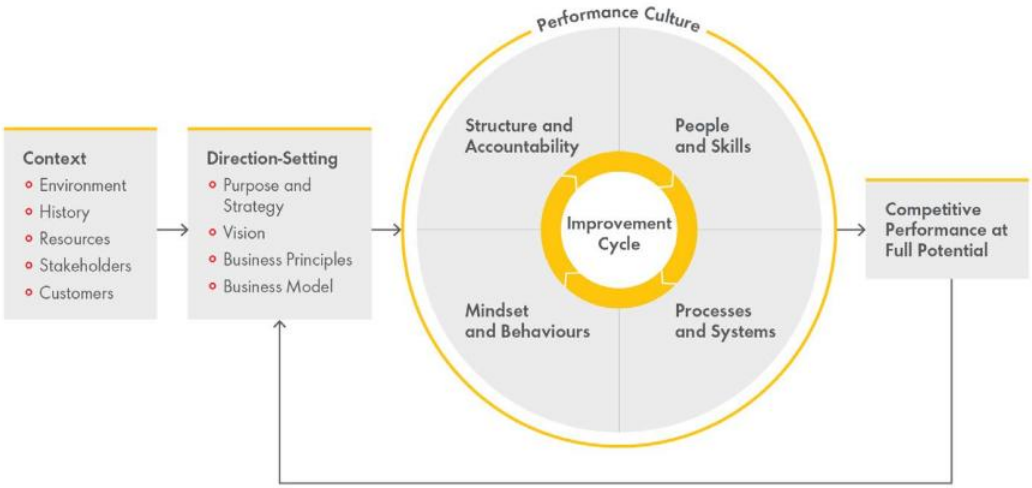
Results presentations and analysts' meetings
The planned dates of the quarterly, half-yearly and annual results presentations, as well as all major analysts' meetings, are announced in advance on the Shell website and through a regulatory release.

Generally, presentations are broadcast live via webcast. Other meetings with analysts or investors are not normally announced in advance, nor can they be followed remotely by webcast or any other means. Procedures are in place to ensure that discussions in such meetings are always limited to non-material information or information already in the public domain.

Results and meeting presentations can be found at shell.com/investors. This is in line with the requirement to ensure that all shareholders and other parties in the financial market have equal and simultaneous access to information that may influence the price of the Company's securities.

Shell Performance Framework
The Shell Performance Framework is the overarching framework we use to deliver our strategy. It applies to all Shell companies and provides a consistent approach for how each company in Shell operates. It seeks to empower each company in a way that is fit for purpose, while delivering on our overall objectives. It emphasises the value of a holistic or "whole systems" approach to business activities along with the important role that culture plays in achieving Shell's objectives.

The Shell Performance Framework



The Shell Performance Framework supports the delivery of sustainable business outcomes. In pursuit of this, consideration is given to both the context in which Shell operates and key elements of direction-setting, including, for example, Shell's strategy and the Shell General Business Principles.

Delivery of the desired outcomes is then pursued by leveraging our Performance Culture, i.e., the shared values, practices and beliefs of our employees. This is influenced by decisions on:

- Structure and Accountability – how we are organised and governed and the associated roles and responsibilities;
- People and Skills – our workforce composition, such as its size, diversity and location, and the skills required to deliver Shell's objectives;
- Processes and Systems – how we transform inputs into outputs in a controlled manner, leveraging data and systems as appropriate. This also includes the standards that further define the boundaries within which Shell operates;
- Mindset and Behaviours – this includes the role of leadership and Shell's values, beliefs and behaviours, as set out, for example, in the Code of Conduct.

At the heart of the Shell Performance Framework is the Improvement Cycle, which integrates performance management, risk management, including controls and assurance, learning and improvement. It follows a "Plan-Do-Check-Adjust" approach and helps to drive a consistent way of working and improving.

Risk management and controls

The Board is responsible for establishing and maintaining procedures to manage risk, overseeing the internal control framework, and determining the nature and extent of the principal risks that Shell is willing to take in order to achieve its long-term strategic objectives.

The Shell Performance Framework sets out the overarching approach to how we manage risks in Shell. This approach, together with Shell's principal and emerging risks, is described on Page 134.

Board review of principal and emerging risks

The Board confirms it has carried out a robust assessment of Shell's principal risks, including a robust process for identifying, evaluating and managing these principal risks. The Board also confirms it has carried out a robust assessment of Shell's emerging risks. These assessments have been in place throughout 2024 and up to the date of this Report, are reviewed by the Board and accord with the Financial Reporting Council guidance on risk management, internal control and related financial and business reporting.

See "Risk management and Risk factors" on page 134-144

Review of the effectiveness of the system of risk management and internal control

The Audit and Risk Committee (ARC) assists the Board in fulfilling its responsibilities in relation to the effectiveness of the risk management and internal control system, the integrity of financial reporting, and consideration of compliance matters.

See "Audit and Risk Committee Report" on pages 176-187.

The ARC receives regular reports from the Chief Internal Auditor on notable internal audits and those with a significant impact on the effectiveness of controls. The ARC reviews significant incidents involving financial, operational and compliance controls and receives regular reports on business integrity issues. The ARC also requests updates on specific financial, operational and compliance control issues throughout the year. It is helped with its monitoring and review responsibilities by summaries of the Annual Proved Reserves Disclosure as well as the reports of:

- the Executive Vice President Controller;
- the Chief Internal Auditor;
- the external auditor;
- the Chairs of the Disclosure Committee and the External Reporting Control Committee; and
- the Chief Ethics and Compliance Officer.

The Chair of the ARC provides regular updates to the Board after each of its meetings. These updates cover, among other matters, the respective aspects of controls that it monitors in accordance with its Terms of Reference. During and after such sessions, the Board has the opportunity to request further information and ask clarifying questions. The Board also receives the approved minutes of the ARC. This helps the Board with its ongoing monitoring and annual review of material controls.

The Executive Committee and the ARC conduct an annual review of the effectiveness of the system of risk management and internal control. This is based on their own insights and experience during the year, the outcomes of Group-level risk reviews and the Group Assurance Letter process. As part of the latter, each Executive Director conducts a structured internal assessment of compliance with legal, ethical and other requirements of the Shell Performance Framework.

As part of their annual review, the Executive Committee and ARC also consider input from the Chief Internal Auditor, Chief Ethics and Compliance Officer, Executive Vice President Controller and the external auditor. The Board reviews and discusses the insights and conclusions from this annual assessment.

The Board confirms that it has conducted its annual review of the effectiveness of Shell's system of risk management and internal control in respect of 2024, and that this review covered all material controls, including financial, operational and compliance controls.

Management's evaluation of disclosure controls and procedures of Shell

Shell's management, including the CEO and CFO, has evaluated the effectiveness of Shell's disclosure controls and procedures at December 31, 2024. Based on that evaluation, they concluded that Shell's disclosure controls and procedures are effective.

Management's report on internal control over financial reporting of Shell

Management, including the CEO and CFO, is responsible for establishing and maintaining adequate internal control over Shell's financial reporting and the preparation of the "Consolidated Financial Statements".

Management conducted an evaluation of the effectiveness of Shell's internal control over financial reporting and the preparation of the "Consolidated Financial Statements" based on the Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). On the basis of this evaluation, management concluded that, at December 31, 2024, the Company's internal control over financial reporting and the preparation of the "Consolidated Financial Statements" was effective.

Changes in internal control over financial reporting

There has not been any change in the internal control over financial reporting of Shell that occurred during the period covered by this Report that has materially affected, or is reasonably likely to materially affect, the internal control over financial reporting of Shell.

Material financial information of the Royal Dutch Shell Dividend Access Trust is included in the "Consolidated Financial Statements" and is therefore subject to the same controls and procedures.

Articles of Association

The Company's Articles were adopted on May 23, 2023. The Articles may only be amended by a special resolution of the shareholders in a general meeting. A full version of the Company's Articles can be found at shell.com/investors.

Management and Directors

The Company has a single-tier Board of Directors headed by a Chair, with management led by a CEO. See "The Board of Shell plc" on pages 152-156 and "Executive Committee" on pages 157-158.

Directors' shareholding qualification

While the Articles do not require Directors to hold shares in the Company, the REMCO believes that Executive Directors should align their interests with those of shareholders by holding shares in the Company. The CEO is expected to build up a shareholding of seven times base salary over five years from appointment and the CFO is expected to build up a shareholding of five times base salary over the same period. In the event that another Executive Director joins the Board, the REMCO will determine their shareholding requirement, which will not be less than 200% of their base salary.

Executive Directors will be required to maintain their requirement (or existing shareholding if less than the guideline) for a period of two years post employment. Non-executive Directors are encouraged to hold shares with a value equivalent to 100% of their base fee and to maintain that holding during their tenure.

Information on the Directors with shares in the Company can be found in the "Directors' Remuneration Report" on pages 188-190.

Appointment and retirement of Directors

The Company's Articles, the Corporate Governance Code and the Companies Act 2006 govern the appointment and retirement of Directors. Board membership and biographical details of the Directors are provided on pages 152-156. However, Directors follow the direction laid out in the Corporate Governance Code and stand for re-election annually.

Rights attaching to shares

The full rights attaching to shares are set out in the Company's Articles. The Company can issue shares with any rights or restrictions attached to them as long as this is not restricted by any rights attached to existing shares. These rights or restrictions can be decided either by an ordinary resolution passed by the shareholders or by the Board as long as there is no conflict with any resolution passed by the shareholders.

Voting

Currently, the voting rights of each ordinary share carry one vote at a general meeting of the Company.

Change of control

There are no provisions in the Articles that would delay, defer or prevent a change of control.

Directors' responsibilities in respect of the preparation of the Annual Report and Accounts

The Directors are responsible for preparing the Annual Report, including the financial statements, in accordance with applicable laws and regulations. These require the Directors to prepare financial statements for each financial year. As such, the Directors have prepared the Consolidated Financial Statements and the Parent Company Financial Statements in accordance with UK-adopted international accounting standards and with the requirements of the UK Companies Act 2006 as applicable to companies reporting under those standards. In preparing these financial statements, the Directors have also elected to comply with IFRS as issued by the International Accounting Standards Board (IASB). The Directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of Shell and the Company and of the profit or loss of Shell and the Company for that period. In preparing these financial statements, the Directors are required to:

- adopt the going concern basis unless it is inappropriate to do so;
- select suitable accounting policies and then apply them consistently;
- make judgements and accounting estimates that are reasonable and prudent; and
- state whether international accounting standards in conformity with the requirements of the UK Companies Act 2006, UK-adopted international accounting standards and International Financial Reporting Standards as issued by the IASB have been followed.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the transactions of Shell and the Parent Company and disclose with reasonable accuracy, at any time, the financial position of Shell and the Parent Company and to enable them to ensure that the financial statements comply with the UK Companies Act 2006 and, as regards the Consolidated Financial Statements are in accordance with UK-adopted international accounting standards. The Directors are also responsible for safeguarding the assets of Shell and the Parent Company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Each of the Directors, whose names and functions can be found on page 152-156, confirms that, to the best of their knowledge:

- the financial statements, which have been prepared in accordance with international accounting standards in conformity with the requirements of the UK Companies Act 2006, and therefore in accordance with UK-adopted international accounting standards and International Financial Reporting Standards as issued by the IASB, give a true and fair view of the assets, liabilities, financial position and profit of Shell and the Company; and
- the Management Report includes a fair review of the development and performance of the business and the position of Shell, together with a description of the principal risks and uncertainties that it faces.

Furthermore, so far as each of the Directors is aware, there is no relevant audit information of which the auditors are unaware, and each of the Directors has taken all the steps that ought to have been taken in order to become aware of any relevant audit information and to establish that the auditors are aware of that information.

The Directors consider that the Annual Report, including the financial statements, taken as a whole, is fair, balanced and understandable and provides the information necessary for shareholders to assess Shell's position and performance, business model and strategy.

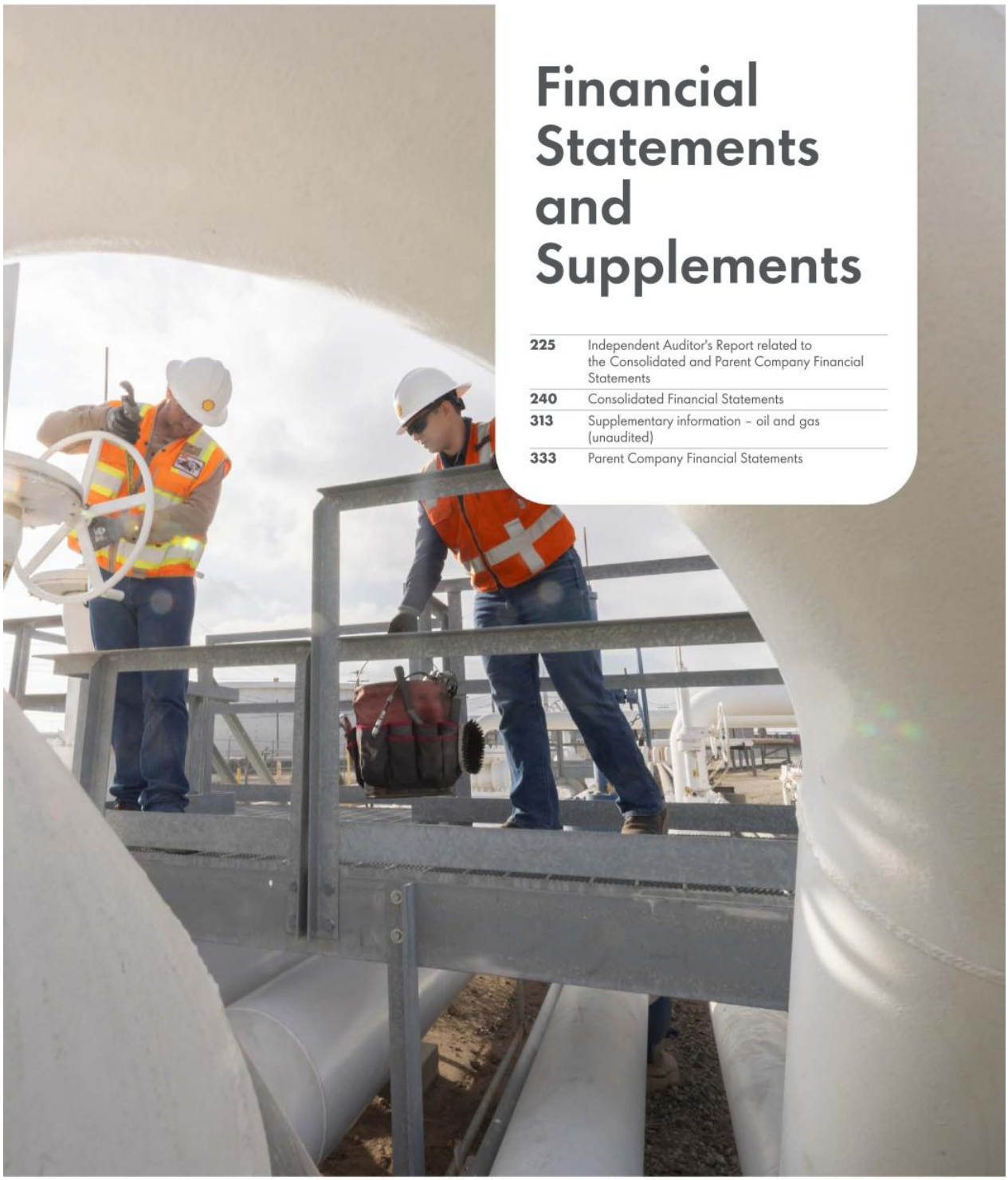
The Directors consider it appropriate to continue to adopt the going concern basis of accounting in preparing the financial statements.

The Directors are responsible for the maintenance and integrity of the Shell website (shell.com). Legislation in the UK governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Signed on behalf of the Board

/s/ Sean Ashley

Sean Ashley
Company Secretary
March 25, 2025



Financial Statements and Supplements

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Independent Auditor's Report to the members of Shell plc

1. Opinion

In our opinion, the financial statements of Shell plc (the Parent Company) and its subsidiaries (collectively, Shell or Group):

- give a true and fair view of the state of Shell's and of the Parent Company's affairs as at December 31, 2024 and of Shell's income and the Parent Company's income for the year then ended;
- have been properly prepared in accordance with UK adopted international accounting standards and International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB); and
- have been prepared in accordance with the requirements of the Companies Act 2006.

We have audited the financial statements of the Parent Company and the Group for the year ended December 31, 2024, which are included in the Annual Report and comprise:

Group	Parent Company
Consolidated Balance Sheet as at December 31, 2024	Balance Sheet as at December 31, 2024
Consolidated Statement of Income for the year then ended	Statement of Income for the year then ended
Consolidated Statement of Comprehensive Income for the year then ended	Statement of Comprehensive Income for the year then ended
Consolidated Statement of Changes in Equity for the year then ended	Statement of Changes in Equity for the year then ended
Consolidated Statement of Cash Flows for the year then ended	Statement of Cash Flows for the year then ended
Related Notes 1 to 36 to the Consolidated Financial Statements, including material accounting policies, judgements and estimates.	Related Notes 1 to 17 to the Financial Statements, including material accounting policies, judgement and estimates.

The financial reporting framework that has been applied in their preparation is applicable law and UK adopted international accounting standards and International Financial reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB).

2. Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the 'Auditor's responsibilities for the audit of the financial statements' section of our report. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

3. Independence

We are independent of the Group and the Parent Company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard as applied to listed public interest entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

The non-audit services prohibited by the FRC's Ethical Standard were not provided to the Group or the Parent Company and we remain independent of the Group and the Parent Company in conducting the audit.

4. Conclusions relating to going concern

In auditing the financial statements, we have concluded that the directors' use of the going concern basis of accounting in the preparation of the financial statements is appropriate. The going concern assessment covered the period to June 30, 2026 (the going concern period). Our evaluation of the directors' assessment of the Group and Parent Company's ability to continue to adopt the going concern basis of accounting included:

- checking the consistency of information used in management's assessment with the operating plan and information obtained through auditing other areas of the business such as impairment assessments and deferred tax asset recoverability assessments;
- challenging the reasonableness of the estimated financial impact of each of the severe but possible scenarios, and the possible mitigation steps and assumptions regarding the availability of future funding options. The scenarios are described by management in the basis of preparation statements in Note 1 to the Consolidated Financial Statements and Note 1 to the Parent Company Financial Statements;
- checking that Shell's operating plan reflects the actions that management intend to take in order to achieve their stated Scope 1 and Scope 2 emissions reductions, as stated in Note 4 to the Consolidated Financial Statements, including confirming that the operating and capital expenditure estimates to deliver the reductions are included in the operating plan. This included evaluating Shell's carbon pricing assumptions;
- conducting severe but plausible independent stress testing to a significantly lower price environment than current prices throughout the going concern period and a reverse stress test to determine the conditions under which Shell could potentially experience a liquidity shortfall; and
- assessing that Shell's going concern disclosures were appropriate.

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the Group's and Parent Company's ability to continue as a going concern until June 30, 2026.

In relation to the Group and Parent Company's reporting on how they have applied the UK Corporate Governance Code, we have nothing material to add or draw attention to in relation to the directors' statement in the Consolidated Financial Statements and Parent Company Financial Statements about whether the directors considered it appropriate to adopt the going concern basis of accounting.

Our responsibilities and the responsibilities of the directors with respect to going concern are described in the relevant section of this report. However, because not all future events or conditions can be predicted, this statement is not a guarantee as to the Group's or Parent Company's ability to continue as a going concern.

5. Overview of our audit approach

Key audit matters (Section 6)	The key audit matters that we identified in the 2024 audit were: ◦ impact of climate change and the energy transition on the Consolidated Financial Statements; ◦ estimation of oil and gas reserves; ◦ impairment assessment of property plant and equipment (PP&E) and joint ventures and associates (JVAs); and ◦ accounting for complex transactions within Shell's Gas & Power trading and supply function and the valuation of physical and financial derivatives.
Assessing materiality (Section 7)	We based materiality on three-year normalised Adjusted Earnings on a pre-tax basis. This approach removes both the effects of changes in oil price on inventory carrying amounts and non-recurring gains and charges disclosed as identified items, which can significantly distort Shell's results in any one particular year. By applying a normalised Adjusted Earnings approach, we concluded that it was appropriate to set planning materiality at $2.0 billion. We adopted the following materiality measures in our 2024 audit: **Assessing materiality** **Planning materiality**: **$2.0 billion** (2023: $2.0 billion) **Performance materiality**: **$1.5 billion** (2023: $1.5 billion) **Reporting differences**: **$100 million** (2023: $100 million)
Our scope of the audit of Shell's Consolidated Financial Statements (Section 8)	We performed an audit of the complete financial information of seven components and audit procedures on specific balances for a further 80 components and central procedures on climate change and energy transition on the Consolidated Financial Statements, estimation of oil and gas reserves, impairment assessment of property, plant and equipment (PP&E) and joint ventures and associates and accounting for complex transactions within Shell's Gas & Power trading and supply function and the valuation of physical and financial derivatives. Our scope was tailored to the circumstances of our audit of Shell and is influenced by our determination of materiality and our assessed risks of material misstatement. Similar to the prior year, during the course of the 2024 audit, we did not make any substantial changes to our assessment of the components where we performed full or specific scope audit procedures; however, what did change was the nature and emphasis of our testing in response to our significant audit risks and areas of audit focus. By following this approach, our audit effort focused on higher risk areas, such as management judgements.

6. Our assessment of key audit matters

Key audit matters (KAMs) are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) that we identified. These matters included those which had the greatest effect on; the overall audit strategy, the allocation of resources in the audit and directing the efforts of the engagement team. These matters were addressed in the context of our audit of Shell's Consolidated and Parent Company Financial Statements as a whole, and in our opinion thereon, and we do not provide a separate opinion on these matters.

The impact of climate change and the energy transition on the Consolidated Financial Statements

Description of the key audit matter

The financial statement and audit risks related to climate change and the energy transition remain an area of audit focus given the continuing uncertainty surrounding the impact of climate change and the pervasive impact it has on many areas of accounting judgement and estimation and, therefore, our audit.

The processes by which management is informed about climate-related issues is set out in Our journey to net zero, within the Strategic report, and Sustainability Statements which forms part of the "other information", rather than the audited financial statements. Within these sections, Shell have described climate-related risks and opportunities over the short, medium and long term. They also describe the impact of climate-related risks and opportunities on Shell's business, strategy and financial planning and Shell's process for identifying and assessing climate-related risks and the process for managing these risks.

In Note 4 to the Consolidated Financial Statements, Shell describe how they consider climate-related impacts in key areas of the Consolidated Financial Statements and how this translates into the valuation of assets and measurement of liabilities.

In carrying out our audit, we have focused on the alignment of assumptions adopted by Shell in the preparation of their financial statements with commentary on climate change within their Strategic Report and Sustainability Statements. We have also considered the information and data on material impacts, risks and opportunities based on the outcome of the double materiality assessment included in the Sustainability Statements. We also focused on how Shell had reflected material climate change risks in their financial statements, including the impact of climate-related targets and ambitions on accounting estimates and judgements.

In focusing on how Shell has reflected material climate change risks in Shell's Consolidated Financial Statements, we have considered:

1) how Shell's assumed future commodity price assumptions compare to energy transition scenarios;
2) the reasonableness of Shell's forecast future carbon costs;
3a) the carbon intensity of Shell's Chemicals and Products, Upstream and Integrated Gas assets and associated products;
3b) the material financial statements risk associated with delivery of decarbonisation projects of Shell's assets to meet their climate-related targets and ambitions;
4) the useful economic lives of assets beyond 2050 and the risk of material stranded assets; and
5) how physical risk considerations have been incorporated into Shell's asset plans.

The critical accounting judgements and estimates that are impacted by climate change and the energy transition are disclosed within Note 4 to the Consolidated Financial Statements.

Our response to the risk

Overall response

To respond to the impact of climate change and the energy transition on our audit, we ensured that we had the appropriate skills and experience within the audit team. Our group engagement team included professionals with significant experience in climate change and energy transition. The audit procedures were performed by the group engagement team and component teams.

In our 2024 audit, as part of our risk assessment, we considered financial and non-financial data to assess five climate risks at a granular level. This covered Shell's higher risk assets, with a net book value of around $35 billion. We considered the carbon intensity of the assets and products sold and where there could be a higher degree of management judgement and bias. This included considering the material financial statement impact of delivery risks of certain decarbonisation projects.

For the assets that we assessed as most susceptible to climate change and energy transition risks, we performed sensitivity analysis and read management's climate scenario analysis to assess whether there were indicators of impairment.

Further procedures performed to address the climate risks included:

Alignment of statements made in Strategic Report and Sustainability Statements with the financial statements

- in connection with our audit of the financial statements, we read the other information in the Annual Report and Accounts (as defined in section 9 below) and, in doing so, considered whether the other information, which includes Shell's climate targets, are materially consistent with the financial statements or our knowledge obtained in the audit;
- evaluated whether the effects of material climate risks, as disclosed within Our journey to net zero, within the Strategic report, had been appropriately reflected in asset values and associated financial statement disclosures, and the timing, nature and measurement of liabilities recognised are in accordance with IFRS, which is discussed further below;
- read and challenged the completeness of management's disclosures in Note 4. We audited the sensitivity disclosures in Note 4 of the carrying value of Shell's Upstream and Integrated Gas PP&E assets to a range of future oil and gas price assumptions, reflecting reduced demand scenarios due to climate change and the energy transition, including the IEA Net Zero Emissions (NZE) by 2050 scenario and Announced Pledges Scenarios (APS). This included considering whether the downside sensitivities could have reduced the level of Shell's distributable profits such that their 2024 shareholder distributions would not have been in compliance with the Companies Act 2006. For Upstream, Integrated Gas and Chemicals and Products assets, we also considered the carrying amounts and their sensitivity to IEA NZE 2050 carbon price scenario and the discount rate sensitivity considering Upstream, Integrated Gas, Marketing, Chemicals and Products and Renewables and Energy Solutions carrying amounts; and
- assessed whether the climate change litigation described in Note 32 was complete and whether it represented obligations where the likelihood of a cash outflow was probable and therefore requiring provision. Also, we considered the appropriateness of the climate change litigation disclosures within Note 32, Legal proceedings and other contingencies, by comparing the disclosures to our understanding of the claims and allegations and to the most recent disclosures provided by other oil and gas companies.

6. Our assessment of key audit matters continued

The impact of climate change and the energy transition on the Consolidated Financial Statements continued

Our response to the risk continued

The reflection of material climate change risks and the impact of Shell's climate-related targets and ambitions in the material judgements and estimates

- tested management's internal controls over the identification and estimation of costs of the potential impacts associated with energy transition and climate change, and related financial statement disclosures in Note 4; and
- held discussions with Group Planning, Group Reporting, Shell's Carbon Strategy group, Safety, Environment, Asset Management Group and, where necessary, individual asset managers to understand and challenge management on how the following four transition and one physical risks of climate change were being factored into Shell's financial statements:

1) The comparison of Shell's assumed future commodity price assumptions to energy transition scenarios

- we engaged oil and gas valuation specialists to assess the reasonableness of Shell's short and long-term pricing assumptions. This included benchmarking Shell's assumptions against a range of third party forecasts (including other oil and gas companies, consultants, banks, brokers and other external outlooks such as International Energy Agency ('IEA'));
- considered specifically the extent to which management's forecast price assumptions incorporated the potential impact of climate change and the energy transition. This included consideration of assumed hydrocarbon and renewables demand and the impacts of such demand movements and supply constraints on future prices; and
- evaluated the reasonableness of Shell's refining and petrochemical margin assumptions, by comparing Shell's assumptions to external benchmarks. We also considered the expected impact on demand for oil products and chemicals in a transition to a net zero economy. Refining margin and petrochemical assumptions underpin the recoverable amount of refineries and petrochemical plants respectively.

2) The reasonableness of Shell's forecast future carbon costs

- we engaged our climate change specialists to assist in evaluating Shell's carbon price methodology, including how price and free allowance assumptions are applied in different jurisdictions. At a country level, we compared Shell's forecast carbon prices to those presented under the IEA NZE scenario. Our procedures were focused on assets with high Scope 1 and 2 emissions and which are geographically located in high carbon price jurisdictions; and
- we independently calculated Shell's forecast carbon cost included in their operating plan, based on carbon price, free allowance and emission assumptions. We performed sensitivity analysis on the mid-point carbon price and free allowance assumptions in the operating plan to the independently determined outlooks identified by our climate change and energy transition specialists to determine whether deviations are material to Shell's operating plan and respective assets.

3a) The carbon intensity of Shell's Chemicals and Products, Upstream and Integrated Gas assets and associated products; and

3b) The material financial statements risk associated with the delivery of decarbonisation projects of Shell's assets to meet their climate-related targets and ambitions

- we considered the Scope 1 and 2 and lifecycle emissions of the products sold by Shell's assets (net carbon intensity), to identify potential impairment triggers. For Shell's high carbon intensive assets, we considered the decarbonisation plans included in their operating plan. We obtained an understanding of the planned strategies and the basis for associated costs with projects related to carbon capture and storage, energy efficiency and renewables growth. We considered decarbonisation strategies and challenged the associated opex and capex included in the operating plan.
- we confirmed that Shell's operating plan, included costs associated with Shell's plans to achieve their Scope 1 and 2 emissions, Scope 3 category 11 emission relating to oil products and their net carbon intensity ('NCI') targets and ambitions. We challenged management's ability to accurately forecast their scope 1 and 2 emissions assumptions included in the operating plan to meet their 2030 absolute emissions targets through the performance of look-back analysis; and
- we also performed sensitivity analysis by removing all in-plan decarbonisation projects at high carbon intensive assets to determine whether the incremental carbon cost that would need to be incurred on emissions would trigger an impairment. We also performed a sensitivity analysis on major decarbonisation projects relating to assets with higher risk of impact from climate change. We used this to determine whether there would be a material impairment risk should these projects extend past their planned operation date. We also considered additional decarbonisation levers outside of the operating plan, which Shell has optionality to execute in order to meet their climate targets. We confirmed whether the carbon credits and associated costs were included in the operating plan to meet Shell's 2030 ambitions.

4) The useful economic lives of assets beyond 2050 and the risk of material stranded assets

- considering Shell's long-term target to achieve net zero emissions by 2050, we have assessed Upstream and Integrated Gas assets which are expected to be producing beyond 2050. We also verified that the oil, gas and carbon price sensitivity disclosures in Note 4 incorporated life of field assumptions.

5) Whether physical risk considerations have been incorporated into the asset plans

- evaluated management's disclosures around physical risk in the Our journey to net zero section of the Annual Report to ensure compliance with the Task Force on Climate-Related Financial Disclosures;
- using our data analytics and climate change specialists, we performed a physical risk assessment that considered Shell's asset-level mitigation and adaptation measures for the assets that we viewed as being exposed to the highest physical risks, such as hurricanes, flooding, rising temperatures, drought and water dredging. For assets assessed to be high risk, we evaluated the mitigation and adaption measures, and ensured that where relevant, the costs have been appropriately reflected in the operating plan; and
- assessed whether the risk exposure represents an impairment trigger for the associated asset through consideration of the severity of the physical risk, likely time horizon, historical ability to manage physical risk and headroom of the asset.

Our procedures were led by the group engagement team, with input from our teams in Australia and Brazil.

Key observations communicated to the Shell Audit and Risk Committee

We reported to the Audit and Risk Committee the key procedures that we had performed and the results of those procedures, which are set out below:

Alignment of statements made in Strategic Report and Sustainability Statements with the financial statements

- we reported that we had not identified any material inconsistencies between Shell's disclosures in Note 4 to the Consolidated Financial Statements, which covers the material impacts of climate-related matters, and the disclosures included within the other information; and
- we reported that the various climate change litigation as detailed in Note 32 were appropriately disclosed and represented possible obligations.

6. Our assessment of key audit matters continued

The impact of climate change and the energy transition on the Consolidated Financial Statements continued

Key observations communicated to the Shell Audit and Risk Committee continued

The reflection of material climate change risks and the impact of Shell's climate-related targets and ambitions in the critical accounting estimates and judgments

1) the comparison of Shell's assumed future commodity price assumptions to energy transition scenarios

- we reported that Shell's price assumptions were within the acceptable range when compared against third party forecasts, peer benchmarks and our independently determined ranges;
- IEA's Announced Pledges Scenario (APS) price assumptions, which assumes that all climate commitments made by governments around the world to date, are aligned with Shell's oil price assumptions. Shell's Henry Hub gas price assumption are higher than the APS scenario; however, Henry Hub is not a significant input to the recoverable amount of the of the assets that are expected to be producing beyond 2030 and 2050;
- IEA's NZE price scenarios are lower than Shell's Brent and Henry Hub price assumptions and represent an aspirational target reflecting governmental, societal and regulatory responses to climate change risks that are still developing; however, as IFRS requires preparers to base the financial statements on current best estimates of future oil and gas prices, we concluded that Shell's assumptions were within a range of benchmarks that reflect the current best estimates of future oil and gas prices; and
- we reported that Shell's refining and chemical margin assumptions were in line with our internally developed range.

2) the reasonableness of Shell's forecast future carbon costs

- we concluded that Shell's carbon pricing methodology was appropriate. Also, we reported that, based on our benchmarking, Shell's forecasted carbon prices were materially in line with our independently determined ranges. For certain years where Shell's country specific carbon prices were outside of our independently determine range, we reported that applying our range would not result in an impairment trigger at the impacted assets.
- we reported that the increase in carbon costs included in the operating plan was primarily driven by a decrease in free allowances permitted by regulators in high carbon price jurisdictions.
- we reported the result of our sensitivity assessment to remove all in-plan decarbonisation projects for highly carbon intensive assets. The incremental carbon costs incurred by removing these projects would be materially offset by the project CAPEX and OPEX saved in the operating plan.

3a) the carbon intensity of Shell's Chemicals and Products, Upstream and Integrated Gas assets and associated products; and

3b) the material financial statements risk associated with the delivery of decarbonisation projects of Shell's assets to meet their climate-related targets and ambitions

- for the assets that we assessed as highly carbon intensive, with decarbonisation projects we considered to be exposed to higher delivery risk, we reported that the headroom at each asset has would withstand the incremental carbon costs that would be incurred if these decarbonisation projects were to be removed from Shell's operating plan. We also reported that the assumptions relating to these projects were appropriately reflected in the operating plan;
- we reported that the impact of climate change and energy transition has been appropriately considered in Shell's financial statements and disclosures and that we did not identify any material inconsistencies between Shell's climate-related targets and ambitions and Shell's material financial statement judgement and estimates. This includes the expected financial impact of management's current planned actions to address the identified climate change risks. Where impairment assessments were performed, climate change factors had been reflected in these assessments throughout the field life of the asset.

4) the useful economic lives of assets beyond 2050 and the risk of material stranded assets

- we reported that, given Shell's climate-related targets and ambitions, there may be a higher risk of reserves not ultimately being produced where assets are carbon intensive or where assets are forecast to be producing beyond 2030. We analysed Shell's integrated Gas and Upstream assets and the Canadian mines to identify such assets. We then considered if there was evidence to indicate that net book value of these assets were overstated and would be regarded as "stranded assets". Of the SEC proved reserves currently recognised at the end of 2024, 52% are expected to be produced by 2030 and only an insignificant amount, 3% (<1% excluding oil sands that are held for sale) would be produced beyond 2050. As the impacted assets are mainly depreciated over SEC proved reserves, the current carrying amount of these assets will be substantially depreciated by 2050, with only around $1.8 billion ($1.2 billion excluding oil sands that are held for sale) will not have been depreciated;
- we reported that, based on the depreciation profile of Shells' refineries, that there was a low risk of stranded assets. Also, we concluded there was a low risk of Shell's chemicals manufacturing plants being stranded as chemical demand is expected to be resilient to energy transition, as highlighted by the IEA and other market commentators; and
- we reported that the recognition of reserves and resources beyond 2050 is not inconsistent Shell's NZE ambitions and that at the balance sheet date there was no indicator that these reserves should be derecognised and that the estimated carrying value of these assets in 2050 is not material.

5) whether physical risk considerations have been incorporated into the asset plans

- for the assets that we assessed as susceptible to higher physical risk, we reported that mitigation and adaptation plans and associated costs were reflected in the operating plan, other than where it had been demonstrated that assets were expected to withstand the physical events, for example severe weather events, or where insurance was in place. Also, we reported that, with the assistance of our climate change specialists, we had re-performed a physical risk assessment over Shell's assets and had not identified any new physical risks that had not been considered by Shell. The risks included extreme weather, flooding, higher temperatures, drought and water dredging.

Other observations

- with regards to the sensitivity analyses provided by Shell in Note 4 to the Consolidated Financial Statements, including commodity prices, carbon prices, refining and chemical margins and the discount rate, we were satisfied that the descriptions of the sensitivities reflected the sensitivities performed. Also, the prices and assumptions applied by Shell in their calculations were agreed to the scenarios as described. We reperformed the sensitivities and did not identify a material difference to the ranges disclosed by Shell in Note 4, including the illustrative disclosures on the impact of commodity prices averaged from three 1.5-2°C external climate change scenarios and from the IEA NZE50 scenario; and
- we reported that we had considered Shell's dividend resilience statement in Note 4. Had Shell applied the IEA NZE50 scenario, and had this impairment of $26-$34 billion directly reduced the carrying value of investments within the Parent Company, Shell plc, this would not have impacted the distributable reserves available to Shell from which to pay dividends and buyback shares in 2024. This is on the basis that Shell plc had a merger reserve of $234 billion and under Companies Act 2006, the adverse impact from an impairment would be on the merger reserve as opposed to distributable reserves.

See the "Audit and Risk Committee Report" on pages 176-187 for details on how the Audit and Risk Committee reviewed climate change and energy transition. See " Our strategy" on pages 10-13 and "Energy transition strategy" on pages 77-92 for more details. Also, see Notes 2, 4, 12, 13, and 32 to the "Consolidated Financial Statements".

6. Our assessment of key audit matters continued

Estimation of oil and gas reserves

Description of the key audit matter

This is a forecast-based estimate. Oil and gas reserves estimates are used in the calculation of depreciation, depletion and amortisation (DD&A) and impairment testing. The risk is the inappropriate recognition of proved reserves that impacts these accounting estimates. Given the current environment, there may be a heightened risk of proved reserves with a high carbon intensity not ultimately being produced (also see climate change and energy transition key audit matter).

As described in Notes 12 and 14 to the Consolidated Financial Statements, at December 31, 2024, production assets amounted to $102.2 billion and had an associated DD&A charge of $15 billion. Joint ventures and associates (JVAs) amounted to $23.4 billion. As further described in Note 13, exploration and production impairment losses of $0.8 billion and exploration and production impairment reversals of $74 million were recorded during the year.

The estimation of proved oil and gas reserves involves subjective judgements and determinations based on available geopolitical, technical, contractual, and economic information. Estimates can change over time because of new information from production or drilling activities, changes in economic factors, such as oil and gas prices, alternations in the regulatory policies of host governments, or other events. Downward adjustments could indicate lower future production volumes and could also lead to revised DD&A rates and to impairment of assets.

The estimation of oil and gas reserves and resources is a higher risk estimate given the significant judgement by management, including the use of management's specialists, when developing the estimates of proved crude oil, natural gas liquids and natural gas reserves volumes, which in turn led to a high degree of auditor judgement, subjectivity, and effort in performing procedures and evaluating audit evidence obtained related to the data, methods and assumption used by management and its specialists in developing the estimates of proved crude oil and natural gas reserves volumes.

The estimates are based on the Company's central group of experts' assessments of petroleum initially in place, production curves and certain other inputs, including prices, license expiration date, capex and opex. Estimation uncertainty is further elevated given the transition to a low-carbon economy, which increases the risk of under-utilised or stranded oil and gas assets.

Our response to the risk

We obtained an understanding of the controls over Shell's oil and gas reserves estimation process. We then evaluated the design of these controls and tested their operating effectiveness. For example, we tested management's review controls over changes to year-on-year estimated oil and gas reserves volumes.

We involved professionals with oil and gas reserves audit experience in evaluating the key assumptions and methodologies applied by management.

Our procedures included, amongst others:

- attended all of Shell's Upstream Reserves Committee meetings to observe the internal review and endorsement process. These meeting are part of Shell's proved reserves assurance process, which is described in Supplementary Information – Oil and gas section;
- evaluated the professional qualifications and objectivity of management's internal reservoir engineers who performed the detailed preparation of the reserve estimates and those who are primarily responsible for providing independent review and challenge, and ultimately endorsement of, the reserve estimates. This covered around 26 individuals involved in the process;
- evaluated management's estimation of the point at which the operating cash flow from a project becomes negative (the economic limit), as this impacts DD&A and impairment. Where relevant, we assessed whether the economic limit test incorporated Shell's estimate of future carbon costs to reflect the potential impact of climate change and the energy transition;
- assessed the completeness and accuracy of the inputs used by management in estimating the oil and gas reserves by agreeing the inputs to source documentation. This included obtaining an understanding of the non-financial information used by the specialists when estimating the reserves. We also performed procedures around the completeness and accuracy of this information;
- performed back-testing of historical data to identify indications of optimism bias over time;
- performed sensitivity analysis on the impact of changes in oil and gas reserves;
- verified significant additions to, or reductions in, proved reserves and that they have been recorded in the appropriate period, and that they are in compliance with Shell's reserves and resources guidance and SEC regulations. Our most experienced oil and gas team members, which included a reservoir engineer, reviewed the documentation and approvals of all changes greater than 30 mmboe (eight fields);
- we focused our audit procedures on those assets that are currently forecast to be producing beyond 2050 and the carbon intensity of the post 2050 production from those fields to identify assets that are carbon intensive, where there may be a higher risk of the reserves not ultimately being produced. The purpose of performing such analysis was to identify assets that were at higher risk of the current net book value being overstated; and
- we also included unpredictability in our testing by selecting a field that did not meet our selection criteria.

Our procedures were led by the group engagement team, with input from our teams in Australia, Brazil, Nigeria, Poland, Qatar, UK and the USA.

Key observations communicated to the Shell Audit and Risk Committee

We reported to the Audit and Risk Committee in January 2025 that, there are no indications that the recognition of the reserve volumes beyond 2030 and 2050 results in any impairment triggers.

We reported to the Committee that the sensitivity analysis that we performed indicated that, at portfolio level with all other assumptions remaining unchanged, reserves would have to be misstated by 18% for DD&A to be misstated by a material amount ($2 billion).

The inputs and assumptions used to estimate proved reserves and resources are consistent with Shell's policies and principles. We reported that the recognition of reserves and resources beyond 2050 is not inconsistent with Shell's NZE ambitions and that it remains appropriate to recognise these reserves. After the oil sands divestment, less than 1% of proved reserves are expected to be produced beyond 2050.

Please see key audit matter on the impact of climate change and the energy transition on the financial statements for details of our considerations on the carbon intensity associated with reserves expected to be produced beyond 2050.

See the "Audit and Risk Committee Report" on pages 176-187 for details on how the Audit and Risk Committee reviewed assurances for oil and gas reserves. Also, see Notes 2, 4 and 12 to the "Consolidated Financial Statements" and "Supplementary information – oil and gas (unaudited")."

6. Our assessment of key audit matters continued

Impairment assessment of Property, plant and equipment (PP&E) and Joint ventures and associates (JVA)

Description of the key audit matter

This is a forecast-based estimate. The risk is that potential impairments are not identified on a timely basis, including whether the impacts of climate change and the energy transition have been considered in Shell's impairment trigger assessments (also see climate change and energy transition key audit matter).

As described in Notes 12, and 14 to the Consolidated Financial Statements, at December 31, 2024 Shell recognised $102.2 billion of production assets, $50.8 billion of manufacturing, supply and distribution assets (primarily refineries and petrochemical plants) and $23.4 billion of joint ventures and associates (JVAs). As disclosed in Note 13 and 14, in 2024, Shell recognised $1.3 billion and $0.9 billion of impairment losses relating to manufacturing, supply and distribution assets and JVA's respectively.

The recoverable amount of PP&E and JVAs can be sensitive to small changes in key assumptions, which increases the risk of indicators of impairment or impairment reversal not being identified. Our audit effort has focused on the completeness and timely identification of indicators of impairment charges or impairment reversals.

Assumptions underpinning the impairment assessments include:
- changes in future oil and gas prices, in particular over the mid-to-long term, which are more uncertain than short term forecasts;
- changes in refining margin assumptions;
- expected production volumes;
- the assumed weighted average cost of capital (WACC) and asset-specific risks; and
- individual asset impairment assessments.

As described in Note 2, the most complex of these judgements relate to management's view on the long-term oil and gas price outlook. Forecasting future prices is inherently difficult, as it requires forecasts that reflect developments in demand such as global economic growth, technology efficiency, policy measures and, on the supply side, consideration of investment and resource potential, cost of development of new supply and behaviour of major resource holders. These judgements are particularly difficult because of increased demand uncertainty and pace of decarbonisation due to climate change and the energy transition.

Our response to the risk

We obtained an understanding of the controls over Shell's asset impairment process. We then evaluated the design of these controls and tested their operating effectiveness. For example, we tested the controls over management's identification of indicators of impairment and reversals of impairment and the approval of oil and gas prices and petrochemical and refining margins.

Our procedures included, amongst others:

Commodity price assumptions
- we have included observations on oil and gas prices in our key audit matter above on climate (The impact of climate change and the energy transition on the Consolidated Financial Statements).
- we involved our valuations specialists to assess the reasonableness of Shell's margin estimation methodologies and assumptions; and
- evaluated the reasonableness of Shell's refining margin assumptions by comparing these to independent market, consultant forecasts and independently determined ranges.

Oil and gas reserves
- we have included observations in our key audit matter above on oil and gas reserves (Estimation of oil and gas reserves).

Weighted average cost of capital (WACC)
- we involved our valuations specialists who reviewed Shell's WACC methodology and calculation. We independently assessed a range of reasonable input assumptions for calculating Shell's WACC; and
- assessed whether Shell's risking in their impairment assessments, through both a discount rate and individual asset cash flows, adequately reflects the appropriate level of risking for the asset.

6. Our assessment of key audit matters continued
Impairment assessment of Property, plant and equipment (PP&E) and Joint ventures and associates (JVA) continued

Our response to the risk continued

Individual asset assessments
- evaluated Shell's assessment of impairment losses and impairment reversal triggers, including changes in the forecast commodity price assumptions, movements in oil and gas reserves, changes in asset performance, changes in Shell's operating plan assumptions, including those relating to Shell's climate-related targets and ambitions, and whether these are indicators of impairment or impairment reversal. We also considered whether potential disposals meet the held for sale criteria;
- separately from management, for material assets, we also assessed independently whether or not indicators of impairment or reversal triggers exist;
- where triggers were identified, we assessed the inputs to the impairment assessment by comparing forecasts to the operating plan and life of field plans, historical actuals and other independent expectations. We also performed a consistency check on the assumptions to other assumptions applied by the group such as commodity prices and WACC;
- tested the model integrity of material impairment assessments;
- evaluated the assumptions used in the preparation of the operating plan at a group, segment and asset level and compared the actual performance of assets to the forecasts made in the prior year;
- considered the existence of other contradictory evidence, such as the results of any comparable market transactions that could indicate a material increase or decrease in the recoverable amount of any of the assets, public comments or commitments made by Shell and whether these could impact the future potential value of any assets; and
- assessed potential operational changes that have or are expected to have a significant adverse effect on an asset, such unplanned shutdowns, and whether they should be considered as impairment triggers.

The audit procedures were performed primarily by our group engagement team as well as our local audit teams in Australia, Canada, Nigeria, Poland, UK and USA.

Key observations communicated to the Shell Audit and Risk Committee

In January 2025, we reported to the Audit and Risk Committee that:

Commodity price assumptions
- See the key matter above on impact of climate change and the energy transition on the Consolidated Financial Statements.
- We reported to the Committee that Shell's refining and petrochemical margin assumptions were within EY's estimated reasonable range.

Oil and gas reserves
- See the key matter above on oil and gas reserves.

WACC
- Shell applied a post-tax WACC of 7.5% (2023: 7.5%) in all impairment assessments performed during the year, other than for the Power business, where a post-tax WACC of 6% (2023: 6%) has been used. Shell's methodology used in estimating the Group-wide WACC was consistent with the requirements set out in IAS 36. We also reported that while Shell's rate was marginally below our estimated range we were satisfied the difference was immaterial. Shell's commodity prices are at the conservative end of reasonable ranges, therefore we would expect the WACC assumption to also be at the bottom end of reasonable ranges. Shell's WACC was within the range with those adopted by peers.
- In addition to applying a discount rate to risk cash flows, Shell also applied asset-specific risks directly in their cash flows. We reported that our valuation specialists estimated an asset-specific discount rate (the WACC and additional cash flow risking) for the most significant impairment assessments performed and that the implicit discount rates were within our ranges.

Individual asset assessments
- We reported to the Committee that the outcomes of the individual impairment assessments were reasonable, including the timing of the assessments. We provided the Committee with our observations on asset impairment trigger assessments where we spent the most audit effort, which included assessments where no charge was deemed necessary. Our observations included areas such as held for sale classification, cash flow phasing, cash flow risking and alignment with the operating plan.
- We reported that there was adequate headroom supporting the goodwill within Upstream, Integrated Gas and Marketing and that there are no material goodwill impairment judgements relating to RE&S.

See the Audit and Risk Committee Report on page 176 for details on how the Audit and Risk Committee considered impairments. Also, see Notes 2, 4, 12, 13 and 14 to the Consolidated Financial Statements.

6. Our assessment of key audit matters continued

Accounting for complex transactions within Shell's Gas & Power Trading and Supply (T&S) function and the valuation of physical and financial derivatives

Description of the key audit matter

The recognition of complex deals requires accounting and valuation judgement. There is a risk that an incorrect accounting judgement may be applied to complex contracts executed by Shell's Gas & Power T&S function (fair value or accrual accounting) and that for those contracts being fair valued, the valuation may not be in accordance with IFRS. Additionally, there is a higher inherent risk of rogue trading associated to Shell's wider portfolio of over-the-counter traded position.

As described in Note 26, Shell recognised derivative financial instrument assets of $10 billion and derivative financial instrument liabilities of $9.6 billion. As described in Note 7 of the Consolidated Financial Statements, at December 31, 2024 Shell recognised $284 billion of revenue. A subset of the consolidated revenue relates to T&S transactions, where there is a risk of unrealised revenues being inappropriately recorded. Shell has identified trading in the risk factors section of the Strategic Report, which form part of the other information, rather than the audited financial statements.

Shell's trading and supply function is integrated within the Integrated Gas, Upstream, Marketing, Chemicals and Products, and Renewables and Energy Solutions segments. The function executes and settles both standard and non-standard complex trades. The IT environment supporting the function is complex and involves a large number of systems, resulting in a high degree of manual intervention being required.

Auditing complex trades is challenging due to the significant judgement needed to determine the appropriate accounting treatment and the key assumptions used in valuing the trades. Furthermore, trading often does not take place in active markets where prices are readily available, especially for longer-dated contracts. This increases the subjectivity in determining the pricing curve and volatility assumptions, which are essential inputs for valuing the trades and assessing unrealized gains and losses.

Rogue trading activity may occur on Shell's portfolio of over-the-counter positions because of trader incentives and the high volume of transactions that Shell executes.

Our response to the risk

We obtained an understanding of the controls over Shell's process for the recognition of revenue relating to unrealised trading gains and losses, including controls over management's complex deal accounting and valuations. We then evaluated the design of these controls and tested their operating effectiveness.

We involved audit professionals with experience auditing large commodity trading organisations. Our audit procedures focus on the appropriateness of the accounting treatment and the valuation of complex contracts.

To respond to the risk of inappropriate accounting for complex deals we:
- assessed the completeness of the list of complex deals;
- directly confirmed with the counterparty a sample of new or amended complex deals;
- obtained an understanding of the commercial rationale of complex deals by analysing transaction documents and agreements and through discussions with management.
- we performed an independent assessment of the accounting treatment of a sample of the complex deals, challenging management on contractual terms and previous accounting judgement;
- assessed the reasonableness of Shell's derivative valuation methodology by comparing it to market practice, analysing whether a consistent framework was applied and confirmed the consistency of inputs used in deal valuations and other assumptions;
- involved valuation specialists to assist us in performing independent testing of complex deals, checking that the appropriate valuation model has been applied. Our valuations were established using independent externally sourced inputs, where available;
- tested the forward pricing curve and volatility assumptions in management's valuation models, including comparing to external broker quotes, market consensus providers, and our independent assessments;
- recalculated the mark to market valuation including reserves if any, against validated forward pricing curves to ensure it is consistent with Shell's mark to market valuation;
- we specifically challenged management's accounting consideration of whether forward physical contracts to buy and sell LNG are in the scope of IFRS 9 and should be fair valued.

To respond to the risk of rogue trading activity, we:
- performed external confirmation procedures for the existence and completeness of recorded forward positions. Our tests included, among other procedures, requesting Shell's counterparties to confirm their entire position with Shell and asking counterparties to provide details of individual trades;
- performed additional procedures over the post year-end tradebook to identify material additions, deletions or amendments from the balance sheet date procedures and validating the impact on the balance sheet date;
- analysed material post-balance sheet date deal entries and cash receipts/disbursements to assess the completeness of the associated derivative recorded as of the balance sheet date; and
- performed testing of deals that were unconfirmed or excluded from the management's confirmation process at the balance sheet date. We obtained evidence of the trade's existence at the year-end and validating their exclusion respectively, for a sample of deals; and

The audit procedures were performed principally by the group engagement team and the UK and US component teams.

Key observations communicated to the Shell Audit and Risk Committee

In January 2025, we reported to the Audit and Risk Committee that:
- the valuation of complex and long-dated derivative contracts executed by the Gas & Power T&S function were materially correct and the related unrealised gains and losses have been recorded appropriately in the financial statements;
- we reported that Shell's key accounting judgments and the application of their accounting policies, including the accounting treatment of non-standard contractual terms, were consistent with the requirements set out in IFRS 9;
- we highlighted that the accounting judgement around LNG liquidity was a significant judgement. We stated that it is appropriate that Shell do not account for their LNG contracts as derivatives and therefore do not reflect these at fair value. This was based on Shell's net settlement history (there is no significant past practice of net settlement within Shell's LNG portfolio) and market liquidity (indicators do not demonstrate any increase in liquidity in 2024 mid/long term contracts continue to dominate the market); and
- we did not identify fictitious or omitted positions as of the balance sheet date.

See the "Audit and Risk Committee Report" on pages 176-187 for details on how the Audit and Risk Committee reviewed the Trading and Supply's control framework. Also see Note 26 to the "Consolidated Financial Statements".

There were no changes from the prior year as to the Key Audit Matters included in our auditor's report.

7. Our application of materiality

We apply the concept of materiality both in planning and performing the audit and in evaluating the effect of identified misstatements on our audit and in forming our audit opinion.

Overall materiality

What we mean

We define materiality as the magnitude of an omission or misstatement that, individually or in the aggregate, could reasonably be expected to influence the economic decisions of the users of the financial statements. Materiality provides a basis for determining the nature and extent of our procedures.

Level set

Group materiality
We set our preliminary overall materiality for Shell's Consolidated Financial Statements at $2.0 billion (2023: $2.0 billion). We kept this under review throughout the year and reassessed the appropriateness of our original assessment in the light of Shell's results and external market conditions. We did not find it necessary to revise our level of overall materiality.

Parent Company materiality
We determined materiality for the Parent Company to be $2.0 billion (2023: $2.0 billion), which is 0.8% of equity (2023: 0.7%). We concluded that equity remains an appropriate basis to determine materiality for an investment holding company. The range we normally apply when determining materiality on an equity measurement basis is 1- 2%. We applied a lower percentage to align the materiality of the Parent Company with that of the Group.

Our basis of determining materiality

Our assessment of overall materiality that we applied throughout the year was $2.0 billion, which represented 4.3% (2023: 4.7%) of the three-year normalised Adjusted Earnings pre-tax (see table below). Our approach is the same as that applied in 2023.

Where we measure materiality on a pre-tax earnings basis, we normally apply 5% of the measure. Applying this to the three-year normalised Adjusted pre-tax earnings would indicate materiality of $2.3 billion. In deciding on an appropriate planning materiality to apply in the Shell audit, we judgementally selected $2.0 billion which is consistent with our planning materiality applied in our 2023 audit.

Our materiality was derived from an average of Shell's earnings for 2022-2024, including an initial estimate of the 2024 result, on an Adjusted Earnings basis, which we then adjusted for an average effective tax rate. At the end of the year, we reassessed materiality based on the actual results for 2024. As disclosed within Non-GAAP measures reconciliations within Additional Information, the "Adjusted Earnings" measure aims to facilitate a comparative understanding of Shell's financial performance from period to period by removing the effects of oil price changes on inventory carrying amounts and removing the effects of non-recurring gains and charges disclosed as identified items. Shell's identified items are disclosed within Additional Information, Non-GAAP measures reconciliations, in the section Identified items.

Our key criterion in determining materiality remains our perception of the needs of Shell's stakeholders. We consider which earnings, activity or capital-based measure aligns best with their expectations. In so doing, we apply a 'reasonable investor perspective', which reflects our understanding of the common financial information needs of the members of Shell as a group.

In our view these needs are best met by basing materiality on normalised Adjusted Earnings on a pre-tax basis. Through applying a normalised earnings approach, large year-on-year swings in materiality are minimised. These swings would be driven primarily by price fluctuations rather than specific structural changes to Shell's business. In addition, an Adjusted Earnings approach is consistent with the presentation of Shell's segment earnings, which is the earnings measure used by the CEO for the purposes of making decisions about allocating resources and assessing performance.

We have considered alternative benchmarks to Adjusted Earnings, including profit before taxation and EBITDA. These indicate a range of $1.45 billion to $2.1 billion.

By applying a normalised Adjusted Earnings approach, we have concluded that it is appropriate to apply a materiality of $2.0 billion (2023: $2.0 billion).

The Adjusted Earnings were as follows:

$ billion	2024	2023	2022
Adjusted Earnings*	23.7	28.2	39.9
Tax impact based on the average effective tax rate	15.0	13.7	18.5
Adjusted Earnings pre-tax	38.7	41.9	58.4
Materiality percentage on the average Adjusted Earnings pre-tax - 2022-2024		4.3%	

* Non-GAAP measure (see page 445).

7. Our application of materiality continued

Performance materiality

What we mean

Having established overall materiality, we determined 'performance materiality', which represents our tolerance for misstatement in an individual account. It is calculated as a percentage of overall materiality in order to reduce to an appropriately low level the probability that the aggregate of uncorrected and undetected misstatements exceed overall materiality of $2.0 billion for Shell's financial statements as a whole. We assigned performance materiality to our various in-scope operating units. The performance materiality allocation is dependent on the size of the operating unit, measured by its contribution of earnings to Shell, or other appropriate metric, and the risk associated with the operating unit.

Level set

In our assessment for 2024, we considered the nature, number and impact of the audit differences identified in 2023 and the Group's overall control environment. Based on our assessment of these factors, our judgement was that performance materiality for the 2024 audit should be 75% (2023: 75%) of our overall materiality or $1.5 billion (2023: $1.5 billion).

The level of materiality that we applied in undertaking our audit work at the operating unit level, for the purpose of responding to the assessed risks of material misstatement of the Consolidated Financial Statements, was determined by applying a percentage of our total performance materiality. This percentage is based on the relative scale and risk of the operating unit to Shell as a whole and our assessment of the risk of material misstatement at that operating unit. In 2024 the range of materiality applied at the operating unit level was $220 million to $970 million (2023: $225 million to $975 million).

The performance materiality was kept under ongoing review, but the conclusion remained unchanged at our year-end re-assessment of materiality.

Audit difference reporting threshold

What we mean

This is the amount below which identified misstatements are clearly trivial. The threshold is the level above which we collate and report audit differences to the Audit and Risk Committee. We also report differences below that threshold that, in our view, warrant reporting on qualitative grounds. We evaluate any uncorrected misstatements against both the quantitative measures of materiality discussed above and in the light of other relevant qualitative considerations in forming our opinion.

Level set

We agreed with the Audit and Risk Committee that we would report to the Committee all audit differences more than $100 million (2023: $100 million), as well as differences below that threshold that, in our view, warranted reporting on qualitative grounds. This represents 5% of our planning materiality (2023: 5%).

8. Our scope of the audit of Shell's financial statements

What we mean

We are required to establish an overall audit strategy that sets the scope, timing, and direction of our audit. Audit scope comprises the physical locations, operating units, activities, and processes to be audited that, in aggregate, are expected to provide sufficient coverage of the financial statements for us to express an audit opinion.

In the current year our audit scoping has been updated to reflect the new requirements of ISA (UK) 600 (Revised). We have followed a risk-based approach when developing our audit approach to obtain sufficient appropriate audit evidence on which to base our audit opinion. We performed risk assessment procedures, with input from our component auditors, to identify and assess risks of material misstatement of the Group financial statements and identified significant accounts and disclosures.

Criteria for determining our audit scope and selection of in-scope operating units

Our assessment of audit risk, our evaluation of materiality and our allocation of performance materiality determined our audit scope for each operating unit within Shell which, when taken together, enabled us to form an opinion on the consolidated financial statements. Our audit effort was focused towards higher risk areas, such as management judgements and on operating units that we considered significant based upon size, complexity or risk.

We assessed our 2024 audit scope following the completion of our 2023 audit. We identified those Areas of Operation (AoOs or operating units) that were significant by virtue of their contribution to Shell's results or significant by virtue of their associated risk or complexity. In identifying the AoOs where we would performed audit procedures, we considered our understanding of Shell and its operating environment, the potential impact of climate change on the AoO, the group's system of internal control at the entity level, centralised processes and IT applications. We also considered the history or expectation of unusual or complex transactions, potential for material misstatements, the previous effectiveness of controls, our fraud assessment and internal audit findings. We then considered the adequacy of account coverage and remaining audit risk of AoOs not directly covered by audit procedures. Finally, we assessed the appropriateness of our audit scope by comparing to the prior year; ensured that there was sufficient unpredictability in our scope and made the necessary changes where appropriate. We applied our Risk Scan analytics techniques, which consolidate internal and external data to inform us on higher risk components to be included in scope. This allowed us to risk rate the group's operating units. We identified 87 operating units where we believed that it was appropriate to carry out targeted testing.

By following this approach, our audit effort focused on higher risk areas, such as management judgements. Our group wide procedures enabled us to obtain audit evidence over the AoOs that were not full, specific or specified procedure scope.

We did not make substantial changes to our 2023 assessment of the components where we performed audit procedures. Also, there were no significant changes to the number of IT applications we tested.

We determined that certain centralised audit procedures could be performed in the following audit areas: the impact of climate change and the energy transition; estimation of oil and gas reserves; impairment assessment of property plant and equipment (PP&E) and joint ventures and associates (JVAs); and accounting for complex transactions within Shell's Gas and Power trading and supply function and the valuation of physical and financial derivatives.

We identified 23 components as individually relevant to the Group due to significant risk or an area of higher assessed risk of material misstatement of the group financial statements being associated with the components.

For those individually relevant components, we identified the significant accounts where audit work was required to be performed at these components by applying professional judgement. This was done having considered the significant accounts on which centralised procedures will be performed, the reasons for identifying the financial reporting component as an individually relevant component and the size of the component's account balance relative to the group significant financial statement account balance.

We considered whether the remaining group significant account balances not yet subject to audit procedures, in aggregate, could give rise to a risk of material misstatement of the group financial statements. No additional components of the group were included in our audit scope to address these risks.

Having identified the components for which work will be performed, we determined the scope to assign to each component.

Our scoping to address the risk of material misstatement for each key audit matter is set out in the Key audit matters section of our report.

We kept our audit scope under review throughout the year to reflect changes in Shell's underlying business and risks; however, no significant changes were required.

The table below illustrates the scope of work performed by our audit teams:

Operating units	2024	2023	No. of countries	Basis of inclusion	Extent of procedures
Full scope	7	7	6	Size and significant risk	Complete financial information
Specific scope	49	34	15	Significant risk or higher risk estimates	Individual account balances
Specified procedures[1]	31	53	14	Other risk factors	Individual transactions or processes
Other procedures	893	818	103	Residual risk of error	Supplementary audit procedures[2]
Total	980	912			

1 These procedures were performed by components and at the group level, to address specified risks of the audit or for audit coverage purposes.

2 We performed supplementary audit procedures in relation to Shell's centralised group accounting and reporting processes. These included, but were not limited to, addressing the implications of significant and complex accounting matters across all operating units, procedures over revenue to cash process analytics, review of impairment or impairment reversal indicators by segments, procedures over the forecasts as they relate to deferred tax asset recoverability and review of pension scheme assumptions, procedures over unusual accounting transactions including trading mark-to-market valuations, acquisitions, divestments and redundancies, addressing the appropriate elimination of intercompany balances and the completeness of provisions for litigation and other claims, including those related to non-compliance with laws and regulations. We performed testing of both manual and consolidation journal entries throughout the year, homogenous processes, and controls at the Business Service Centres (BSCs) and testing of group wide IT systems. We performed a disaggregated analytical review on each financial statement line item and also tested Shell's analytical procedures performed at a group, segment and function level.

8. Our scope of the audit of Shell's financial statements continued

Group evaluation, review and oversight of component teams

The group engagement partner and Senior Statutory Auditor, Gary Donald, has overall responsibility for the direction, supervision and performance of the Shell audit engagement in compliance with professional standards and applicable legal and regulatory requirements. He is supported by segment and function partners and, who together with related staff, comprise the integrated group engagement team. This group engagement team established the overall group audit strategy, communicated with component auditors, performed work on the consolidation process, and evaluated the conclusions drawn from the audit evidence as the basis for forming EY's opinion on the group financial statements.

The group engagement team is responsible for directing, supervising, evaluating and reviewing the work of EY global network firms operating under their instruction (local EY teams) to assess whether:

- the local EY audit team had the appropriate level of experience;
- the work was performed and documented to a sufficiently high standard;
- the local EY audit team demonstrated that they had challenged management sufficiently and had executed their audit procedures with an appropriate level of scepticism; and
- there is sufficient appropriate audit evidence to support the conclusions reached.

Members of the group engagement team provide direct oversight, review, and coordination of our BSC audit teams. Our BSC teams performed centralised testing in the BSCs for certain accounts, including revenue, cash and payroll. In establishing our overall approach to the group audit, we determined the type of work that needed to be undertaken at each of the operating units or BSCs by the group engagement team or by auditors from other local EY teams.

For the operating units where the work was performed by local EY auditors, we determined the appropriate level of involvement of the group engagement team to enable us to conclude that sufficient appropriate audit evidence had been obtained, as a basis for our opinion on the Group as a whole.

The group engagement team provided detailed instructions to our component teams to drive the audit strategy and execution in a coordinated manner. Group audit partners physically visited Australia, Brazil, India, Philippines Poland, Singapore and the USA, covering operating units, functions and BSCs. Our visits covered all of the T&S component teams and Shell's trading locations. The Senior Statutory Auditor physically visited Australia, India, Poland, Singapore and the USA.

During our visits, we exercised direction, supervision, oversight and review of our overseas EY audit teams. We were satisfied that we have had adequate involvement in their work and that we exercised sufficient and appropriate direction to the component teams.

The group engagement team interacted regularly with the component teams where appropriate during various stages of the audit, reviewed relevant working papers, as well as holding formal closing meetings and were responsible for the scope and direction of the audit process. Where relevant, the section on key audit matters details the level of involvement we had with component auditors to enable us to determine that sufficient audit evidence had been obtained as a basis for our opinion on the Group as a whole.

This, together with the additional procedures performed at Group level, gave us appropriate evidence for our opinion on the Group financial statements.

9. Other information

The other information comprises the information included in the Annual Report including the Introduction, Strategic Report, Governance, Supplementary Information – oil and gas (unaudited), Sustainability Statements and Additional Information sections, other than the consolidated financial statements and parent company financial statements and our auditor's report thereon. The Directors are responsible for the other information contained within the Annual Report.

Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in this report, we do not express any form of assurance conclusion thereon.

Our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the course of the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether this gives rise to a material misstatement in the financial statements themselves. If, based on the work we have performed, we conclude that there is a material misstatement of the other information, we are required to report that fact.

We have nothing to report in this regard.

10. Opinions on Other matters prescribed by the Companies Act 2006

In our opinion, the part of the directors' remuneration report to be audited has been properly prepared in accordance with the Companies Act 2006.

In our opinion, based on the work undertaken in the course of the audit:

- the information given in the strategic report and the directors' report for the financial year for which the financial statements are prepared is consistent with the financial statements; and
- the strategic report and the directors' report have been prepared in accordance with applicable legal requirements.

11. Matters on which we are required to report by exception

In the light of the knowledge and understanding of the Group and the Parent Company and its environment obtained in the course of the audit, we have not identified material misstatements in the strategic report or the directors' report.

We have nothing to report in respect of the following matters in relation to which the Companies Act 2006 requires us to report to you if, in our opinion:

- adequate accounting records have not been kept by the parent company, or returns adequate for our audit have not been received from branches not visited by us; or
- the Parent Company financial statements and the part of the Directors' Remuneration Report to be audited are not in agreement with the accounting records and returns; or
- certain disclosures of directors' remuneration specified by law are not made; or
- we have not received all the information and explanations we require for our audit.

12. Corporate Governance Statement

We have reviewed the directors' statement in relation to going concern, longer-term viability and that part of the Corporate Governance Statement relating to the group and company's compliance with the provisions of the UK Corporate Governance Code specified for our review by the Listing Rules.

Based on the work undertaken as part of our audit, we have concluded that each of the following elements of the Corporate Governance Statement is materially consistent with the financial statements or our knowledge obtained during the audit:

- Directors' statement with regards to **the appropriateness of adopting the going concern basis of accounting** and any material uncertainties identified set out in the "Other regulatory and statutory information" section;
- Directors' explanation as to its **assessment of the company's prospects**, the period this assessment covers and why the period is appropriate set out in the "Other regulatory and statutory information" section;
- Director's statement on whether it has a reasonable expectation that the group will be able to continue in operation and meets its liabilities set out in the "Other regulatory and statutory information" section;
- Directors' statement on **fair, balanced and understandable** set out in the "Other regulatory and statutory information" section;
- Board's confirmation that it has carried out a **robust assessment of the emerging and principal risks** set out in the "Other regulatory and statutory information" section;
- The section of the annual report that describes the **review of effectiveness of risk management and internal control systems** set out in the "Other regulatory and statutory information" section; and;
- The section describing **the work of the audit and risk committee** set out in the "Other regulatory and statutory information" section.

13. Responsibilities of the Directors'

As explained more fully in the statement of Directors' responsibilities set out in the "Other regulatory and statutory information" section, the Directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the Directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Directors are responsible for assessing Shell and the Parent Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Directors either intend to liquidate Shell or the Parent Company or to cease operations, or have no realistic alternative but to do so.

14. Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISA (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

15. Explanation as to what extent our audit was considered capable of detecting irregularities, including fraud

Irregularities, including fraud, are instances of non-compliance with laws and regulations. We design procedures in line with our responsibilities, outlined above, to detect irregularities, including fraud.

The risk of not detecting a material misstatement due to fraud is higher than the risk of not detecting one resulting from error, as fraud may involve deliberate concealment by, for example, forgery or intentional misrepresentations, or through collusion.

The extent to which our procedures are capable of detecting irregularities, including fraud is detailed below. However, the primary responsibility for the prevention and detection of fraud rests with both those charged with governance of the entity and management.

Our approach was as follows:

- we obtained an understanding of the legal and regulatory frameworks that are applicable to Shell and determined that the most significant are those that relate to the reporting framework (UK adopted international accounting standards, IFRS as issued by the IASB, Companies Act 2006, the UK Corporate Governance Code, the US Securities Exchange Act of 1934 and the Listing Rules of the UK Listing Authority) and the relevant tax compliance regulations in the jurisdictions in which Shell operates. In addition, we concluded that there are certain significant laws and regulations that may have an effect on the determination of the amounts and disclosures in the financial statements and those laws and regulations relating to health and safety, employee matters, environmental, and bribery and corruption practices.

15. Explanation as to what extent our audit was considered capable of detecting irregularities, including fraud continued

- we understood how Shell is complying with those frameworks by making enquiries of management, internal audit, and those responsible for legal and compliance procedures. We corroborated our enquiries through our review of Board minutes, papers provided to the Audit and Risk Committee and correspondence received from regulatory bodies and noted that there was no contradictory evidence.
- we assessed the susceptibility of Shell's financial statements to material misstatement, including how fraud might occur, by embedding forensic specialists into our group engagement team. Our forensic specialists worked with the group engagement team to identify the fraud risks across various parts of the business. In addition, we utilised internal and external information to perform a fraud risk assessment for each of the countries of operation. We considered the risk of fraud through management override and, in response, we incorporated data analytics across manual journal entries into our audit approach. We also considered the possibility of fraudulent or corrupt payments made through third parties, gaining a detailed understanding of the Company's monitoring and compliance activities related to vendor screening and due diligence. Where deemed appropriate we conducted analytical testing on third party vendors in high-risk jurisdictions. We utilised a suite of digital tools in our assessment of fraud and management override including technology that seeks to verify the authenticity of key documents. We also conducted specific audit procedures in relation to the risk of bribery, corruption and sanctions compliance across various countries of operation determined on a risk-based approach.
- based on the results of our risk assessment we designed our audit procedures to identify non-compliance with such laws and regulations identified above. Our procedures involved journal entry testing, with a focus on journals meeting our defined risk criteria based on our understanding of the business; enquiries of legal counsel, group management, internal audit and all full and specific scope management; review of the volume and nature of complaints received by the whistleblowing hotline during the year; review of internal audit reports issued during the year; review of news releases published by external parties; and
- if any instances of non-compliance with laws and regulations were identified, these were communicated to the group engagement team and the relevant local EY teams who performed sufficient and appropriate audit procedures, supplemented by audit procedures performed at the group level.

A further description of our responsibilities for the audit of the financial statements is located on the Financial Reporting Council's website at frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

16. Other matters we are required to address

Following the recommendation of the Audit and Risk Committee, we were re-appointed by Shell plc's Annual General Meeting (AGM) on May 21, 2024, as auditors of Shell to hold office until the conclusion of the next AGM of the Company, and signed an engagement letter and addendum to the engagement signed on January 17, 2024 and July 30, 2024 respectively. Our total uninterrupted period of engagement is nine years covering periods from our appointment through to the period ending December 31, 2024.

Our audit opinion is consistent with our additional report to the Audit and Risk Committee explaining the results of our audit.

17. Use of our report

This report is made solely to the company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the company and the company's members as a body, for our audit work, for this report, or for the opinions we have formed.

/s/ Gary Donald (Senior Statutory Auditor)

Gary Donald
Senior Statutory Auditor
for and on behalf of Ernst & Young LLP, Statutory Auditor
London
March 25, 2025

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Consolidated Statement of Income
for the year ended December 31, 2024

$ million

	Notes	2024	2023	2022
Revenue	8	284,312	316,620	381,314
Share of profit of joint ventures and associates	14	2,993	3,725	3,972
Interest and other income	9	1,724	2,838	915
Total revenue and other income		**289,029**	**323,183**	**386,201**
Purchases		188,120	212,883	258,488
Production and manufacturing expenses	7	23,379	25,240	25,518
Selling, distribution and administrative expenses	7	12,439	13,433	12,883
Research and development	7	1,099	1,287	1,075
Exploration	7	2,411	1,750	1,712
Depreciation, depletion and amortisation	7	26,872	31,290	18,529
Interest expense	10	4,787	4,673	3,181
Total expenditure		**259,107**	**290,556**	**321,386**
Income before taxation		**29,922**	**32,627**	**64,815**
Taxation charge	23	13,401	12,991	21,941
Income for the period	7	**16,521**	**19,636**	**42,874**
Income attributable to non-controlling interest	7	427	277	565
Income attributable to Shell plc shareholders	7	**16,094**	**19,359**	**42,309**
Basic earnings per share ($)	31	2.55	2.88	5.76
Diluted earnings per share ($)	31	2.53	2.85	5.71

Consolidated Statement of Comprehensive Income
for the year ended December 31, 2024

$ million

	Notes	2024	2023	2022
Income for the period	7	16,521	19,636	42,874
Other comprehensive income/(loss) net of tax				
Items that may be reclassified to income in later periods:				
Currency translation differences	29	(3,248)	1,397	(2,986)
Debt instruments remeasurements	29	5	41	(78)
Cash flow hedging gains/(losses)	29	216	71	(232)
Net investment hedging (losses)/gains	29	–	(44)	180
Deferred cost of hedging	29	(73)	(148)	200
Share of other comprehensive (loss)/income of joint ventures and associates	14	(118)	18	274
Total		**(3,218)**	**1,335**	**(2,642)**
Items that are not reclassified to income in later periods:				
Retirement benefits remeasurements	29	1,407	(1,083)	5,466
Equity instruments remeasurements	29	28	(99)	(491)
Share of other comprehensive income/(loss) of joint ventures and associates	14	47	(201)	(253)
Total		**1,482**	**(1,383)**	**4,722**
Other comprehensive (loss)/income for the period		(1,736)	(48)	2,080
Comprehensive income for the period		**14,785**	**19,588**	**44,954**
Comprehensive income attributable to non-controlling interest		406	312	621
Comprehensive income attributable to Shell plc shareholders		**14,379**	**19,276**	**44,333**

Consolidated Balance Sheet
as at December 31, 2024

	Notes	Dec 31, 2024	$ million Dec 31, 2023
Assets			
Non-current assets			
Goodwill	11	16,032	16,660
Other intangible assets	11	9,480	10,253
Property, plant and equipment	12	185,219	194,835
Joint ventures and associates	14	23,445	24,457
Investments in securities	15	2,255	3,246
Deferred tax	23	6,857	6,454
Retirement benefits	24	10,003	9,151
Trade and other receivables	16	6,018	6,298
Derivative financial instruments	26	374	801
		259,683	**272,155**
Current assets			
Inventories	17	23,426	26,019
Trade and other receivables	16	45,860	53,273
Derivative financial instruments	26	9,673	15,098
Cash and cash equivalents	18	39,110	38,774
		118,069	**133,164**
Assets classified as held for sale	19	9,857	951
		127,926	**134,115**
Total assets		**387,609**	**406,270**
Liabilities			
Non-current liabilities			
Debt	21	65,448	71,610
Trade and other payables	20	3,290	3,103
Derivative financial instruments	26	2,185	2,301
Deferred tax	23	13,505	15,347
Retirement benefits	24	6,752	7,549
Decommissioning and other provisions	25	21,227	22,531
		112,407	**122,441**
Current liabilities			
Debt	21	11,630	9,931
Trade and other payables	20	60,693	68,237
Derivative financial instruments	26	7,391	9,529
Income taxes payable	23	4,648	3,422
Decommissioning and other provisions	25	4,469	4,041
		88,831	**95,160**
Liabilities directly associated with assets classified as held for sale	19	6,203	307
		95,034	**95,467**
Total liabilities		**207,441**	**217,908**
Equity			
Share capital	27	510	544
Shares held in trust		(803)	(997)
Other reserves	29	19,766	21,145
Retained earnings		158,834	165,915
Equity attributable to Shell plc shareholders		**178,307**	**186,607**
Non-controlling interest		1,861	1,755
Total equity		**180,168**	**188,362**
Total liabilities and equity		**387,609**	**406,270**

Signed on behalf of the Board

/s/ Sinead Gorman

Sinead Gorman
Chief Financial Officer
March 25, 2025

Consolidated Statement of Changes in Equity
for the year ended December 31, 2024

$ million

	Equity attributable to Shell plc shareholders						
	Share capital (see Note 27)	Shares held in trust	Other reserves (see Note 29)	Retained earnings	Total	Non-controlling interest	Total equity
At January 1, 2024	**544**	**(997)**	**21,145**	**165,915**	**186,607**	**1,755**	**188,362**
Comprehensive income for the period	–	–	(1,715)	16,094	14,379	406	14,785
Transfer from other comprehensive income	–	–	193	(193)	–	–	–
Dividends (see Note 30) [A]	–	–	–	(8,668)	(8,668)	(308)	(8,976)
Repurchases of shares [B]	(34)	–	34	(14,057)	(14,057)	–	(14,057)
Share-based compensation	–	194	109	(354)	(51)	–	(51)
Other changes	–	–	–	97	97	8	105
At December 31, 2024	**510**	**(803)**	**19,766**	**158,834**	**178,307**	**1,861**	**180,168**
At January 1, 2023	**584**	**(726)**	**21,132**	**169,482**	**190,472**	**2,125**	**192,597**
Comprehensive income for the period	–	–	(83)	19,359	19,276	312	19,588
Transfer from other comprehensive income	–	–	(112)	112	–	–	–
Dividends (see Note 30) [A]	–	–	–	(8,389)	(8,389)	(764)	(9,153)
Repurchases of shares	(40)	–	40	(14,571)	(14,571)	–	(14,571)
Share-based compensation	–	(271)	168	(85)	(188)	–	(188)
Other changes	–	–	–	7	7	82	89
December 31, 2023	**544**	**(997)**	**21,145**	**165,915**	**186,607**	**1,755**	**188,362**
At January 1, 2022	**641**	**(610)**	**18,909**	**153,026**	**171,966**	**3,360**	**175,326**
Comprehensive income for the period	–	–	2,024	42,309	44,333	621	44,954
Transfer from other comprehensive income	–	–	(34)	34	–	–	–
Dividends (see Note 30) [A]	–	–	–	(7,283)	(7,283)	(206)	(7,489)
Repurchases of shares	(57)	–	57	(18,547)	(18,547)	–	(18,547)
Share-based compensation	–	(116)	176	131	191	–	191
Other changes	–	–	–	(188)	(188)	(1,650)	(1,838)
At December 31, 2022	**584**	**(726)**	**21,132**	**169,482**	**190,472**	**2,125**	**192,597**

[A] The amount charged to retained earnings is based on prevailing exchange rates on the payment date.
[B] Includes shares committed to repurchase under irrevocable contracts and repurchases subject to settlement at the end of the year. (See Note 27).

Consolidated Statement of Cash Flows for the year ended December 31, 2024

$ million

	Notes	2024	2023	2022
Income before taxation for the period		29,922	32,627	64,815
Adjustment for:				
Interest expense (net)		2,415	2,360	2,135
Depreciation, depletion and amortisation		26,872	31,290	18,529
Exploration well write-offs	12	1,622	868	881
Net losses/(gains) on sale and revaluation of non-current assets and businesses		288	(246)	(642)
Share of profit of joint ventures and associates		(2,993)	(3,725)	(3,972)
Dividends received from joint ventures and associates		3,632	3,674	4,398
Decrease/(increase) in inventories		1,273	6,325	(8,360)
Decrease/(increase) in current receivables		6,578	12,401	(8,989)
(Decrease)/increase in current payables [A]		(5,789)	(11,581)	12,329
Derivative financial instruments		2,484	(5,723)	(2,619)
Retirement benefits		(326)	(37)	417
Decommissioning and other provisions [A]		(828)	220	(379)
Other		1,539	(550)	2,991
Tax paid		(12,002)	(13,712)	(13,120)
Cash flow from operating activities		**54,687**	**54,191**	**68,414**
Cash capital expenditure		(21,085)	(24,392)	(24,833)
Capital expenditure	7	(19,601)	(22,993)	(22,600)
Investments in joint ventures and associates	7	(1,404)	(1,202)	(1,973)
Investments in equity securities	7	(80)	(197)	(260)
Proceeds from sale of property, plant and equipment and businesses		1,621	2,565	1,431
Proceeds from joint ventures and associates from sale, capital reduction and repayment of long-term loans		590	474	511
Proceeds from sale of equity securities		582	51	117
Interest received		2,399	2,124	906
Other investing cash inflows		4,576	4,269	2,060
Other investing cash outflows		(3,838)	(2,825)	(2,640)
Cash flow from investing activities		**(15,155)**	**(17,734)**	**(22,448)**
Net (decrease)/increase in debt with maturity period within three months		(310)	(211)	318
Other debt:				
New borrowings		363	1,029	269
Repayments		(9,672)	(10,650)	(8,459)
Interest paid		(4,557)	(4,441)	(3,677)
Derivative financial instruments		(594)	723	(1,799)
Change in non-controlling interest		(15)	(22)	(1,965)
Cash dividends paid to:				
Shell plc shareholders		(8,668)	(8,393)	(7,405)
Non-controlling interest		(295)	(764)	(206)
Repurchases of shares		(13,898)	(14,617)	(18,437)
Shares held in trust: net purchases and dividends received		(789)	(889)	(593)
Cash flow from financing activities		**(38,435)**	**(38,235)**	**(41,954)**
Effects of exchange rate changes on cash and cash equivalents		(761)	306	(736)
(Decrease)/increase in cash and cash equivalents		336	(1,472)	3,276
Cash and cash equivalents at beginning of year		38,774	40,246	36,970
Cash and cash equivalents at end of year	18	**39,110**	**38,774**	**40,246**

[A] To further enhance consistency between working capital in the Balance Sheet and the Statement of Cash Flows, from January 1, 2024, onwards movements in current other provisions are recognised in 'Decommissioning and other provisions' instead of '(Decrease)/increase in current payables'. Comparatives have been reclassified accordingly for 2023 by $693 million and for 2022 by $414 million to conform with current year presentation.

Notes to the Consolidated Financial Statements

1. Basis of preparation

The Consolidated Financial Statements of Shell plc (the "Company") and its subsidiaries (collectively referred to as "Shell") have been prepared in accordance with UK-adopted international accounting standards and with the requirements of the UK Companies Act 2006 as applicable to companies reporting under those standards. As applied to Shell, there are no material differences from the International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB); therefore, the Consolidated Financial Statements have been prepared in accordance with the IFRS as issued by the IASB.

As described in the accounting policies in Note 2, the Consolidated Financial Statements have been prepared under the historical cost convention except for certain items measured at fair value. Those accounting policies have been applied consistently in all periods.

The Consolidated Financial Statements were approved and authorised for issue by the Board of Directors on March 25, 2025.

Going concern

These Consolidated Financial Statements have been prepared on the going concern basis of accounting. In assessing the appropriateness of the going concern assumption over the period to June 30, 2026 (the "going concern period"), management has stress-tested Shell's most recent financial projections to incorporate a range of potential future outcomes by considering Shell's principal risks, potential downside pressures on commodity prices and long-term demand, and cash preservation measures, including reduced future cash capital expenditure and shareholder distributions. This assessment confirmed that Shell has adequate cash, other liquid resources and undrawn credit facilities to enable it to meet its obligations as they fall due in order to continue its operations during the going concern period. Therefore, the Directors consider it appropriate to continue to adopt the going concern basis of accounting in preparing the audited Consolidated Financial Statements.

2. Material accounting policies, judgements and estimates

This Note describes Shell's material accounting policies. It allows for an understanding as to how material transactions, other events and conditions are reported. It also describes: (a) judgements, apart from those involving estimations, that management makes in applying the policies that have the most significant effect on the amounts recognised in the Consolidated Financial Statements; and (b) estimations, including assumptions about the future, that management makes in applying the policies. The sources of estimation uncertainty that have a significant risk of a material adjustment to the carrying amounts of assets and liabilities within the next financial year are specifically identified as a significant estimate.

The accounting policies applied are consistent with those of the previous financial year.

Nature of the Consolidated Financial Statements

The Consolidated Financial Statements are presented in US dollars (dollars) and comprise the financial statements of the Company and its subsidiaries, being those entities over which the Company has control, either directly or indirectly, through exposure or rights to their variable returns and the ability to affect those returns through its power over the entities. Information about subsidiaries at December 31, 2024, can be found in "Appendix 1: Significant subsidiaries and other related undertakings (audited)".

2. Material accounting policies, judgements and estimates continued

Subsidiaries are consolidated from the date on which control is obtained until the date that such control ceases, using consistent accounting policies. All inter-company balances and transactions, including unrealised profits arising from such transactions, are eliminated. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Non-controlling interest represents the proportion of income, other comprehensive income and net assets in subsidiaries that is not attributable to the Company's shareholders.

Currency translation

Foreign currency transactions are translated using the exchange rate at the dates of the transactions or valuation where items are remeasured. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at quarter-end exchange rates of monetary assets and liabilities denominated in foreign currencies (including those in respect of inter-company balances, unless related to loans of a long-term investment nature) are recognised in income unless when recognised in other comprehensive income in respect of cash flow or net investment hedges. Foreign exchange gains and losses in income are presented within interest and other income or within purchases where not related to financing. Share capital issued in currencies other than the dollar is translated at the exchange rate at the date of issue.

On consolidation, assets and liabilities of non-dollar entities are translated to dollars at year-end rates of exchange, while their statements of income, other comprehensive income and cash flows are translated at monthly average rates. Prior to January 1, 2023, these currency translations were performed at quarterly average rates. This change has no significant impact on Shell's financial reporting. The resulting translation differences are recognised as currency translation differences within other comprehensive income. Upon sale of all or part of an interest in, or upon liquidation of, an entity, the appropriate portion of cumulative currency translation differences related to that entity is generally recognised in income.

Revenue recognition

Revenue from sales of oil, natural gas, chemicals and other products is recognised at the transaction price to which Shell expects to be entitled, after deducting sales taxes, excise duties and similar levies. For contracts that contain separate performance obligations, the transaction price is allocated to those separate performance obligations by reference to their relative stand-alone selling prices.

Revenue is recognised when control of the products has been transferred to the customer. For sales by Integrated Gas and Upstream operations, this generally occurs when the product is physically transferred into a vessel, pipe or other delivery mechanism; for sales by refining operations, it is either when the product is placed onboard a vessel or offloaded from the vessel, depending on the contractually agreed terms; and for sales of oil products and chemicals, it is either at the point of delivery or the point of receipt, depending on contractual conditions.

Revenue resulting from hydrocarbon production from properties in which Shell has an interest with partners in joint arrangements is recognised on the basis of Shell's volumes lifted and sold. Revenue resulting from the production of oil and natural gas under production-sharing contracts (PSCs) is recognised for those amounts relating to Shell's cost recoveries and Shell's share of the remaining production. Gains and losses on derivative contracts and the revenue and costs associated with other contracts that are classified as held primarily for the purpose of being traded are reported on a net basis in the Consolidated Statement of Income. Purchases and sales of hydrocarbons under exchange contracts that are necessary to obtain or reposition feedstocks for the refinery operations are presented net in the Consolidated Statement of Income.

Revenue resulting from arrangements that are not considered contracts with customers is presented as revenue from other sources.

Research and development

Development costs that are expected to generate probable future economic benefits are capitalised as intangible assets. All other research and development expenditure is recognised in the Consolidated Statement of Income as incurred.

Exploration costs

Hydrocarbon exploration costs are accounted for under the successful efforts method: exploration costs are recognised in the Consolidated Statement of Income when incurred, except that exploratory drilling costs, including in respect of the recapitalisation of depreciation, are included in property, plant and equipment pending determination of proved reserves. Exploration costs capitalised in respect of exploration wells that are more than 12 months old are written off unless: (a) proved reserves are booked; or (b) (i) they have found commercially producible quantities of reserves; and (ii) they are subject to further exploration or appraisal activity in that either drilling of additional exploratory wells is under way or firmly planned for the near future or other activities are being undertaken to sufficiently progress the assessing of reserves and the economic and operating viability of the project.

Property, plant and equipment and intangible assets other than goodwill

Recognition

Property, plant and equipment comprise assets owned by Shell, assets held by Shell under lease contracts, and assets operated by Shell as contractor in PSCs. They include rights and concessions in respect of properties with proved reserves ("proved properties") and with no proved reserves ("unproved properties"). Property, plant and equipment, including expenditure on major inspections, and intangible assets are initially recognised in the Consolidated Balance Sheet at cost where it is probable that they will generate future economic benefits. This includes capitalisation of decommissioning and restoration costs associated with provisions for asset retirement (see "provisions"), certain development costs (see "research and development") and the effects of associated cash flow hedges (see "financial instruments") as applicable. Interest is capitalised as an increase in property, plant and equipment on major capital projects during construction. The accounting for exploration costs is described separately (see "exploration costs"). Intangible assets other than goodwill include acquired liquefied natural gas (LNG) off-take and sales contracts, environmental certificates, power purchase agreements, software costs, retail customer relationships and trademarks.

Property, plant and equipment and intangible assets other than goodwill are subsequently carried at cost less accumulated depreciation, depletion and amortisation (including any impairment). Gains and losses on sale are determined by comparing the proceeds with the carrying amounts of assets sold and are recognised in the Consolidated Statement of Income, within interest and other income.

2. Material accounting policies, judgements and estimates continued

An asset is classified as held for sale if its carrying amount will be recovered principally through sale rather than through continuing use, which is when the sale is highly probable, and it is available for immediate sale in its present condition subject only to terms that are usual and customary for sales of such assets. Assets classified as held for sale are measured at the lower of the carrying amount upon classification and the fair value less costs to sell. Assets classified as held for sale and the associated liabilities are presented separately from other assets and liabilities in the Consolidated Balance Sheet. Once assets are classified as held for sale, property, plant and equipment and intangible assets other than goodwill are no longer subject to depreciation or amortisation.

Depreciation, depletion and amortisation

Property, plant and equipment related to hydrocarbon production activities are in principle depreciated on a unit-of-production basis over the proved developed reserves of the field concerned, other than assets whose useful lives differ from the lifetime of the field which are depreciated applying the straight-line method. For certain Integrated Gas and Upstream assets, the use of proved developed reserves, which are determined using the Securities and Exchange Commission (SEC) mandated yearly average oil and gas prices, could result in depreciation charges for these assets which do not reflect the pattern in which their future economic benefits are expected to be consumed as, for example, it may result in assets with long-term expected lives having accelerated or being fully depreciated within one year. Therefore, in these instances, other approaches are applied to determine a reserves base for the purpose of calculating depreciation, such as using management's expectations of future oil and gas prices rather than yearly average prices and using total proved reserves to provide a phasing of periodic depreciation charges that more appropriately reflects the expected utilisation of the assets concerned. (See Note 12).

Rights and concessions in respect of proved properties are depleted on the unit-of-production basis over the total proved reserves of the relevant area. Where individually insignificant, unproved properties may be grouped and depreciated based on factors such as the average concession term and past experience of recognising proved reserves.

Property, plant and equipment held under lease contracts, capitalised LNG off-take and sales contracts and power purchase agreements are depreciated or amortised over the term of the respective contract. Other property, plant and equipment and intangible assets other than goodwill are depreciated or amortised on a straight-line basis over their estimated useful lives. They include energy and chemicals parks (for which the useful life is generally 20 years), retail service stations (for which the useful life is generally 15 years) and major inspection costs, which are depreciated over the estimated period before the next planned major inspection (three to five years). Estimates of the useful lives and residual values of property, plant and equipment and intangible assets other than goodwill are reviewed annually and adjusted if appropriate.

On classification of an asset as held for sale, depreciation ceases.

Impairment

Intangible assets other than goodwill and assets other than unproved properties (see "Exploration costs") are tested for impairment whenever events or changes in circumstances indicate that the carrying amounts for those assets may not be recoverable. If any such indication of impairment exists, the carrying amounts of those assets are written down to their recoverable amount, which is the higher of fair value less costs of disposal (see "Fair value measurements") and value in use.

Value in use is determined as the amount of estimated risk-adjusted discounted future cash flows. For this purpose, assets are grouped into cash-generating units based on separately identifiable and largely independent cash inflows. Estimates of future cash flows used in the evaluation of impairment of assets are made using management's forecasts of commodity prices, market supply and demand, potential costs associated with operational greenhouse gas (GHG) emissions, mainly related to CO_2, and forecast product, refining and chemical margins. In addition, management takes into consideration the expected useful lives of the manufacturing facilities, exploration and production assets, and expected production volumes. The latter takes into account assessments of field and reservoir performance and includes expectations about both proved reserves and volumes that are expected to constitute proved reserves in the future (unproved volumes), which are risk-weighted utilising geological, production, recovery and economic projections. Cash flow projections are based on management's most recent Operating Plan that represents management's best estimate and are risked as appropriate. The discount rate is based on a nominal post-tax weighted average cost of capital (WACC). Using a post-tax discount rate to calculate value in use does not result in a materially different outcome than using a pre-tax discount rate. (See Note 13).

Impairments are reversed as applicable to the extent that the events or circumstances that triggered the original impairment have changed.

Impairment losses and reversals are reported within depreciation, depletion and amortisation.

Upon classification of an asset as held for sale, the carrying amount is impaired if this exceeds the fair value less costs to sell.

2. Material accounting policies, judgements and estimates continued

Judgements and estimates

Proved oil and gas reserves

Unit-of-production depreciation, depletion and amortisation charges are principally measured based on management's estimates of proved developed oil and gas reserves. Exploration drilling costs are capitalised pending the results of further exploration or appraisal activity (successful efforts method), which may take place for several years before the final investment decision on a development project is taken and before any related proved reserves can be booked.

Proved reserves are estimated by internal qualified professionals. The proved reserves are estimated with reasonable certainty by analysis of available geological and engineering data at the time of the estimation, and only include volumes for which access to market is assured with reasonable expectation. Yearly average oil and gas prices are used for the estimation of proved reserves unless prices are defined by contractual arrangements, excluding escalations based upon future conditions. Proved reserves are subject to regular revision, both upward or downward, based on new information from the drilling of additional wells, observation of long-term reservoir performance under producing conditions, updates of development plans and changes in economic factors, including product prices, contract terms, legislation or development plans.

Changes to estimates of proved developed reserves affect prospectively the amounts of depreciation, depletion and amortisation charged and, consequently, the carrying amounts of exploration and production assets. Generally, in the normal course of business the diversity of the asset portfolio will limit the net effect of such revisions. The outcome of, or assessment of plans for, exploration or appraisal activity may result in the related capitalised exploration drilling costs being recognised in the Consolidated Statement of Income in that period.

Judgement is involved in determining when to use an alternative reserves base in order to appropriately reflect the expected utilisation of the assets concerned (see "Depreciation, depletion and amortisation").

Information about the carrying amounts of exploration and production assets and the amounts charged to the Consolidated Statement of Income, including depreciation, depletion and amortisation and the quantitative impact of the use of an alternative reserves base, is presented in Note 12.

Impairment

For the purposes of determining whether impairment of assets has occurred, and the extent of any impairment loss or its reversal, the key assumptions management uses in estimating risk-adjusted future cash flows for value in use measures are future oil and gas prices and product margins, including refining and chemical margins. In addition, management uses other assumptions, such as potential costs associated with operational GHG emissions, market supply and demand, expected production volumes and forecast expenditure. These assumptions and the judgements of management that are based on them are subject to change as new information becomes available. Changes in assumptions could affect the carrying amounts of assets, and any impairment losses and reversals will affect income. Changes in economic conditions can affect the rate used to discount future cash flow estimates or the risk adjustment in the future cash flows. Judgement is applied to conclude whether changes in assumptions or economic conditions are an indicator that an asset may be impaired or that an impairment loss recognised in prior periods may no longer exist, or may have decreased.

Expected production volumes, which comprise proved reserves and unproved volumes, are used for impairment testing because management believes this to be the most appropriate indicator of expected future cash flows. Reserves estimates are inherently imprecise. Furthermore, projections about unproved volumes are based on information that is necessarily less robust than that available for mature reservoirs.

Estimation is involved with respect to the expected life of energy and chemicals parks, including management's view on the future development of refining margins.

The determination of cash-generating units requires judgement. Changes in this determination could impact the calculation of value in use and therefore the conclusion on the recoverability of assets' carrying amounts when performing an impairment test.

Judgement, which is subject to change as new information becomes available, can be required in determining when an asset is classified as held for sale. A change in that judgement could result in impairment charges affecting income, depending on whether classification requires a write-down of the asset to its fair value less costs to sell.

Significant estimates

In assessing the value in use, the estimated risk-adjusted future post-tax cash flows are discounted to their present value using a post-tax discount rate that reflects Shell's post-tax WACC. (See Note 13). The level of risking reflected in the cash flow assumptions is a consideration in management's assessment of the discount rate to be applied in order to avoid duplication of systemic and asset-specific risking in calculating value in use, and to ensure the discount rate applied is commensurate with risks included in forecast cash flows.

Assumptions about future commodity prices and refining and chemical margins used in the impairment testing in, respectively, Integrated Gas and Upstream, and Chemicals and Products (see Note 13) are regularly assessed by management, noting that management does not necessarily consider short-term increases or decreases in prices as being indicative of long-term levels.

The price methodology applied is based on Shell management's understanding and interpretation of demand and supply fundamentals in the near term, taking into account various other factors such as industry rationalisation and energy transition in the long term.

The discount rate, future commodity prices and refining margins used in impairment testing provide a source of estimation uncertainty as referred to in paragraph 125 of IAS 1 Presentation of Financial Statements (IAS 1.125).

Information about the carrying amounts of assets and impairments and their sensitivity to changes in significant estimates is presented in Note 13.

2. Material accounting policies, judgements and estimates continued

Goodwill

Goodwill is initially measured as the excess of the aggregate of the consideration transferred and the amount recognised for any non-controlling interest over the fair value of the identifiable assets acquired and liabilities assumed in a business combination at the acquisition date. The amount recognised for any non-controlling interest is measured as a percentage of the identified net assets of the acquiree based on the present ownership's proportionate share. At the acquisition date, acquired goodwill is allocated to each cash-generating unit (CGU), or groups of CGUs, expected to benefit from the combination's synergies. The CGU to which goodwill is allocated represents the lowest level at which the goodwill will be monitored and managed.

Goodwill is not amortised and is subsequently measured at the initial amount recognised less any accumulated impairment losses. (See Note 11).

Impairment

The carrying amount of goodwill is tested for impairment at least annually. Impairment is determined for goodwill by assessing the recoverable amount of each CGU to which the goodwill relates. An impairment loss is recognised when the CGU's recoverable amount is lower than its carrying amount. (See Note 13).

Previously recognised impairment losses of goodwill are not reversed subsequently.

Leases

A contract, or part of a contract, that conveys the right to control the use of an identified asset for a period of time in exchange for payments to be made to the owners (lessors) is accounted for as a lease. Contracts are assessed to determine whether a contract is, or contains, a lease at the inception of a contract or when the terms and conditions of a contract are significantly changed. The lease term is the non-cancellable period of a lease, together with contractual options to extend or to terminate the lease early, where it is reasonably certain that an extension option will be exercised or a termination option will not be exercised.

At the commencement of a lease contract, a lease liability and a corresponding right-of-use asset are recognised, unless the lease term is 12 months or less. The commencement date of a lease is the date on which the underlying asset is made available for use. The lease liability is measured at an amount equal to the present value of the lease payments during the lease term that are not paid at that date. The lease liability includes contingent rentals and variable lease payments that depend on an index, rate, or where they are fixed payments in substance. The lease liability is remeasured when the contractual cash flows of variable lease payments change due to a change in an index or rate when the lease term changes following a reassessment.

Lease payments are discounted using the interest rate implicit in the lease. If that rate is not readily available, the incremental borrowing rate is applied. The incremental borrowing rate reflects the rate of interest that the lessee would have to pay to borrow over a similar term, with a similar security, the funds necessary to obtain an asset of a similar nature and value to the right-of-use asset in a similar economic environment.

In general, a corresponding right-of-use asset is recognised for an amount equal to each lease liability, adjusted by the amount of any pre-paid lease payment relating to the specific lease contract. The depreciation on right-of-use assets is recognised in the Consolidated Statement of Income unless capitalised as exploration drilling cost (see "exploration cost") or capitalised when the right-of-use asset is used to construct another asset.

Where Shell is the lessor in a lease arrangement at inception, the lease arrangement will be classified as a finance lease or an operating lease. Classification is based on the extent to which the risks and rewards incidental to ownership of the underlying asset lie with the lessor or the lessee.

Where Shell, usually in its capacity as operator, has entered into a lease contract on behalf of a joint arrangement, a lease liability is recognised to the extent that Shell has primary responsibility for the lease liability. A finance sublease is subsequently recognised if the related right-of-use asset is subleased to the joint arrangement. This is usually the case when the joint arrangement has the right to direct the use and obtains substantially all of the economic benefits from using the asset.

Impairment of the right-of-use asset

Right-of-use assets are subject to existing impairment requirements as set out in "Property, plant and equipment", above, and as presented in Note 13.

Judgements and estimates

A lease term includes optional lease periods where it is reasonably certain Shell will exercise the option to extend or not exercise the option to terminate the lease. Determination of the lease term is subject to judgement and has an impact on the measurement of the lease liability and related right-of-use asset. When assessing the lease term at the commencement date, Shell takes into consideration the broader economics of the contract. Reassessment of the lease term is performed upon changes in circumstances that may affect the probability that an option to extend or to terminate the lease will be exercised.

Where the rate implicit in the lease is not readily available, an incremental borrowing rate is applied. This incremental borrowing rate reflects the rate of interest that the lessee would have to pay to borrow over a similar term, with a similar security, the funds necessary to obtain an asset of a similar nature and value to the right-of-use asset in a similar economic environment. Determination of the incremental borrowing rate requires estimation.

2. Material accounting policies, judgements and estimates continued

Joint arrangements and associates

Arrangements under which Shell has contractually agreed to share control (see "Nature of the Consolidated Financial Statements" for the definition of control) with another party or parties are joint ventures where the parties have rights to the net assets of the arrangement, or joint operations where the parties have rights to the assets and obligations for the liabilities relating to the arrangement. Investments in entities over which Shell has significant influence but neither control nor joint control are classified as associates. Information about incorporated joint arrangements and associates at December 31, 2024, can be found in "Appendix 1: Significant subsidiaries and other related undertakings (audited)".

Investments in joint ventures and associates are accounted for using the equity method, under which the investment is initially recognised at cost and subsequently adjusted for the Shell share of post-acquisition income less dividends received and the Shell share of other comprehensive income and other movements in equity, together with any loans of a long-term investment nature. Where necessary, adjustments are made to the financial statements of joint ventures and associates to bring the accounting policies used into line with those of Shell. In an exchange of assets and liabilities for an interest in a joint venture, the non-Shell share of any excess of the fair value of the assets and liabilities transferred over the pre-exchange carrying amounts is recognised in the Consolidated Statement of Income. Unrealised gains on other transactions between Shell and its joint ventures and associates are eliminated to the extent of Shell's interest in them; unrealised losses are treated similarly but may also result in an assessment of whether the asset transferred is impaired.

Shell recognises its assets and liabilities relating to its interests in joint operations, including its share of assets held jointly and liabilities incurred jointly with other partners.

Inventories

Inventories are stated at cost or net realisable value, whichever is lower. Cost comprises direct purchase costs (including transportation), and associated costs incurred in bringing inventories to their present condition and location, and is determined using the first-in, first-out (FIFO) method for oil, gas and chemicals and by the weighted average cost method for materials.

Taxation

The charge for current tax is calculated based on the income reported by the Company and its subsidiaries, as adjusted for items that are non-taxable or disallowed and using rates that have been enacted or substantively enacted by the balance sheet date.

Deferred tax is determined, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the Consolidated Balance Sheet and on unused tax losses and credits carried forward.

Deferred tax assets and liabilities are calculated using the enacted or substantively enacted rates that are expected to apply when an asset is realised or a liability is settled. They are not recognised where they arise on the initial recognition of goodwill or of an asset or liability in a transaction (other than in a business combination) that, at the time of the transaction, affects neither accounting nor taxable profit, or in respect of taxable temporary differences associated with subsidiaries, joint ventures and associates where the reversal of the respective temporary difference can be controlled by Shell and it is probable that it will not reverse in the foreseeable future.

Deferred tax assets are recognised to the extent that it is probable that future taxable profits will be available against which the deductible temporary differences, unused tax losses and credits carried forward can be utilised.

Income tax receivables and payables as well as deferred tax assets and liabilities include provisions for uncertain income tax positions/treatments.

Income taxes are recognised in income except when they relate to items recognised in other comprehensive income, in which case the tax is recognised in other comprehensive income. Income tax assets and liabilities are presented separately in the Consolidated Balance Sheet except where there is a right of offset within fiscal jurisdictions and an intention to settle such balances on a net basis.

Judgements and estimates

Tax liabilities are recognised when it is probable that there will be a future outflow of funds to a taxing authority. In such cases, a provision is made for the amount expected to be settled, provided it can be reasonably estimated. Provisions for uncertain income tax positions/treatments are measured at the most likely amount or the expected value method, depending on which method better predicts the resolution of the uncertainty. Generally, uncertain tax treatments are assessed on an individual basis unless they are expected to be settled collectively. It is assumed that taxing authorities will examine positions taken if they have the right to do so and have full knowledge of the relevant information. Changes in estimates regarding the likelihood of a future outflow of funds or the expected amount to be settled are recognised in the Consolidated Statement of Income in the period in which the change occurs. This process requires the application of judgement, which can change over time depending on new facts and circumstances. Judgements primarily relate to transfer pricing, including inter-company financing, interpretation of PSCs, deductible expenditure for tax purposes, and taxation arising from disposal.

2. Material accounting policies, judgements and estimates continued

Judgements and estimates continued

Deferred tax assets are recognised only to the extent it is considered probable that those assets will be recoverable. This involves an assessment of when those assets are likely to reverse, and a judgement as to whether or not there will be sufficient taxable profits available to offset the assets when they do reverse. This requires assumptions regarding future profitability and is therefore inherently uncertain. To the extent assumptions regarding future profitability change, there can be an increase or decrease in the amounts recognised in respect of deferred tax assets as well as in the amounts recognised in income in the period in which the change occurs.

Taxation information, including charges and deferred tax assets and liabilities, is presented in Note 23. Income taxes include certain charges at higher rates levied on income from certain Integrated Gas and Upstream activities.

Retirement benefits

Benefits in the form of retirement pensions and health care and life insurance are provided to certain employees and retirees under defined benefit and defined contribution plans.

Obligations under defined benefit plans are calculated annually by independent actuaries using the projected unit credit method, which takes into account employees' years of service and, for pensions, average or final pensionable remuneration, and are discounted to their present value using interest rates of high-quality corporate bonds denominated in the currency in which the benefits will be paid and of a duration consistent with the plan obligations. Where plans are funded, payments are made to independently managed trusts; assets held by those trusts are measured at fair value. Defined benefit plan surpluses are recognised as assets to the extent that they are considered recoverable, which is generally by way of a refund or lower future employer contributions.

The amounts recognised in income in respect of defined benefit plans mainly comprise service cost and net interest. Service cost comprises principally the increase in the present value of the obligation for benefits resulting from employee service during the period (current service cost) and also amounts relating to past service and settlements or amendments of plans. Plan amendments are changes to benefits and are generally recognised when all legal and regulatory approvals have been received and the effects have been communicated to members. Net interest is calculated using the net defined benefit liability or asset matched against the discount rate yield curve at the beginning of each year for each plan. Remeasurements of the net defined benefit liability or asset resulting from actuarial gains and losses, and the return on plan assets excluding the amount recognised in income, are recognised in other comprehensive income.

For defined contribution plans, pension expense represents the amount of employer contributions payable for the period.

Significant judgements and estimates

Defined benefit obligations and plan assets, and the resulting liabilities and assets that are recognised, require significant estimation as these are subject to volatility as (actuarial) assumptions regarding future outcomes and market values change. Significant judgement is required in determining the actuarial assumptions, which vary for the different plans to reflect local conditions but are determined under a common process in consultation with independent actuaries. The assumptions applied in respect of each plan are reviewed annually and adjusted where necessary to reflect changes in experience and actuarial recommendations.

Actuarial assumptions applied in determining defined benefit obligations provide a source of estimation uncertainty as referred to in IAS 1.125.

Information about the amounts reported in respect of defined benefit pension plans, assumptions applicable to the principal plans and their sensitivity to changes in significant estimates is presented in Note 24.

Provisions

Provisions are recognised at the balance sheet date at management's best estimate of the expenditure required to settle the present obligation. Non-current amounts are discounted at a rate intended to reflect the time value of money. The carrying amounts of provisions and the discount rate applied are regularly reviewed and adjusted for new facts or changes in law, technology or financial markets.

2. Material accounting policies, judgements and estimates continued

Provisions for decommissioning and restoration costs, which arise principally in connection with hydrocarbon production facilities, oil products manufacturing facilities and pipelines, are measured on the basis of current requirements, technology and price levels; the present value is calculated using amounts discounted over the useful economic life of the assets. The liability is recognised (together with a corresponding amount as part of the related property, plant and equipment) once a legal or constructive obligation arises to dismantle an item of property, plant and equipment and to restore the site on which it is located and when a reasonable estimate can be made. The effects of changes resulting from revisions to the timing or the amount of the original estimate of the provision are reflected on a prospective basis, generally by adjustment to the carrying amount of the related property, plant and equipment. However, where there is no related asset, or the change reduces the carrying amount to nil, the effect, or the amount in excess of the reduction in the related asset to nil, is recognised in income.

Shell reviews its energy and chemicals parks on a regular basis to determine whether any changes in assumptions, including expected life, trigger the need to recognise a provision for decommissioning and restoration.

Redundancy provisions are recognised when a detailed formal plan identifies the business or part of the business concerned, the location and number of employees affected, a detailed estimate of the associated costs and an appropriate timeline, and the employees affected have been notified of the plan's main features.

An onerous contract provision is recognised when the unavoidable cost of meeting the obligations under the contract exceeds the economic benefits expected to be received under it. The unavoidable cost under a contract is the lower of the cost of fulfilling the contract and any compensation or penalties arising from failure to fulfil it. The cost of fulfilling a contract comprises the costs that relate directly to the contract. Before an onerous provision is recognised Shell first recognises any impairment loss that has occurred on assets dedicated to that contract.

Other provisions are recognised in the Consolidated Statement of Income in the period in which an obligation arises and the amount can be reasonably estimated. Provisions are measured based on current legal requirements and existing technology where applicable. Recognition of any joint and several liability is based on management's best estimate of the final pro rata share of the liability. Provisions are determined independently of expected insurance recoveries. Recoveries are recognised when virtually certain of realisation.

Estimates

Estimates of provisions for future decommissioning and restoration costs are recognised and based on current legal and constructive requirements, technology and price levels. Because actual cash outflows can differ from estimates due to changes in laws, regulations, public expectations, technology, prices and conditions, and can take place many years in the future, the carrying amounts of provisions are regularly reviewed and adjusted to take account of such changes.

Significant estimate

The discount rate applied to reflect the time value of money in the carrying amount of provisions requires estimation. The discount rate used in the calculation of provisions is the pre-tax rate that reflects current market assessments of the time value of money. Generally, the market assessments of the time value of money can be reflected in the risk-free rate and given the long-term investment nature of oil and gas business, Shell considers it appropriate to use the 20-year US Treasury bond yield return as the risk-free rate. The discount rate applied is reviewed regularly and adjusted following changes in market rates.

The discount rate applied to determine the carrying amount of provisions provides a source of estimation uncertainty as referred to in IAS 1.125.

Information about decommissioning and restoration provisions and their sensitivity to changes in estimates is presented in Note 25.

Financial instruments

Financial assets and liabilities are presented separately in the Consolidated Balance Sheet except where there is a legally enforceable right of offset and Shell has the intention to settle on a net basis or realise the asset and settle the liability simultaneously.

Financial assets

Financial assets are classified at initial recognition and subsequently measured at amortised cost, fair value through other comprehensive income or fair value through profit or loss. The classification of financial assets is determined by the contractual cash flows and where applicable the business model for managing the financial assets.

Debt instruments are measured at amortised cost, if the objective of the business model is to hold the financial asset in order to collect contractual cash flows and the contractual terms give rise to cash flows that are solely payments of principal and interest. It is initially recognised at fair value plus or minus transaction costs that are directly attributable to the acquisition or issue of the financial asset. Subsequently, the financial asset is measured using the effective interest method less any impairment. Gains and losses are recognised in profit or loss when the asset is derecognised, modified or impaired.

All equity instruments and other debt instruments are recognised at fair value. For equity instruments, on initial recognition, an irrevocable election (on an instrument-by-instrument basis) can be made to designate these as at fair value through other comprehensive income instead of fair value through profit or loss. Dividends received on equity instruments are recognised as other income in profit or loss when the right of payment has been established, except when Shell benefits from such proceeds as a recovery of part of the cost of the financial asset, in which case such gains are recorded in other comprehensive income.

2. Material accounting policies, judgements and estimates continued

Investments in securities

Investments in securities ("securities") comprise equity and debt securities. Equity securities are carried at fair value. Generally, unrealised holding gains and losses are recognised in other comprehensive income. On sale, net gains and losses previously accumulated in other comprehensive income are transferred to retained earnings. Debt securities are generally carried at fair value with unrealised holding gains and losses recognised in other comprehensive income. On sale, net gains and losses previously accumulated in other comprehensive income are recognised in income.

Impairment of financial assets

The expected credit loss model is applied for recognition and measurement of impairments in financial assets measured at amortised cost or at fair value through other comprehensive income. The expected credit loss model is also applied for financial guarantee contracts to which IFRS 9 applies and which are not accounted for at fair value through profit or loss. The loss allowance for the financial asset is measured at an amount equal to the 12-month expected credit losses. If the credit risk on the financial asset has increased significantly since initial recognition, the loss allowance for the financial asset is measured at an amount equal to the lifetime expected credit losses. Changes in loss allowances are recognised in profit or loss. For trade receivables, a simplified impairment approach is applied recognising expected lifetime losses from initial recognition.

Cash and cash equivalents

Cash and cash equivalents comprise cash at bank and in hand, including offsetting bank overdrafts, short-term bank deposits, money market funds, reverse repos and similar instruments that generally have a maturity of three months or less at the date of purchase.

Financial liabilities

Financial liabilities are measured at amortised cost, unless they are required to be measured at fair value through profit or loss, such as instruments held for trading, or Shell has opted to measure them at fair value through profit or loss. Debt and trade payables are recognised initially at fair value based on amounts exchanged, net of transaction costs, and subsequently at amortised cost except for fixed rate debt subject to fair value hedging which is remeasured for the hedged risk (see below). Interest expense on debt is accounted for using the effective interest method, and other than interest capitalised, is recognised in income. For financial liabilities that are measured under the fair value option, the change in the fair value related to own credit risk is recognised in other comprehensive income. The remaining fair value change is recognised at fair value through profit or loss.

Derivative contracts and hedges

Derivative contracts are used in the management of interest rate risk, foreign exchange risk, commodity price risk, and foreign currency cash balances. Derivatives that are not closely related to the host contract in terms of economic characteristics and risks and the host contract of which is not a financial asset are separated from their host contract and recognised at fair value with the associated gains and losses recognised in income.

Contracts to buy or sell a non-financial item that can be settled net in cash are accounted for as financial instruments, with the exception of those contracts that were entered into and continue to be held for the purpose of the receipt or delivery of a non-financial item in accordance with Shell's expected purchase, sale or usage requirements. Gains or losses arising from changes in the fair value of derivatives that are not designated as effective hedging instruments are recognised in income.

Certain derivative contracts qualify and are designated either: as a fair value hedge of the change in fair value of a recognised asset or liability or an unrecognised firm commitment; or as a cash flow hedge for the change in cash flows to be received or paid relating to a recognised asset or liability or a highly probable forecast transaction; or as a net investment hedge of the change in foreign exchange rates associated with net investments in foreign operations with a different functional currency than Shell's functional currency.

A change in the fair value of a hedging instrument designated as a fair value hedge is recognised in income, together with the consequential adjustment to the carrying amount of the hedged item. The effective portion of a change in fair value of a derivative contract designated as a cash flow hedge is recognised in other comprehensive income until the hedged transaction occurs; any ineffective portion is recognised in income. Where the hedged item is a non-financial asset or liability, the amount in accumulated other comprehensive income is transferred to the initial carrying amount of the asset or liability (reclassified to the balance sheet); a net investment hedge is accounted for similarly to a cash flow hedge. Gains or losses on the hedging instrument relating to the effective portion of the hedge are recognised in other comprehensive income while any gains or losses relating to the ineffective portion are recognised in the Consolidated Statement of Income. On disposal of the foreign operation, the cumulative value of any such gains or losses recorded in other comprehensive income is reclassified to the Consolidated Statement of Income.

The effective portion of a change due to retranslation at quarter-end exchange rates in the carrying amount of debt and the principal amount of derivative contracts used to hedge net investments in foreign operations is recognised in other comprehensive income until the related investment is sold or liquidated; any ineffective portion is recognised in income.

All relationships between hedging instruments and hedged items are documented, as well as risk management objectives and strategies for undertaking hedge transactions. The effectiveness of hedges is also continually assessed and hedge accounting is discontinued when there is a change in the risk management strategy.

Unless designated as hedging instruments, contracts to sell or purchase non-financial items that can be settled net as if the contracts were financial instruments and that do not meet expected own-use requirements (typically, forward sale and purchase contracts for commodities in trading operations), and contracts that are or contain written options, are recognised at fair value; associated gains and losses are recognised in income.

Derivatives that are held primarily for the purpose of trading are presented as current in the Consolidated Balance Sheet.

2. Material accounting policies, judgements and estimates continued

Judgement
Judgement is required to determine whether contracts to buy or sell LNG are capable of being settled on a net basis. Due to the limited liquidity in the LNG market and the lack of net settlement history, contracts to buy or sell LNG are not considered capable of being settled on a net basis. As a result, these contracts are accounted for on an accrual basis and not as a financial instrument.

Fair value measurements
Fair value measurements are estimates of the amounts for which assets or liabilities could be transferred at the measurement date, based on the assumption that such transfers take place between participants in principal markets and, where applicable, taking highest and best use into account.

Estimate
Where available, fair value measurements are derived from prices quoted in active markets for identical assets or liabilities. In the absence of such information, other observable inputs are used to estimate fair value. Inputs derived from external sources are corroborated or otherwise verified, as appropriate. In the absence of publicly available information, fair value is determined using estimation techniques that take into account market perspectives relevant to the asset or liability, in as far as they can reasonably be ascertained, based on predominantly unobservable inputs. For derivative contracts where publicly available information is not available, fair value estimations are generally determined using models and other valuation methods, the key inputs for which include future prices, volatility, price correlation, counterparty credit risk and market liquidity, as appropriate; for other assets and liabilities, fair value estimations are generally based on the net present value of expected future cash flows.

Share-based compensation plans
The fair value of share-based compensation expense arising from the Performance Share Plan (PSP) and the Long-term Incentive Plan (LTIP) – Shell's main equity-settled plans - is estimated using the average Monte Carlo fair values and is recognised in income from the date of grant over the vesting period with a corresponding increase directly in equity. The model projects and averages the results for a range of potential outcomes for the vesting conditions, the principal assumptions for which are the share price volatility and dividend yields for Shell and four of its main competitors using respectively three years and 10 years of historical data.

Shares held in trust
Shares in the Company, which are held by employee share ownership trusts and trust-like entities, are not included in assets but are reflected at cost as a deduction from equity as shares held in trust.

Acquisitions and sales of interests in a business
Assets acquired and liabilities assumed when control is obtained over a business, and when an interest or an additional interest is acquired in a joint operation which is a business, are recognised at their fair value at the date of the acquisition; the amount of the purchase consideration above this value is recognised as goodwill. When control is obtained, any non-controlling interest is recognised as the proportionate share of the identifiable net assets. The acquisition of a non-controlling interest in a subsidiary and the sale of an interest while retaining control are accounted for as transactions within equity. The difference between the purchase consideration or sale proceeds after tax and the relevant proportion of the non-controlling interest, measured by reference to the carrying amount of the interest's net assets at the date of acquisition or sale, is recognised in retained earnings as a movement in equity attributable to Shell plc shareholders.

Emission schemes and related environmental programmes
Emission certificates, biofuel certificates and renewable power certificates (together "environmental certificates") held for trading purposes are recognised at cost or net realisable value, whichever is lower, and classified under inventory.

Emission trading schemes
Emission certificates acquired for compliance purposes are initially recognised at cost and classified under intangible assets. In the schemes where a cap is set for emissions, the associated emission certificates granted are recognised at cost, which may be zero. An emission liability is recognised under other liabilities when actual emissions occur that give rise to an obligation. To the extent the liability is covered by emission certificates held for compliance purposes, the liability is measured with reference to the value of these emission certificates held and for the remaining uncovered portion at market value. The associated expense is presented under "Production and manufacturing expenses". Both the emission certificates and the emission liability are derecognised upon settling the liability with the respective regulator.

Biofuel programmes
Biofuel certificates acquired that are held for compliance purposes are initially recognised at cost under intangible assets. Self-generated biofuel certificates are recognised at nil value, as they primarily offset the obligation. A biofuel liability is recognised under other liabilities when the obligation arises under local regulations. To the extent covered by biofuel certificates held for compliance purposes, the liability is measured with reference to the value of these certificates held and for the remaining uncovered portion at market value. The associated expense is presented under "purchases". Biofuel certificates and the biofuel liability are both derecognised upon settling the liability with the respective regulator.

2. Material accounting policies, judgements and estimates continued

Renewable power programmes

Renewable power certificates acquired for compliance purposes are initially recognised at cost as an intangible asset. Self-generated renewable power certificates are generally transferred to the customer upon sales of electricity. A renewable power liability is recognised under other liabilities when electricity sales take place that give rise to an obligation to retire renewable power certificates. The associated cost is recognised in "purchases" in the income statement. If the obligation relates to power consumed in business operations, it is presented in other liabilities with cost reflected in "Production and manufacturing expenses". To the extent covered by renewable power certificates held for compliance purposes, the liability is measured with reference to the value of these renewable power certificates and for the remaining uncovered portion at market value. Renewable power certificates and the renewable power liability are derecognised upon settling the liability with the respective regulator.

Consolidated Statement of Income presentation

Purchases reflect all costs related to the acquisition of inventories and the effects of the changes therein, and include associated costs incurred in conversion into finished or intermediate products. Production and manufacturing expenses are the costs of operating, maintaining and managing production and manufacturing assets. Selling, distribution and administrative expenses include direct and indirect costs of marketing and selling products.

3. Changes to IFRS not yet adopted

IFRS 18 Presentation and Disclosure in Financial Statements ("IFRS 18")

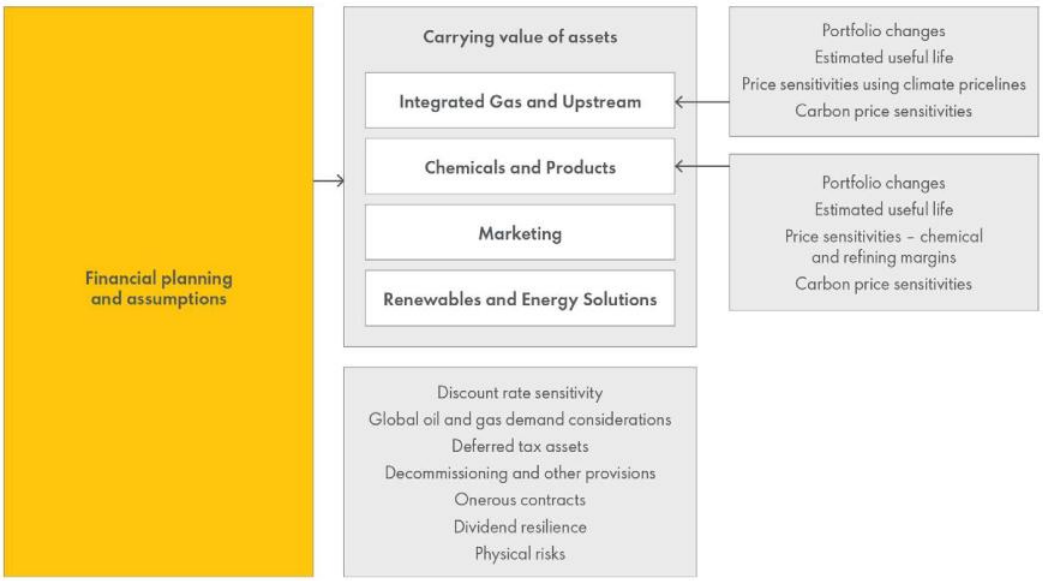
IFRS 18 was issued in April 2024 and will replace IAS 1 Presentation of Financial Statements. IFRS 18 will be effective for reporting periods beginning on or after January 1, 2027. This standard sets out requirements for the presentation and disclosure of information in financial statements, particularly the Consolidated Statement of Income. The standard introduces a defined structure for the Consolidated Statement of Income, additional defined subtotals, new principles for aggregation and disaggregation of information, and it mandates disclosures about management-defined performance measures.

IFRS 18 will have no impact on recognition and measurement. From Shell's initial impact assessment, it has concluded that the impact will be limited to disclosure and presentation in the Consolidated Financial Statements. The primary change will be that the share of profit from joint ventures and associates will be classified in the Consolidated Statement of Income under the investing category (income generated by the investment) instead of the operating category. As a result of this change, the dividends received from joint ventures and associates will be reclassified in the Consolidated Statement of Cash Flows from cash flow from operating activities (CFFO) to cash flow from investing activities (CFFI).

4. Climate change and energy transition

This note describes how Shell has considered climate-related impacts in key areas of the financial statements and how this translates into the valuation of assets and measurement of liabilities as Shell makes progress in the energy transition. The note is structured as follows:

Climate change and energy transition



4. Climate change and energy transition continued

Note 2 Material accounting policies, judgements and estimates describes uncertainties, including those that have the potential to have a material effect on the Consolidated Balance Sheet in the next 12 months. This note describes the key areas of climate impacts that potentially have short-, medium- and longer-term effects on amounts recognised in the Consolidated Balance Sheet at December 31, 2024. Where relevant, this note contains references to other notes to the Consolidated Financial Statements and aims to provide an overarching summary of the energy transition impact.

In 2021, Shell launched its strategy to become a net-zero emissions energy business by 2050. The strategy aims to deliver more value with less emissions. Shell's targets include those related to its own operations: halve Scope 1 and 2 emissions on a net basis under operational control by 2030, compared with 2016 baseline, achieve methane emissions intensity below 0.2% and achieve near-zero methane emissions by 2030, and eliminate routine gas flaring by 2025. [A] In relation to emissions from the products we sell, Shell has a target to reduce the net carbon intensity of energy products sold by 9-13% by 2025, 15-20% by 2030 and 100% by 2050, compared with a 2016 baseline and an ambition, set in March 2024, to reduce customer emissions (Scope 3, Category 11) related to the use of oil products sold by 15-20% by 2030, compared with 2021. [B]

[A] This target was subject to the completion of the sale of The Shell Petroleum Development Company of Nigeria Limited (SPDC). With effect from January 1, 2025, SPDC ceased routine flaring. On March 13, 2025, Shell completed the sale of SPDC to Renaissance.

[B] Customer emissions from the use of our oil products (Scope 3, Category 11) were 517 million tonnes carbon dioxide equivalent (CO_2e) in 2023 and 569 million tonnes CO_2e in 2021.

Financial planning and assumptions

This section provides an overview of key assumptions used for financial planning related to climate change and the energy transition. These assumptions that underpin the amounts recognised in these financial statements – such as future oil and gas prices, future chemical and refining margins, discount rates, future costs of decommissioning and restoration, carbon emission cost and deferred tax assets – take climate change and energy transition into account and are similarly used for impairment testing of carrying values of assets. The areas described focus on those most pertinent to Shell's business and how financial planning and assumptions interact with scenarios. Subsequently, the sensitivity of carrying values to commodity prices, carbon emission costs, chemical and refining margins, discount rates and demand, if different assumptions were applied, is described.

There is no one single scenario that underpins the financial statements. Shell Scenarios are not predictions. They are designed to stretch management's thinking when it comes to considering events that may be possible, even if only remotely. As a result, these scenarios are not intended to be predictions of likely future events or outcomes and are not the basis for Shell's financial statements and Operating Plans.

Shell Scenarios and the range of possible outcomes inform the development of Shell's strategy and Shell's view on future oil and gas price outlooks, refining margins and chemical margins. The oil and gas price outlooks are one of the key assumptions that underpin Shell's financial statements. Shell's scenarios inform high-, mid- and low-price outlooks. The mid-price outlook represents management's reasonable best estimate and is the basis for Shell's financial statements, Operating Plans and impairment testing. Impairment testing applies management's reasonable best estimates across the full life cycle of assets, which may go beyond the Operating Plan period.

Shell's targets – including to reduce absolute Scope 1 and 2 emissions on a net basis [C] by 50% by 2030, compared with 2016 baseline, and a 15-20% reduction of net carbon intensity [D] by 2030 – have been included in the Operating Plan. The Operating Plan also includes expected costs for evolving carbon regulations (see "Carbon price sensitivities" below) based on a forecast of Shell's equity share of emissions from operated and non-operated assets, also taking into account the estimated impact of free allowances. For impairment testing purposes, key assumptions that underpin the amounts recognised in the Consolidated Balance Sheet, such as future oil and gas prices, refining margins, chemical margins, discount rates, future costs of decommissioning and restoration, carbon emission cost and tax rates, all go beyond the planning horizon in the Operating Plan and do take climate change and energy transition into account.

[C] Operational control boundary.

[D] GHG emissions based on the energy product sales included in the net carbon intensity (NCI) using equity boundary.

Goodwill, other intangible assets, property, plant and equipment, and joint ventures and associates

The carrying value of goodwill, other intangible assets, property plant and equipment, and joint ventures and associates by segment as at December 31 was as follows:

2024

$ billion

	Goodwill	Other intangible assets	Property, plant and equipment	Joint ventures and associates	Total
Integrated Gas	4.9	2.6	60.0	6.4	73.9
Upstream	5.3	0.1	63.4	8.0	76.8
Chemicals and Products	0.3	1.0	32.6	4.0	37.9
Marketing	4.3	4.6	21.4	3.9	34.2
Renewables and Energy Solutions	1.2	1.2	5.7	1.0	9.1
Corporate	–	–	2.1	0.1	2.2
Total	16.0	9.5	185.2	23.4	234.1

4. Climate change and energy transition continued

2023

$ billion

	Goodwill	Other intangible assets	Property, plant and equipment	Joint ventures and associates	Total
Integrated Gas	4.9	3.2	57.7	6.1	71.9
Upstream	5.4	0.3	70.9	7.6	84.2
Chemicals and Products [A]	0.3	0.9	35.5	4.0	40.7
Marketing [A]	4.4	4.4	23.6	4.7	37.1
Renewables and Energy Solutions	1.7	1.5	4.8	2.0	10.0
Corporate	–	–	2.3	0.1	2.4
Total	16.7	10.3	194.8	24.5	246.3

[A] Following resegmentation in 2024 (see Note 7), prior period comparatives have been revised to conform with current year presentation with an offsetting impact between Marketing and Chemicals & Products segments.

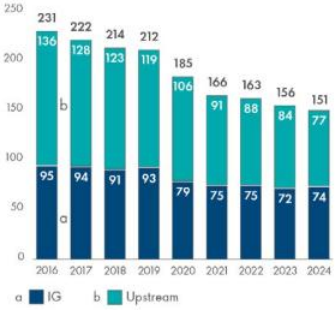
For Integrated Gas and Upstream, sensitivity to commodity prices and carbon prices has been tested (see below) covering the carrying amount of goodwill, other intangible assets, property, plant and equipment, and joint ventures and associates. Sensitivity testing was performed applying alternative price scenarios to the forecasted cash flows for the whole period until the end of life of the asset tested. For Chemicals and Products, sensitivity to chemical margins, refining margins and carbon prices has been tested (see below). Marketing and Renewables and Energy Solutions are expected to be resilient through the energy transition with limited exposure of stranded assets.

In addition, sensitivity to changes in the discount rate applied in impairment testing has also been tested (see below).

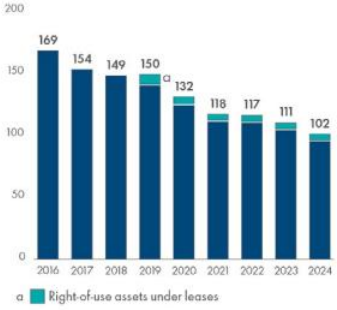
In calculating recoverable value, key assumptions are not determined in isolation to ensure relevant interdependencies are appropriately reflected. In particular, management considers the relationship between discount rates, forecast commodity prices and cash flow risking to ensure impairment testing assumptions result in an implicit expected return that is balanced and appropriate for the asset under review. Each of the sensitivities described above has been tested under a ceteris paribus assumption where all other factors remain unchanged, and, as such, does not reflect the potential offsetting effects of corresponding changes in other assumptions.

Carrying value of Integrated Gas and Upstream assets

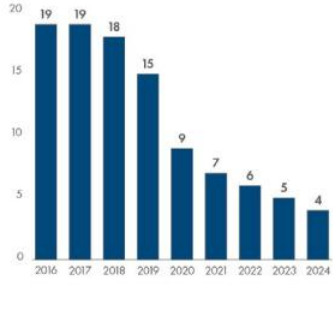
Carrying value of Integrated Gas and Upstream assets
$ billion as at December 31



Carrying value of production assets
$ billion as at December 31



Carrying value of exploration and evaluation assets
$ billion as at December 31



Within Integrated Gas and Upstream, the assets potentially most sensitive to the energy transition are production assets and exploration and evaluation assets. Both production assets of $102 billion and exploration and evaluation assets of $4 billion are recognised within Property, plant and equipment within Integrated Gas and Upstream.

Portfolio composition and changes
Since 2016, the carrying value of production assets in Integrated Gas and Upstream decreased from $169 billion as at December 31, 2016, to $102 billion as at December 31, 2024. Over this period, depreciation was higher than additions for each year, and disposals of property, plant and equipment with a carrying value of $26 billion occurred. The carrying value of capitalised exploration and evaluation expenses decreased from $19 billion as at December 31, 2016, to $4 billion at December 31, 2024. This is the result of final investment decisions, reclassifications to production assets and amounts charged to expenses exceeding additions.

4. Climate change and energy transition continued

Estimated useful life

The energy transition and the pace at which it progresses may impact the remaining life of assets. Integrated Gas and Upstream assets are generally depreciated using a unit-of-production methodology where depreciation generally depends on production of SEC proved reserves. (See Note 2). Based on production plans of existing assets, 49%, 7% and 1% of SEC proved reserves as at December 31, 2024, would currently be left by 2030, 2040 and 2050, respectively. Based on the unit-of-production depreciation methodology applied, the carrying value for individual assets are depreciated to nil in the same pattern as the depletion of reserves towards nil. An analysis of Integrated Gas and Upstream production assets of $102 billion as at December 31, 2024, based on planned reserves depletion shows that these assets would be significantly further depreciated under the unit-of-production method by 2030 and nearly fully depreciated by 2050. This provides a further perspective on the risk of stranded assets carried in the Consolidated Balance Sheet as at December 31, 2024.

Price sensitivities using climate pricelines

As noted, in accordance with IFRS, Shell's financial statements are based on reasonable and supportable assumptions that represent management's current best estimate of the range of economic conditions that may exist in the foreseeable future. The mid-price outlook informed by Shell's scenario planning represents management's best estimate. A change of -10% or +10% to the mid-price outlook, as an average percentage over the whole life cycle of assets, would result in around $5-9 billion (2023: $5-8 billion) impairment or $2-5 billion (2023: $2-5 billion) impairment reversal respectively in Integrated Gas and Upstream (see Note 13).

The energy transition will continue to bring volatility and there is significant uncertainty as to how commodity prices will develop over the next decades. Some pricelines see a structurally lower price during the transition period, while other pricelines see structurally higher commodity prices as a result of changes in supply and demand. As the risk of stranded assets is prevalent with downside price risk in energy transition scenarios, sensitivities have only been undertaken for such downside scenarios. If different price outlooks from external and often normative climate change scenarios were used, this would impact the recoverability of certain assets recognised in the Consolidated Balance Sheet as at December 31, 2024. These external scenarios are not representative of management's mid-price reasonable best estimate.

Sensitivity of carrying value to commodity prices described below is under the assumption that all other factors in the models used – such as cost levels, volumes, mid-price CO_2 assumptions and the discount rate – to calculate recoverability of carrying value remains unchanged. Sensitivity testing has been performed by applying the alternative commodity price scenarios to cash flows for the whole period until the end of life of the assets tested, which may extend beyond the Operating Plan period. The alternative commodity prices were applied in the local cash flow models and thereafter aggregated by segment. Changes to commodity prices are applied because of the significant impact on Shell's business. It should be noted that a significant decrease in long-term forecasted commodity prices would probably lead to further changes, such as in portfolio choices and cost levels.

Sensitivity to changes in commodity prices in value in use calculations has been tested as follows:
Priceline 1 – Average prices from three 1.5-2°C external climate change scenarios: in view of the broad range of price outlooks across the various scenarios, the average of three external price outlooks was taken.

- **IHS Markit/ACCS 2024** – under this scenario oil prices (real terms 2024 (RT24)) decrease from $110 per barrel (/b) in 2025 to around $100/b in 2026-2027. From 2028 prices gradually decrease from $50/b towards $31/b in 2037, gradually recovering to $92/b in 2048 with a subsequent decrease towards $90/b in 2050. Gas prices (RT24) are around $3 per million British thermal units (/MMBtu) until 2042 and gradually increase towards $4/MMBtu until 2050 for Henry Hub. For Europe, prices decrease from $10/MMBtu in 2025 towards around $4/MMBtu in 2032, with a subsequent increase to some $5/MMBtu until 2050. For Asia, prices decrease from $11/MMBtu in 2025 towards around $6/MMBtu in 2033, and gradually increase towards $7/MMBtu until 2050.

- **Woodmac WM AET-1.5 degree** – under this scenario oil prices (RT24) gradually decrease from $64/b in 2025 towards $28/b in 2050. Gas prices (RT24) increase from $3/MMBtu in 2025 towards around $4/MMBtu until 2035, staying on that level until 2050 for Henry Hub. For Europe, gas prices (RT24) decrease gradually from around $13/MMBtu in 2025 to some $6/MMBtu in 2030, then gradually increase towards $9/MMBtu in 2035 and subsequently decrease towards $6/MMBtu in 2050. For Asia, gas prices decrease from $14/MMBtu in 2025 to $7/MMBtu in 2030, subsequently increasing to $10/MMBtu around 2036 and subsequently decreasing towards $7/MMBtu in 2050.

- **IEA NZE50** – under this scenario oil prices (RT24) gradually decrease from $72/b in 2025 towards some $26/b in 2050. Gas prices (RT24) decrease from some $3/MMBtu in 2025 to around $2/MMBtu until 2050 for Henry Hub. For Europe and Asia, gas prices (RT24) decrease from some $10/MMBtu and $11/MMBtu respectively in 2025 to some $4/MMBtu in 2050 for Europe and $5/MMBtu around 2030, for Asia staying at that level until 2050.

This average priceline provides an external view of the development of commodity prices under 1.5-2°C external climate change scenarios over the whole period under review.

Applying this priceline to Integrated Gas assets of $74 billion (2023: $72 billion) and Upstream assets of $77 billion (2023: $84 billion) as at December 31, 2024, shows recoverable amounts that are $11-15 billion (2023: $12-16 billion) and $1-3 billion (2023: $3-5 billion) lower, respectively, than the carrying value as at December 31, 2024.

4. Climate change and energy transition continued

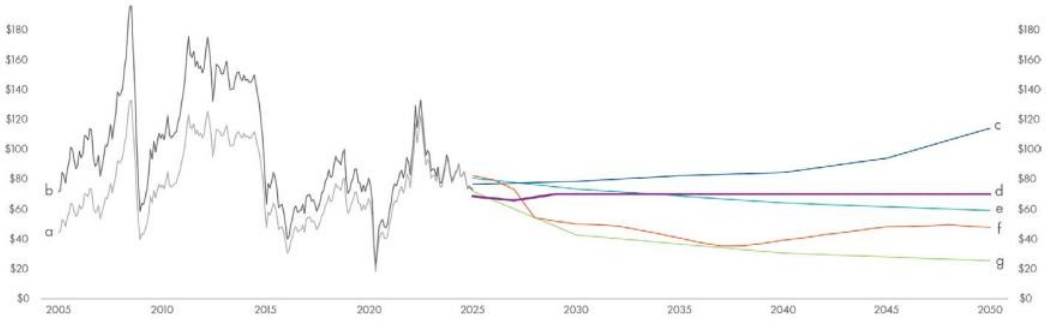
Priceline–2 - Hybrid Shell Plan and IEA NZE50: this priceline applies Shell's mid-price outlook for the first 10 years (see Note 13). Because of the greater uncertainty for the period after 10 years, the International Energy Agency (IEA) normative Net Zero Emissions scenario is applied. This gives less weight to the price-risk uncertainty in the first 10 years reflected in the Operating Plan period and applies more risk to the more uncertain subsequent periods.

Applying this priceline to Integrated Gas assets of $74 billion (2023: $72 billion) and Upstream assets of $77 billion (2023: $84 billion) as at December 31, 2024, shows recoverable amounts that are $7–10 billion (2023: $8-10 billion) and up to $1 billion (2023: $1-3 billion) lower, respectively, than the carrying value as at December 31, 2024.

Priceline–3 - IEA NZE50: this priceline applies the International Energy Agency normative Net Zero Emissions by 2050 (IEA NZE50) scenario over the whole period under review. This priceline has been applied in order to also reflect the sensitivity to a pure net-zero emissions scenario from the IEA.

Applying this priceline to Integrated Gas assets of $74 billion (2023: $72 billion) and Upstream assets of $77 billion (2023: $84 billion) as at December 31, 2024, shows recoverable amounts that are $21-27 billion (2023: $15-20 billion) and $5-7 billion (2023: $3-5 billion) lower, respectively, than the carrying value as at December 31, 2024. For Integrated Gas the change in sensitivity compared with 2023 is largely driven by lower oil and Asia gas prices applied in sensitivity testing for the whole period under review.

Oil price assumptions



a — Monthly average price (actual on money of the day basis) b — Monthly average price (actual on real terms basis using US CPI all urban consumers) c — NGFS GCAM NZE 2050 [A]
d — Shell mid-price e — IEA APS f — Average prices from three 1.5-2 degrees Celsius external climate change scenarios g — IEA NZE50

[A] The Network for Greening the Financial System (NGFS) is a group of 143 central banks and supervisors and 21 observers committed to sharing best practices, contributing to the development of climate- and environment-related risk management in the financial sector and mobilising mainstream finance to support the transition toward a sustainable economy. This scenario results from the NGFS GCAM model. This model embodies certain assumptions on the relationships between economic and energy output and climate interactions. This NGFS scenario shows a decline in world oil demand relative to the current policies baseline, in part a response to substitution away from fossil fuels. At the same time prices increase due to supply constraints.
[B] All figures are presented on RT24 basis unless noted differently.

The graph above shows the oil pricelines on a real-terms basis applied for the period until 2050 for Shell's mid-price outlook in comparison with the IEA announced pledges (IEA APS) scenario, the NGFS GCAM NZE 2050 scenario, the average prices from three 1.5-2°C external climate change scenarios (Priceline 1, above) and the IEA Net Zero Emissions by 2050 scenario (IEA NZE50, Priceline 3 above). The development of future oil prices is uncertain and oil prices have been subject to significant volatility in the past. Future oil prices may be impacted by future changes in macroeconomic factors, available supply, demand, geopolitical and other factors. The pricelines as per the scenarios NGFS GCAM NZE 2050, IEA APS, the average prices from three 1.5-2°C external climate change scenarios and IEA NZE50 differ from Shell's best estimate and view of the future oil price.

4. Climate change and energy transition continued

Sensitivity + 10% to the mid-price outlook

$ billion

	Carrying value		Sensitivity			
	Dec 31, 2024	Dec 31, 2023	2024		2023	
Integrated Gas	74	72	2	4	2	4
Upstream	77	84	–	1	–	1
Total	151	156	2	5	2	5

Sensitivity - 10% to the mid-price outlook

$ billion

	Carrying value		Sensitivity			
	Dec 31, 2024	Dec 31, 2023	2024		2023	
Integrated Gas	74	72	(4)	(6)	(4)	(6)
Upstream	77	84	(1)	(3)	(1)	(2)
Total	151	156	(5)	(9)	(5)	(8)

Sensitivity averaged from three 1.5-2 °C external climate change scenarios

$ billion

	Carrying value		Sensitivity			
	Dec 31, 2024	Dec 31, 2023	2024		2023	
Integrated Gas	74	72	(11)	(15)	(12)	(16)
Upstream	77	84	(1)	(3)	(3)	(5)
Total	151	156	(12)	(18)	(15)	(21)

Sensitivity Hybrid Shell Plan + IEA NZE50

$ billion

	Carrying value		Sensitivity			
	Dec 31, 2024	Dec 31, 2023	2024		2023	
Integrated Gas	74	72	(7)	(10)	(8)	(10)
Upstream	77	84	–	(1)	(1)	(3)
Total	151	156	(7)	(11)	(9)	(13)

Sensitivity IEA NZE50

$ billion

	Carrying value		Sensitivity			
	Dec 31, 2024	Dec 31, 2023	2024		2023	
Integrated Gas	74	72	(21)	(27)	(15)	(20)
Upstream	77	84	(5)	(7)	(3)	(5)
Total	151	156	(26)	(34)	(18)	(25)

Carbon price sensitivities

Carbon costs in the Operating Plan

The Operating Plan includes capital expenditure and operating costs to achieve Scope 1 and 2 emission reduction targets (see above). These include asset level abatement project costs that drive efficiencies and reduce emissions, expected costs for evolving carbon regulations based on a forecast of Shell's equity share of emissions and costs of offsets for any residual amounts.

The total capital expenditure for abatement projects which includes energy efficiency improvements, the transformation of energy and chemicals parks, CCS facilities and electrification of our facilities included in the Operating Plan is in excess of $6 billion. Total yearly carbon emission costs in Shell's Operating Plan gradually increase from $1 billion in 2025 to $5 billion in 2034 using the mid-price scenario. The sensitivity of carrying value of assets to changes in carbon prices is described in the section below.

Methods for estimating costs vary, depending on the nature of the cost. Abatement project costs to improve efficiencies and reduce emissions are estimated by applying a bottom-up approach where individual opportunities on an asset-level, project-by-project basis are identified.

Costs for evolving carbon regulations are based on a forecast of Shell's equity share of emissions and are included in the Operating Plan at Shell's mid-price outlook on a country-by-country basis and represent management's best estimate. In the short and near term, up to around 2030, costs for carbon emissions estimates are largely policy driven, through emissions trading schemes or taxation levied by governments which currently vary significantly on a country-by-country basis. Beyond 2030, where policy predictions are more challenging, the costs for carbon emissions are estimated based on the expected costs of abatement technologies required for 2050. The estimated costs are trending towards $50 to $230 per tonne (RT24), depending on the country, in 2050.

Sensitivity to changes in carbon price assumptions

There is significant uncertainty as to how carbon costs will develop over the next decades. These will depend on policies set by countries and the pace of the energy transition. In accordance with IFRS, Shell's financial statements are based on reasonable and supportable assumptions that represent management's current best estimate, which is policy based up to 2030 and then based on the mid-price outlook beyond 2030. As the risk of stranded assets is prevalent with higher carbon emission prices than anticipated, sensitivity analyses have only been undertaken for such a downside scenario. If the IEA NZE50 outlook is applied, this would impact the recoverability of certain assets recognised in the Consolidated Balance Sheet as at December 31, 2024. This scenario is not representative of management's mid-price reasonable best estimate.

Sensitivity of carrying value to carbon emission costs as described below is under the assumption that all other factors in the value in use models used to calculate recoverability of carrying value remain unchanged. Changes to carbon emission costs are applied for Integrated Gas, Upstream and Chemicals and Products because of the potential impact on Shell's business.

4. Climate change and energy transition continued

Applying the IEA NZE50 carbon price scenario to Integrated Gas assets of $74 billion (2023: $72 billion) and Upstream assets of $77 billion (2023: $84 billion), up to the end of life of these assets, shows recoverable amounts that are $1-2 billion (2023: $2-4 billion) lower for Integrated Gas and up to $1 billion lower for Upstream than the carrying value as at December 31, 2024.

Applying the IEA NZE50 carbon price scenario to Chemicals and Products assets of $38 billion shows recoverable amounts that are $1-2 billion lower than the carrying value as at December 31, 2024. For Chemicals and Products, increased carbon cost could however potentially be recovered partially through increased product sale prices.

Sensitivity IEA NZE 2050 carbon price scenario

$ billion

	Carrying value		Sensitivity			
	Dec 31, 2024	Dec 31, 2023	2024		2023	
Integrated Gas	74	72	(1)	(2)	(2)	(4)
Upstream	77	84	–	(1)	–	(1)
Chemicals and Products	38	44	(1)	(2)	(3)	(4)
Total	189	200	(2)	(5)	(5)	(9)

For the key regions and countries the following carbon prices per tonne (RT24) have been assumed in the Operating Plan:

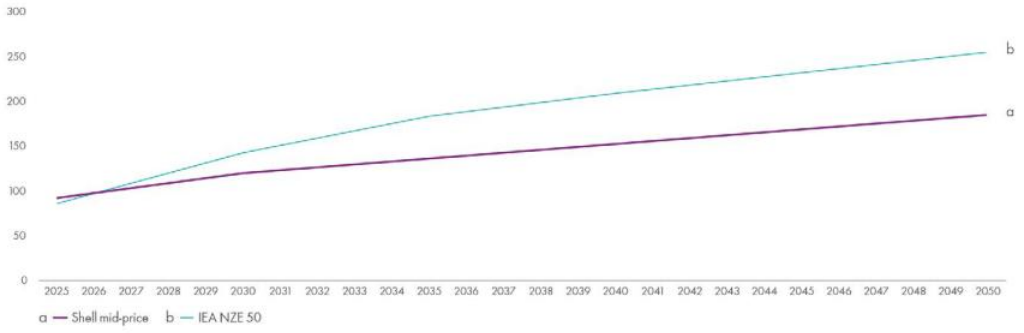
	Operating plan period	Subsequent period
Region	2025-2034	2035-2050
European Union [A]	$92-$133	$136-$185
Norway	$181-$230	$230-$230
United Kingdom	$62-$133	$136-$185
Canada (Federal)	$69-$115	$115-$125
United States of America (Federal)	$0-$25	$31-$125
Australia	$32-$76	$80-$150
All other countries	$0-$65	$13-$150

[A] Except for the Netherlands where the ranges are $94-163 per tonne (2025-2034) and $164-185 per tonne (2035-2050).

The graph below shows the carbon pricelines per tonne for the European Union on an RT24 basis under Shell's mid-price outlook that represents the best estimate as required to be applied under IFRS, in comparison with the IEA NZE50 scenario. The IEA NZE50 scenario differs from Shell's best estimate and view of future CO_2 prices. Sensitivity of carrying value to the IEA NZE50 carbon price scenario is provided above.

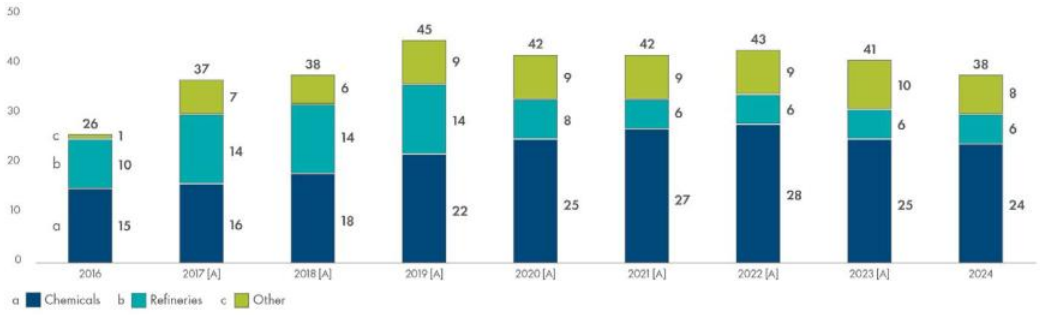
CO_2 prices - European Union

RT24 $/tonne



4. Climate change and energy transition continued

Carrying value of Chemicals and Products assets
$ billion as at December 31



[A] Following resegmentation in 2024 (see Note 7), prior period comparatives have been revised to conform with current year presentation with an offsetting impact between Marketing and Chemicals & Products segments.

Within Chemicals and Products, the assets potentially most sensitive to the energy transition are refineries.

Portfolio composition and changes
Since 2016, Shell's Chemicals and Products portfolio has evolved, shifting from 15 refineries at the end of 2016 to eight (of which one is classified as held for sale) at the end of 2024. During that period, Shell assumed the sole ownership of two refineries through the dissolution of the Motiva joint venture, and disposed of, converted or closed nine refineries. Further, during 2024 Shell agreed to sell one refinery (classified as assets held for sale at the end of 2024, see Note 19). The carrying value of refineries decreased from $10 billion as at December 31, 2016, to less than $6 billion as at December 31, 2024. In line with Shell's strategy, it is progressing the repurposing of its energy and chemicals parks; these key focused assets allows Shell to underpin its hydrocarbon energy sales and the sales of lower carbon products.

Estimated useful life
Refineries in the Chemicals and Products segment (carrying value as at December 31, 2024, $6 billion (2023: $6 billion)) may be impacted under a 2°C or less external climate scenario.

For refineries in Chemicals and Products, depreciation of assets is on a straight-line basis over the life of the assets, starting at the date the asset becomes available for use, over a period of 20 years (see Note 2). Over the course of the energy transition, the current carrying value of refineries will be fully depreciated, offset by anticipated investments in assets that are expected to be resilient in the energy transition as described above. Based on current depreciation of the carrying value as at December 31, 2024, and assuming no further investment, all refineries would be fully depreciated between four and 11 years.

In addition to refineries, further assets of $32 billion include $24 billion of assets in relation to Chemicals. This includes $14 billion for the Pennsylvania chemical plant, which started operations in November 2022 and being a more efficient plant, it is expected to be more resilient in the energy transition. Chemical products are not produced with the aim to combust and consequently do not generate GHG emissions. Under the IEA NZE50 scenario chemical production volumes are not expected to decrease towards 2050, compared with current levels and hence chemical assets are expected to be resilient through the energy transition.

Other assets of $8 billion include $5 billion of assets mainly related to storage tanks, vessels, pipelines in trading and supply that are also expected to be resilient in the energy transition.

Price sensitivities
Where available Shell uses external climate scenarios for sensitivity testing. In relation to chemical and refining margin forecasts, no credible climate scenarios have been identified and consequently sensitivity testing is performed by providing sensitivity to changes in margins.

Chemical margins applied for impairment testing by reference to value in use are at an average of $197.5/tonne (20-year average). A change of -$30/tonne or +$30/tonne in long-term chemical margins over the entire cash flow projection period would ceteris paribus result in up to $0.5 billion (2023: up to $2 billion) impairment or no impairment reversal, respectively, in Chemicals and Products (see Note 13).

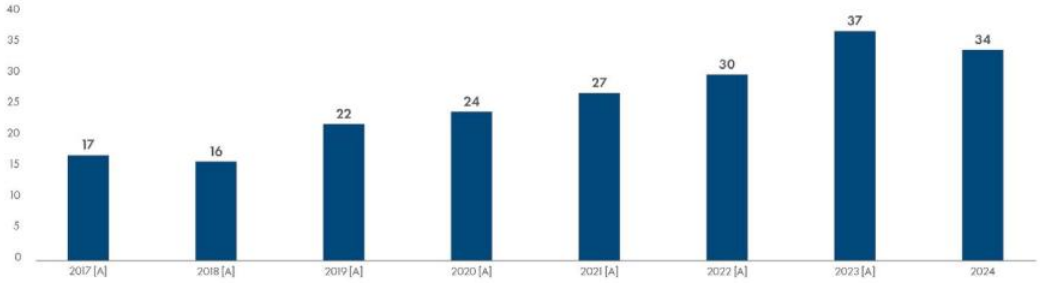
Refining margins applied for impairment testing by reference to value in use are at an average of $10/bbl (20-year). A change of -$1/bbl or +$1/bbl to the refining margin outlook over the entire cash flow projection period would ceteris paribus result in no impairment (2023: $1-2 billion) or up to $0.5 billion (2023: up to $1 billion) impairment reversal respectively in Chemicals and Products (see Note 13).

Sensitivities to carbon prices are described in the section above.

4. Climate change and energy transition continued

Carrying value of Marketing assets

Carrying value of Marketing assets
$ billion as at December 31

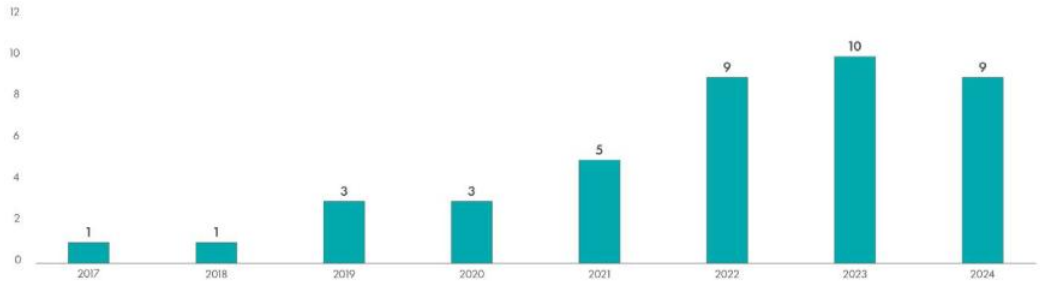


[A] Following resegmentation in 2024 (see Note 7), prior period comparatives have been revised to conform with current year presentation with an offsetting impact between Marketing and Chemicals & Products segments.

Portfolio composition and changes
Assets in the Marketing segment are expected to be resilient through the energy transition with a change in the product mix as the energy transition progresses. The demand for products sold – such as chemicals, lubricants, biofuels, bitumen, electric vehicle charging and convenience retail – is not expected to decrease and is expected to increase for a variety of these products in many markets. Shell is expanding networks of refuelling stations offering low-carbon fuels, including biofuels and various gaseous fuels, such as LNG and bio-LNG. As a result, the carrying value of these assets is not expected to be impacted by the energy transition or lower commodity price scenarios.

Carrying value of Renewables and Energy Solutions assets

Carrying value of Renewables and Energy Solutions assets
$ billion as at December 31



Portfolio composition and changes
In 2024 Shell refreshed its renewable generation, energy marketing, and gas and power trading strategy, shifting Shell's asset portfolio towards energy storage and flexible generation with an increased focus on power trading and minimising new investments in offshore wind projects. The aim is to maximise returns from onshore positions using capital-light business models, debt finance and partnerships. The carrying value of assets in the Renewables and Energy Solutions segment in the balance sheet at December 31, 2024, is expected to be resilient through the energy transition.

4. Climate change and energy transition continued

Other energy transition considerations

Discount rate sensitivity

The discount rate applied for value in use impairment testing is based on a nominal post-tax weighted average cost of capital (WACC) and is determined at 7.5% except for the power activities in the Renewables and Energy Solutions segment where 6% is applied. The discount rate includes generic systematic risk for energy transition risk. In addition, cash flow projections applied in individual assets include specific asset risks, including risk of transition. An increase in systematic energy transition risk could lead to a higher WACC and consequently to a higher discount rate to be applied in impairment testing. An increase of the discount rate applied for impairment testing of 1% under the assumption that all other factors (such as commodity prices, product margins and carbon prices) in the models used to calculate recoverability of carrying value remain unchanged would lead to a change in the carrying value of $1-3 billion (2023: $2-4 billion) in Integrated Gas and Upstream, and no significant impairment in other segments (2023: up to $1 billion in Chemicals and Products).

Global oil and gas demand considerations

A decrease in global demand and unchanged supply of oil and gas would probably lead to a decrease in price (see price sensitivity above). During 2024, Shell's production of oil and gas accounted for some 1.5% and 2% of total global production of oil and gas respectively. Changes in global oil and gas demand are therefore not expected to directly impact the ability to sell volumes of oil and gas produced by Shell at market prices.

Deferred tax assets

In general, it is expected that sufficient deferred tax liabilities and forecasted taxable profits within the planning period of 10 years are available for recovery of the deferred tax assets recognised at December 31, 2024. Integrated Gas and Upstream deferred tax assets recognised are expected to be recovered within the period of production of each asset. For deferred tax assets of $625 million as at December 31, 2024 (2023: $241 million) this period extends beyond 10 years. Deferred tax assets in Chemicals and Products and in Marketing expected to be recovered in more than 10 years (between 11 and 20 years) are $315 million as at December 31, 2024 (2023: $455 million) for which the forecasted taxable profits to determine recoverability have been risked. (See Note 23).

Decommissioning and other provisions

The energy transition may result in decommissioning and restoration occurring earlier than expected. The risk on the timing of decommissioning and restoration activities for Integrated Gas and Upstream fields is limited, supported by production plans in the foreseeable future (see "Estimated useful life" above). Acceleration of decommissioning and restoration activities has also been reflected in the assessment of the appropriate discount rate.On an undiscounted basis the provision for decommissioning and restoration as at December 31, 2024 was $32 billion (2023: $33 billion), recognised on a discounted basis in the Consolidated Balance Sheet as at December 31, 2024 at $18 billion (2023: $19 billion). Sensitivity to changes in the discount rate is provided in Note 25.

Historically, in Chemicals and Products, it was industry practice not to recognise decommissioning and restoration provisions associated with manufacturing facilities. This was on the basis that these assets were considered to have indefinite lives, so it was considered remote that an outflow of economic benefits would be required. In 2020, Shell considered the changed macroeconomic fundamentals, together with Shell's plans to rationalise the Group's manufacturing portfolio. Shell also reconsidered whether it remained appropriate not to recognise decommissioning and restoration provisions for manufacturing facilities. Since 2020, decommissioning and restoration provisions are recognised for certain shorter-lived manufacturing facilities (see Notes 25 and 32). The energy and chemicals parks are considered longer-lived facilities that are expected to be resilient in the energy transition, and decommissioning would generally be more than 50 years away.

Onerous contracts

Closure or early termination of activities may lead to supply contracts becoming onerous. Onerous contract provisions (see Note 25) have been recognised as at December 31, 2024, to reflect changes in expected future utilisation of certain assets. These include contracts in relation to unused terminals and refineries. The total carrying value of the provision for onerous contracts as at December 31, 2024 was $1.1 billion (2023: $1.1 billion) principally related to contracts in relation to unused terminals and refineries.

Dividend resilience

External stakeholders have requested disclosures on how climate change affects dividend-paying capacity. If a further impairment had been recognised in 2024 using any of the climate change scenarios described above, this would not have impacted the ability to pay dividends in this financial year because of strong cash flow generation and financial reserves. Had Shell applied the IEA NZE50 scenario (see above), and if this had led to a decrease in the recoverable amount of Integrated Gas and Upstream assets of $26-34 billion and recognition of an equivalent impairment, this would not have impacted the distributable reserves available to Shell from which to pay dividends in 2024. This is on the basis that such impairment would have resulted in part-realisation of the merger reserve recognised by the Company of $234 billion as at December 31, 2024.

A forward-looking statement regarding future dividend-paying capacity cannot be provided because of unknown risks and uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied in these statements.

4. Climate change and energy transition continued

Physical risks

The potential impact of physical risks comes from both acute and chronic climate hazards. Acute hazards, such as flooding and droughts, wildfires and more severe tropical storms, and chronic hazards, such as rising temperatures and rising sea levels, could impact some of Shell's facilities, operations and supply chains. The frequency of these hazards and impacts is expected to increase in certain locations. Extreme weather events, whether or not related to climate change, could have a negative impact on Shell's earnings, cash flows and financial condition. Mitigation of physical risks, whether or not related to climate change, is considered and embedded in the design and construction of Shell's projects, and/or operation of its assets to minimise the risk of adverse incidents to Shell's employees and contractors, the communities where Shell operates, and Shell's equipment.

In 2023, Shell carried out a detailed review to assess the impact of a range of changing climatic conditions, including projected changes in temperature, precipitation, wind and sea levels, across segments and geographies for Shell's significant assets. Shell used IPCC climate modelling data covering three exploratory climate scenarios (RCP2.6, RCP4.5 and RCP8.5) across the time-horizons 2025, 2030 and 2050. These scenarios were selected to ensure a broad range of risks and uncertainties were assessed. There have been no changes to the climate modelling data that would require a full update of the 2023 assessment. Shell has confirmed there are no changes to the risk profile of Shell's significant assets and accounted for portfolio changes. In the short to medium term, the risks identified were found to be related to factors that Shell is already aware of (whether or not related to climate change) and that the assets are actively managing to mitigate, e.g. hurricane impacts in the US Gulf Coast, rising air temperatures in the Middle East and water scarcity in Europe and Asia. As an example, in recent years the Rhine river in Europe has seen historic lows during the summer months leading to challenges in the use of barges for transportation of Shell's products. Dredging of harbours and investment in shallower-draft barges have helped to mitigate the risk. In the long term, the results of the exercise indicated that while have evaluated against current climate modelling projections and Shell's current asset portfolio, by 2050 the frequency and severity of the climate hazards may differ from current projections. The level of predictability is such that the need for investment in climate adaptation measures at the assets is not immediate and the results mean Shell is in a position to monitor the assets and determine whether there is any need for adaptation action, e.g. the impact of potential water scarcity on various assets. Shell's testing to assess the potential impact of climate-related changes on its significant assets covers over 70% of the carrying value of Shell's physical assets as at December 31, 2023. Over 12% (based on the carrying value) of physical assets tested are considered to be exposed to climate-related physical risks in the short to medium term which the assets are already actively managing to mitigate. In addition, Shell reviewed significant acquisitions made in 2023 and 2024, none of which were found to have significant climate-related physical risks in the short to medium term. Shell's plan reflects the impact of mitigating actions in the short to medium term for the assets assessed. Shell will continue to monitor and assess the future exposure of Shell's assets in the longer term to changing climatic conditions to establish the need for any further adaptation actions and related metrics.

The impact of physical climate change on Shell's operations is unlikely to be limited to the boundaries of Shell's assets. For example, the downstream transportation and distribution of Shell's products from its own operations could potentially be exposed to climate-related hazards that ultimately impact Shell's operations. The overall impact, including how supply chains, resource availability and markets may be affected, also needs to be considered for a holistic assessment of this risk. Shell's assets manage this risk as part of broad risk and threat management processes as required by Shell's Environment and Asset Management (SEAM) standards, part of the wider Shell Performance Framework.

5. Emission schemes and related environmental programmes

Emission trading and related schemes

In general, emission trading schemes (ETS) are mandated governmental schemes to control emission levels and enhance clean energy transition, allowing for the trading of emission certificates. In most ETS, governments set an emission cap for one or more sectors. Generally, entities in scope of the scheme are allowed to buy emission certificates to cover shortages or sell surplus emission certificates. In certain countries, emissions are priced through a carbon tax. For Shell, the most significant carbon pricing mechanisms are established in Europe, Canada and Singapore.

Biofuel programmes

Biofuel programmes are mandated governmental schemes that set binding national targets on the share of renewables in fuel consumption or measures on reducing GHG emissions by fuel suppliers. Biofuels are blended with existing fuels, such as gasoline and diesel, to reduce net emissions. The share of biofuels in the total sales mix of fuel is used to comply with regulatory requirements. This can be achieved by the blending of biofuels in refineries and/or distribution depots (self-blending), through import of biofuels (for jurisdictions that grant biofuels certificates at the point of import) or by the purchasing of certificates from third parties (for jurisdictions that have a tradable biofuel certificates mechanism). Biofuel programmes also include regulatory requirements to pay a levy for the combustion of fossil fuels, based on CO_2 emitted – mainly related to the German Fuel Emissions Trading Act (BEHG) which has applied since January 1, 2021.

Renewable power programmes

Renewable power programmes create a financial incentive to consume power that is sourced from renewable origins or require that a minimum percentage of power sold meets the green definition of the relevant standard. These regulations are typically accompanied by schemes supporting investments in the renewable technology. Renewable power programmes generally use certificates to monitor compliance, where renewable power certificates are granted for each MWh of energy generated that meets the predefined renewable criteria. Shell's compliance obligation under renewable power programmes comes primarily from energy supply and results from regulations applying in Europe, North America and Australia.

Cost of emission schemes and related environmental programmes recognised in the Consolidated Statement of Income

$ million

	2024	2023	2022
ETS and related schemes	381	493	493
Biofuels [A]	2,942	2,581	2,918
Renewable power	623	552	594
Total	3,946	3,626	4,005

[A] Represents the cost of biofuel certificates required for compliance purposes over and above those generated from self-blending activities.

Purchased environmental certificates (presented under Other intangible assets, see Note 11) [A]

$ million

	ETS and related schemes	Biofuels	Renewable power	Total
At January 1, 2024	441	1,805	145	2,391
Additions	299	3,146	417	3,862
Settlements	(392)	(2,804)	(411)	(3,607)
Other movements	(47)	(65)	(20)	(132)
At December 31, 2024	301	2,082	131	2,514
At January 1, 2023	440	1,601	160	2,201
Additions	396	2,955	486	3,837
Settlements	(413)	(2,783)	(451)	(3,647)
Other movements	18	32	(50)	–
At December 31, 2023	441	1,805	145	2,391

[A] Relates to environmental certificates held for compliance purposes.

5. Emission schemes and related environmental programmes continued

Obligation (presented under Other payables, see Note 20)

$ million

	ETS and related schemes	Biofuels	Renewable power	Total
At January 1, 2024				
Current	(498)	(3,012)	(343)	(3,853)
Non-current	–	(105)	(88)	(193)
	(498)	(3,117)	(431)	(4,046)
Additions	(1,051)	(2,981)	(612)	(4,644)
Additions covered by government grants	675 [A]			675
Settlements	453	3,011	467	3,931
Other movements	33	85	31	149
	110	115	(114)	111
At December 31, 2024				
Current	(388)	(2,594)	(536)	(3,518)
Non-current	–	(408)	(9)	(417)
	(388)	(3,002)	(545)	(3,935)
At January 1, 2023				
Current	(458)	(3,424)	(350)	(4,232)
Non-current	–	(422)	(56)	(478)
	(458)	(3,846)	(406)	(4,710)
Additions	(1,244)	(2,593)	(597)	(4,434)
Additions covered by government grants	762 [A]			762
Settlements	479	3,386	492	4,357
Other movements	(37)	(64)	80	(21)
	(40)	729	(25)	664
At December 31, 2023				
Current	(498)	(3,012)	(343)	(3,853)
Non-current	–	(105)	(88)	(193)
	(498)	(3,117)	(431)	(4,046)

[A] Emission certificates that were allocated free of charge at an equivalent fair value at grant date.

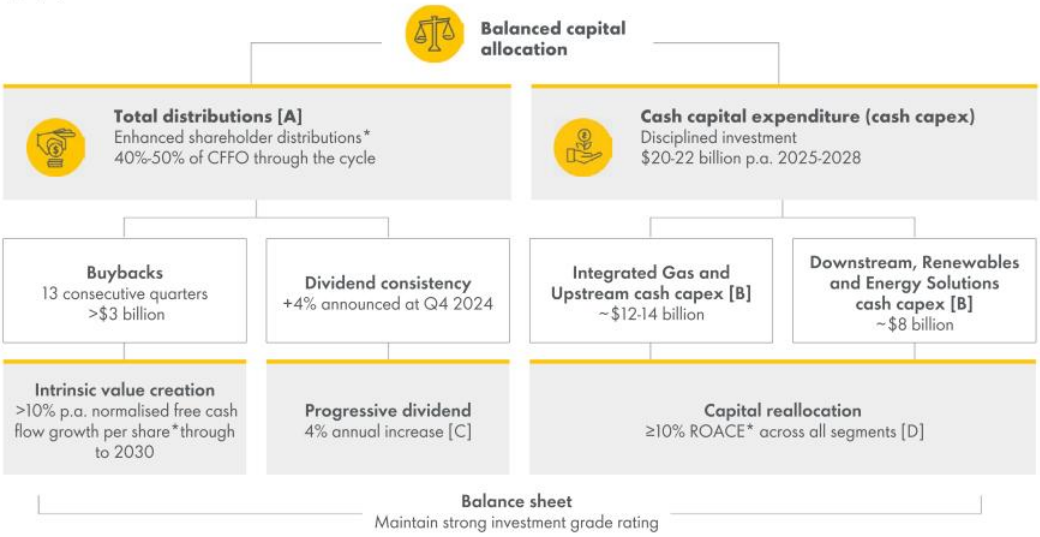
Environmental certificates acquired that are held for compliance purposes are recognised at cost under other intangible assets (see Note 11). In addition, a portfolio of environmental certificates is held for trading purposes and classified under inventory (see Note 2 and Note 17). Environmental certificates held for trading purposes can be redesignated for compliance purposes and then used to settle compliance obligations.

Cost recognised in the Consolidated Statement of Income represents the compliance cost associated with emissions or with products sold during the year. The liability at year-end represents the compliance cost recognised over current and past compliance periods to the extent not settled to date. Liabilities are settled in line with compliance periods, which depend on the scheme and may not coincide with the calendar year.

The figures present compliance schemes only, excluding voluntary activities.

6. Capital management

Shell manages its businesses to deliver strong cash flows to sustain its strategy and for profitable growth. Management's current priorities for applying Shell's cash are:



[A] Total shareholder distributions (dividends + share buybacks) based on cash generation, macro-outlook and balance sheet trajectory.
[B] The Integrated Gas and Upstream cash capex includes expenditures related to the Integrated Gas and Upstream segments. The Downstream, Renewables and Energy Solutions cash capex includes expenditures for the Marketing, Chemicals and Products, and Renewables and Energy Solutions segments. (See Note 7)
[C] Subject to Board approval as well as shareholder approval at the 2025 Annual General Meeting.
[D] Price normalised ROACE on an Adjusted Earnings plus non-controlling interest basis.
* Non-GAAP measure (see page 445).

7. Segment information

General information

Shell is an international energy company engaged in the principal aspects of the energy and petrochemical industries and reports its business through segments: Integrated Gas, Upstream, Marketing, Chemicals and Products, Renewables and Energy Solutions, and Corporate.

With effect from January 1, 2024, Wholesale Commercial Fuels forms part of Mobility with inclusion in the Marketing segment (previously Chemicals and Products segment). The change in segmentation reflects the increasing alignment between the economic characteristics of wholesale commercial fuels and other Mobility businesses, and is consistent with changes in the information provided to the Chief Executive Officer, who serves as the Chief Operating Decision Maker. Prior period comparatives have been revised to conform with current year presentation with an offsetting impact between the Marketing and the Chemicals and Products segments. Also, from January 1, 2024, Shell's longer-term innovation portfolio is managed centrally and hence reported as part of the Corporate segment (previously all other segments). Prior period comparatives have been revised to conform with current year presentation with an offsetting impact on all the other segments.

The Integrated Gas segment includes liquefied natural gas (LNG), conversion of natural gas into gas-to-liquids (GTL) fuels and other products. It includes natural gas and liquids exploration and extraction, and the operation of the upstream and midstream infrastructure necessary to deliver these to market. The segment also includes the marketing, trading and optimisation of LNG.

The Upstream segment includes exploration and extraction of crude oil, natural gas and natural gas liquids. It also markets and transports oil and gas, and operates the infrastructure necessary to deliver them to the market.

The Marketing segment comprises the Mobility, Lubricants, and Sectors & Decarbonisation businesses. The Mobility business operates Shell's retail network, including electric vehicle charging services and the wholesale commercial fuels business which provides fuels for transport, industry and heating. The Lubricants business produces, markets and sells lubricants for road transport and machinery used in manufacturing, mining, power generation, agriculture and construction. The Sectors & Decarbonisation business sells fuels, speciality products and services, including low-carbon energy solutions, to a broad range of commercial customers, including the aviation, marine and agricultural sectors.

The Chemicals and Products segment includes chemical manufacturing plants, with their own marketing network, and refineries, which turn crude oil and other feedstocks into a range of oil products which are moved and marketed around the world for domestic, industrial and transport use. The segment also includes the pipeline business, trading and optimisation of crude oil, oil products and petrochemicals, and oil sands activities (the extraction of bitumen from mined oil sands and its conversion into synthetic crude oil).

7. Segment information continued

The Renewables and Energy Solutions segment includes activities such as renewable power generation, the marketing and trading and optimisation of power and pipeline gas, as well as carbon credits and digitally enabled customer solutions. The segment also includes production and marketing of hydrogen, development of commercial carbon capture and storage hubs, investment in nature-based projects that avoid or reduce carbon emissions, and Shell Ventures, which invests in companies that work to accelerate the energy and mobility transformation.

The Corporate segment covers the non-operating activities supporting Shell. The segment comprises Shell's holdings and treasury organisation, its self-insurance activities, headquarters and central functions, and centrally managed longer-term innovation portfolio. All finance expense and income and related taxes are included in Corporate segment earnings rather than in the earnings of business segments.

Basis of segmental reporting

Sales between segments are based on prices generally equivalent to commercially available prices. Third-party revenue and non-current assets information by geographical area are based on the country of operation of the Group subsidiaries that report this information. Separate disclosure is provided for the UK as this is the Company's country of domicile.

Segment earnings are presented on a current cost of supplies basis (CCS earnings), which was the earnings measure used by the Chief Executive Officer for the purposes of making decisions about allocating resources and assessing performance. On this basis, the purchase price of volumes sold during the period is based on the current cost of supplies during the same period after making allowance for the tax effect. CCS earnings therefore exclude the effect of changes in the oil price on inventory carrying amounts.

Finance expense and income related to core financing activities, as well as related taxes, are included in the Corporate segment earnings rather than in the earnings of the business segments.

Information by segment on a current cost of supplies basis is as follows:

2024

$ million

	Integrated Gas	Upstream	Marketing	Chemicals and Products	Renewables and Energy Solutions	Corporate	Total
Revenue:							
Third-party	37,290	6,606	120,089	90,918	29,366	43	284,312
Inter-segment	8,715	39,939	4,938	38,381	4,971	–	96,944
Share of profit/(loss) of joint ventures and associates (CCS basis)	1,931	1,189	6	648	(807)	–	2,967
Interest and other income, of which:	48	609	(432)	121	242	1,136	1,724
Interest income	8	18	1	79	2	2,264	2,372
Net (losses)/gains on sale and revaluation of non-current assets and businesses	(100)	89	(399)	6	119	(3)	(288)
Other	140	502	(34)	36	121	(1,125)	(360)
Third-party and inter-segment purchases (CCS basis)	24,055	7,368	107,210	114,972	31,074	(3)	284,676
Operating expenses, of which:	4,442	9,790	10,681	8,392	2,915	697	36,917
Production and manufacturing expenses	4,153	9,351	1,322	6,605	1,934	14	23,379
Selling, distribution and administrative expenses	164	176	9,150	1,636	887	426	12,439
Research and development expenses	125	263	209	151	94	257	1,099
Exploration expenses	414	1,997	–	–	–	–	2,411
Depreciation, depletion and amortisation charge, of which:	6,150	11,223	3,866	4,700	907	26	26,872
Impairment losses	564	327	1,633	1,319	658	1	4,502 [A]
Impairment reversals	(9)	(75)	(1)	(114)	(134)	–	(333) [B]
Interest expense	189	806	56	70	6	3,660	4,787
Taxation charge/(credit) (CCS basis)	3,144	9,387	894	177	99	(209)	13,492
CCS earnings	9,590	7,772	1,894	1,757	(1,229)	(2,992)	16,792

[A] Impairment losses comprise Property, plant and equipment ($3,673 million), Goodwill ($510 million) and Other intangible assets ($319 million). (See Note 13).
[B] Impairment reversals comprise Property, plant and equipment ($333 million). (See Note 13).

7. Segment information continued

2023

$ million

	Integrated Gas	Upstream	Marketing [A]	Chemicals and Products [A]	Renewables and Energy Solutions	Corporate	Total	
Revenue:								
Third-party	37,645	6,475	130,559	97,080	44,819	42	316,620	
Inter-segment	11,560	41,230	5,299	42,816	4,707	–	105,612	[A]
Share of profit/(loss) of joint ventures and associates (CCS basis)	1,951	768	561	577	(96)	(3)	3,758	
Interest and other income, of which:	137	671	73	64	75	1,818	2,838	
Interest income	6	27	9	57	12	2,202	2,313	
Net gains/(losses) on sale and revaluation of non-current assets and businesses	(22)	209	1	(46)	110	5	257	
Other	153	435	63	53	(47)	(389)	268	
Third-party and inter-segment purchases (CCS basis)	27,356	7,890	118,912	123,337	40,170	15	317,680	[A]
Operating expenses, of which: [B]	4,809	9,830	11,142	9,598	3,763	818	39,960	
Production and manufacturing expenses	4,529	9,186	1,463	7,394	2,610	58	25,240	
Selling, distribution and administrative expenses [B]	154	326	9,427	2,022	1,058	446	13,433	
Research and development expenses [B]	126	318	252	182	95	314	1,287	
Exploration expenses	216	1,534	–	–	–	–	1,750	
Depreciation, depletion and amortisation charge, of which:	8,903	12,463	2,477	6,269	1,159	19	31,290	
Impairment losses	3,472	1,360	430	2,777	908	–	8,947	[C]
Impairment reversals	(324)	(206)	(1)	(90)	(141)	–	(762)	[D]
Interest expense	146	507	53	61	4	3,902	4,673	
Taxation charge/(credit) (CCS basis) [B]	2,806	8,380	851	(210)	1,320	47	13,194	
CCS earnings [B]	7,057	8,540	3,057	1,482	3,089	(2,944)	20,281	

[A] From January 1, 2024, Wholesale Commercial Fuels has been reallocated from the Chemicals and Products segment to the Marketing segment. Comparatives for the year 2023 have been reclassified accordingly for each of the above financial parameters to conform with current period presentation. The net impact on CCS earnings is $104 million.
[B] From January 1, 2024, costs for Shell's centrally managed longer-term innovation portfolio are reported as part of the Corporate segment. Comparatives for Corporate for the year 2023 have been reclassified accordingly to conform with current period presentation. The net impact on CCS earnings is $133 million with offsetting impact in all other segments.
[C] Impairment losses comprise Property, plant and equipment ($8,182 million), Goodwill ($635 million) and Other intangible assets ($130 million). (See Note 13).
[D] Impairment reversals comprise Property, plant and equipment ($627 million) and Other intangible assets ($135 million). (See Note 13).

7. Segment information continued

2022

$ million

	Integrated Gas	Upstream	Marketing [A]	Chemicals and Products [A]	Renewables and Energy Solutions	Corporate	Total
Revenue:							
Third-party	54,751	8,352	149,439	115,541	53,190	41	381,314
Inter-segment	18,412	52,285	6,195	48,999	6,791	–	132,682 [A]
Share of profit/(loss) of joint ventures and associates (CCS basis)	1,219	2,111	249	362	(7)	(4)	3,930
Interest and other income, of which:	(714)	726	(82)	222	57	706	915
Interest income	43	22	–	24	(2)	959	1,046
Net gains/(losses) on sale and revaluation of non-current assets and businesses	101	437	(169)	265	8	–	642
Other	(858) [C]	267	87	(67)	51	(253)	(773)
Third-party and inter-segment purchases (CCS basis)	37,785	10,666	140,368	147,069	57,024	(28)	392,884 [A]
Operating expenses, of which: [B]	5,226	10,321	10,149	9,564	3,547	669	39,476
Production and manufacturing expenses	4,907	9,676	1,293	7,100	2,520	22	25,518
Selling, distribution and administrative expenses [B]	207	327	8,631	2,303	972	443	12,883
Research and development expenses [B]	112	318	225	161	55	204	1,075
Exploration expenses	240	1,472	–	–	–	–	1,712
Depreciation, depletion and amortisation charge, of which:	2,211	10,334	2,027	3,162	777	18	18,529
Impairment losses	115	950	479	357	412	–	2,313 [D]
Impairment reversals	(3,449)	(2,504)	(151)	(73)	–	–	(6,177) [E]
Interest expense	84	345	47	21	2	2,682	3,181
Taxation charge/(credit) (CCS basis) [B]	5,901	14,078	918	928	(292)	(36)	21,497
CCS earnings [B]	22,221	16,258	2,292	4,380	(1,027)	(2,562)	41,562

[A] From January 1, 2024, Wholesale Commercial Fuels has been reallocated from the Chemicals and Products segment to the Marketing segment. Comparatives for the year 2023 have been reclassified accordingly for each of the above financial parameters to conform with current period presentation. The net impact on CCS earnings is $158 million.
[B] From January 1, 2024, costs for Shell's centrally managed longer-term innovation portfolio are reported as part of the Corporate segment. Comparatives for Corporate for the year 2023 have been reclassified accordingly to conform with current period presentation. The net impact on CCS earnings is $101 million with offsetting impact in all other segments.
[C] Includes the full write-down of the Nord Stream 2 loan amounting to $1,126 million as a result of the withdrawal from Russian oil and gas activities.
[D] Impairment losses comprise Property, plant and equipment ($1,799 million), Goodwill ($361 million) and Other intangible assets ($153 million). (See Note 13).
[E] Impairment reversals fully comprise Property, plant and equipment. (See Note 13).

Reconciliation of CCS earnings to income for the period

$ million

	2024	2023	2022
Income attributable to Shell plc shareholders	16,094	19,359	42,309
Income attributable to non-controlling interest	427	277	565
Income for the period	16,521	19,636	42,874
Current cost of supplies adjustment:			
Purchases	388	815	(1,714)
Taxation	(91)	(203)	444
Share of profit of joint ventures and associates	(26)	33	(42)
Current cost of supplies adjustment	271	645	(1,312)
Of which:			
Attributable to Shell plc shareholders	257	650	(1,196)
Attributable to non-controlling interest	14	(5)	(116)
CCS earnings	16,792	20,281	41,562
Of which:			
CCS earnings attributable to Shell plc shareholders	16,351	20,008	41,113
CCS earnings attributable to non-controlling interest	441	273	449

7. Segment information continued

Information by geographic area is as follows:

2024

$ million

	Europe	Asia, Oceania, Africa	USA	Other Americas	Total
Third-party revenue, by origin	92,480 [A]	98,343	65,089	28,400	284,312
Goodwill, other intangible assets, property, plant and equipment, joint ventures and associates at December 31	40,971 [B]	88,588	55,245	49,372	234,176

[A] Includes $28,011 million that originated from the UK.
[B] Includes $15,822 million located in the UK (excluding assets reclassified as held for sale). (See Note 19).

2023

$ million

	Europe	Asia, Oceania, Africa	USA	Other Americas	Total
Third-party revenue, by origin	118,135 [A]	99,967	70,291	28,227	316,620
Goodwill, other intangible assets, property, plant and equipment, joint ventures and associates at December 31	48,008 [B]	91,374	57,261	49,562	246,205

[A] Includes $44,815 million that originated from the UK.
[B] Includes $21,478 million located in the UK.

2022

$ million

	Europe	Asia, Oceania, Africa	USA	Other Americas	Total
Third-party revenue, by origin	135,975 [A]	126,643	87,085	31,611	381,314
Goodwill, other intangible assets, property, plant and equipment, joint ventures and associates at December 31	40,161 [B]	97,019	59,233	51,794	248,207

[A] Includes $50,236 million that originated from the UK.
[B] Includes $20,772 million located in the UK.

Cash capital expenditure

Cash capital expenditure is a measure used by the Chief Executive Officer for the purposes of making decisions about allocating resources and assessing performance.

2024

$ million

	Integrated Gas	Upstream	Marketing	Chemicals and Products	Renewables and Energy Solutions	Corporate	Total [A]
Capital expenditure	4,095	7,739	2,357	2,943	2,338	129	19,601
Investments in joint ventures and associates	672	150	88	347	138	9	1,404
Investments in equity securities	–	1	–	–	73	6	80
Cash capital expenditure	4,767	7,890	2,445	3,290	2,549	144	21,085

[A] See Consolidated Statement of Cash Flows.

7. Segment information continued

2023

$ million

	Integrated Gas	Upstream	Marketing [A]	Chemicals and Products [A]	Renewables and Energy Solutions	Corporate	Total [B]
Capital expenditure	3,491	8,249	5,741	2,928	2,314	270	22,993
Investments in joint ventures and associates	705	94	49	84	261	9	1,202
Investments in equity securities	–	–	–	2	106	89	197
Cash capital expenditure	4,196	8,343	5,790	3,014	2,681	368	24,392

[A] Revised to conform with reporting segment changes applicable from 2024.
[B] See Consolidated Statement of Cash Flows.

2022

$ million

	Integrated Gas	Upstream	Marketing [A]	Chemicals and Products [A]	Renewables and Energy Solutions	Corporate	Total [B]
Capital expenditure	3,433	8,020	4,674	3,688	2,610	175	22,600
Investments in joint ventures and associates	832	123	304	2	703	9	1,973
Investments in equity securities	–	–	–	1	156	103	260
Cash capital expenditure	4,265	8,143	4,978	3,691	3,469	287	24,833

[A] Revised to conform with reporting segment changes applicable from 2024.
[B] See Consolidated Statement of Cash Flows.

8. Revenue [A]

$ million

	2024	2023	2022
Crude oil	40,625	39,609	46,523
Oil products	129,554	144,985	173,840
Natural gas and NGL	19,309	28,010	42,598
LNG	30,923	32,976	44,967
Power	11,566	11,822	5,801
Lubricants	11,511	11,548	11,195
Chemicals products	8,529	8,360	11,524
Other [B]	22,330	23,703	33,158
Revenue from contracts with customers	274,347	301,013	369,606
Revenue from other sources	9,965	15,607	11,708
Total revenue	284,312	316,620	381,314

[A] Note 7 contains a detailed analysis of the total revenue from customer contracts and other sources, broken down by segment and geographic area.
[B] Other primarily includes sales of Naphtha, LPG, Condensate, (refined) Bitumen, and revenue from smaller sales of various other products.

Revenue from other sources related to fair value accounting of commodity derivatives

9. Interest and other income

$ million

	2024	2023	2022
Interest income	2,372	2,313	1,046
Dividend income (from investments in equity securities)	83	49	216
Net (losses)/gains on sale and revaluation of non-current assets and businesses	(288)	257	642
Net foreign exchange losses on financing activities	(1,025) [A]	(458)	(340)
Other	582	677	(649)
Total	1,724	2,838	915

[A] Net foreign exchange losses on financing activities include a $1,124 million loss from cumulative currency translation differences reclassified to profit and loss. This reclassification was mainly due to changes in the funding structure of Shell's UK businesses. These differences were previously recognised in equity as part of accumulated other comprehensive income.

Other includes amounts recognised in respect of sublease income from partners in joint operations (2024: $493 million, 2023: $418 million, 2022: $319 million).

In 2022, Other included the full write-down of the Nord Stream 2 loan amounting to $1,126 million as a result of Shell's withdrawal from Russian oil and gas activities.

10. Interest expense

$ million

	2024	2023	2022
Interest incurred and similar charges	2,800	2,669	1,971
Interest expense related to leases	1,722	1,772	1,724
Less: interest capitalised	(638)	(532)	(950)
Other net (gains)/losses on fair value and cash flow hedges of debt	(71)	45	(71)
Accretion expense	974	719	507
Total	4,787	4,673	3,181

The rate applied in determining the amount of interest capitalised in 2024 was 4.0% (2023: 4.0%; 2022: 4.0%).

11. Goodwill and other intangible assets

2024

$ million

		Other intangible assets			
	Goodwill	LNG off-take and sales contracts	Environmental certificates	Other	Total
Cost					
At January 1	18,542	9,734	2,391	9,642	21,767
Additions	155	–	3,862	594	4,456
Sales, retirements and other movements [A]	(195)	(3,147)	(3,668)	(180)	(6,995)
Currency translation differences	(220)	–	(71)	(258)	(329)
At December 31	18,282	6,587	2,514	9,798	18,899
Depreciation, depletion and amortisation, including impairments					
At January 1	1,882	6,751		4,763	11,514
Charge for the year [B]	510	590		744	1,334
Sales, retirements and other movements [A]	(101)	(3,147)		(169)	(3,316)
Currency translation differences	(41)	–		(113)	(113)
At December 31	2,250	4,194		5,225	9,419
Carrying amount at December 31	16,032	2,393	2,514	4,573 [C]	9,480

[A] Includes the reclassification of assets classified as held for sale. (See Note 19).
[B] Includes impairment losses and reversals (except for Goodwill). (See Note 13).
[C] Includes software ($1,013 million), power purchase agreements, retail customer relationships and trademarks.

11. Goodwill and other intangible assets continued

2023

$ million

		Other intangible assets			
	Goodwill	LNG off-take and sales contracts	Environmental certificates	Other	Total
Cost					
At January 1	17,557	9,833	2,201	8,158	20,192
Additions	1,436	–	3,837	1,721 [C]	5,558
Sales, retirements and other movements [A]	(506)	(99)	(3,714)	(376)	(4,189)
Currency translation differences	55	–	67	139	206
At December 31	18,542	9,734	2,391	9,642	21,767
Depreciation, depletion and amortisation, including impairments					
At January 1	1,518	6,060		4,470	10,530
Charge for the year [B]	635	790		442	1,232
Sales, retirements and other movements [A]	(296)	(99)		(222)	(321)
Currency translation differences	25	–		73	73
At December 31	1,882	6,751		4,763	11,514
Carrying amount at December 31	16,660	2,983	2,391	4,879 [D]	10,253

[A] Includes the reclassification of assets classified as held for sale. (See Note 19).
[B] Includes impairment losses and reversals. (See Note 13).
[C] Includes feedstock supply contracts and intellectual property rights ($948 million) from an acquisition in Marketing and software ($357 million) primarily in Integrated Gas and Marketing.
[D] Includes software ($829 million), power purchase agreements, retail customer relationships and trademarks.

Goodwill at December 31, 2024, related principally to the acquisition of BG Group plc in 2016, allocated to Integrated Gas ($4,945 million) and Upstream ($5,294 million) at the operating segment level, and to Pennzoil-Quaker State Company ($1,605 million), a lubricants business in the Marketing segment based largely in North America.

12. Property, plant and equipment

2024 [A]

$ million

	Exploration and production		Manufacturing, supply and distribution	Other	Total
	Exploration and evaluation	Production			
Cost					
At January 1	8,635	285,670	113,069	47,696	455,070
Additions	1,174	12,835	8,256	4,181	26,446
Sales, retirements and other movements [B]	(2,390)	(22,324)	(15,636)	(3,430)	(43,780)
Currency translation differences	(205)	(3,156)	(1,782)	(1,847)	(6,990)
At December 31	7,214	273,025	103,907	46,600	430,746
Depreciation, depletion and amortisation, including impairments					
At January 1	3,323	174,973	63,826	18,113	260,235
Charge for the year [C]	159	15,004	6,652	3,739	25,554
Sales, retirements and other movements [B]	(243)	(17,540)	(16,096)	(2,618)	(36,497)
Currency translation differences	(133)	(1,591)	(1,281)	(760)	(3,765)
At December 31	3,106	170,846	53,101	18,474	245,527
Carrying amount at December 31	4,108	102,179	50,806	28,126	185,219

[A] Includes right-of-use assets under leases. (See Note 22).
[B] Includes the reclassification of assets classified as held for sale. (See Note 19).
[C] Includes impairment losses and reversals. (See Note 13).

12. Property, plant and equipment continued

2023 [A]

$ million

	Exploration and production		Manufacturing, supply and distribution	Other	Total
	Exploration and evaluation	Production			
Cost					
At January 1	11,565	277,016	106,785	39,595	434,961
Additions	2,161	10,731	5,910	7,029	25,831
Sales, retirements and other movements [B]	(5,164)	(1,153)	(1,016)	(1,387)	(8,720)
Reclassifications [C]	–	(2,779)	527	2,252	–
Currency translation differences	73	1,855	863	207	2,998
At December 31	8,635	285,670	113,069	47,696	455,070
Depreciation, depletion and amortisation, including impairments					
At January 1	5,162	159,662	56,901	14,594	236,319
Charge for the year [D]	731	18,202	8,295	2,687	29,915
Sales, retirements and other movements [B]	(2,609)	(2,000)	(2,083)	(1,394)	(8,086)
Reclassifications [C]	–	(2,217)	63	2,154	–
Currency translation differences	39	1,326	650	72	2,087
At December 31	3,323	174,973	63,826	18,113	260,235
Carrying amount at December 31	5,312	110,697	49,243	29,583	194,835

[A] Includes right-of-use assets under leases. (See Note 22).
[B] Includes the reclassification of assets classified as held for sale. (See Note 19).
[C] Reclassifications of right-of-use assets. (See Note 22).
[D] Includes impairment losses and reversals. (See Note 13).

The carrying amount of property, plant and equipment at December 31, 2024, included $27,852 million (2023: $28,135 million) of assets under construction. This amount excludes exploration and evaluation assets. Assets under construction mainly include projects in Integrated Gas in Canada and Australia and projects in Upstream in the USA and Malaysia.

The carrying amount of exploration and production assets at December 31, 2024, included rights and concessions in respect of proved and unproved properties of $5,411 million (2023: $6,097 million). Exploration and evaluation assets principally comprise rights and concessions in respect of unproved properties and capitalised exploration drilling costs.

The total contractual commitments for the purchase and lease of property, plant and equipment at December 31, 2024, amounted to $7,815 million of which $2,914 million related to lease commitments.

Capitalised exploration drilling costs

$ million

	2024	2023	2022
At January 1	3,136	2,911	3,015
Additions pending determination of proved reserves	1,104	1,967	1,298
Amounts charged to expense	(1,622)	(868)	(881)
Reclassifications to productive wells on determination of proved reserves	(333)	(874)	(531)
Other movements [A]	(231)	–	10
At December 31	2,054	3,136	2,911

[A] Includes the reclassification of assets classified as held for sale. (See Note 19).

	Projects		Wells	
	Number	$ million	Number	$ million
Between 1 and 5 years	15	388	28	388
Between 6 and 10 years	14	778	22	720
Between 11 and 15 years	10	214	17	260
Between 16 and 20 years	3	34	4	46
Total [A]	42	1,414	71	1,414

[A] Number of projects increased by 13 as some of the individual wells moved to stand-alone projects.

Exploration drilling costs capitalised for periods greater than one year at December 31, 2024, analysed according to the most recent year of activity, are presented in the table above. These comprise $116 million relating to four projects where drilling activities were under way or firmly planned for the future, and $1,298 million relating to 38 projects awaiting development concepts.

13. Impairment of property, plant and equipment, goodwill and other intangible assets

Impairments

$ million

	2024	2023	2022
Impairment losses			
Goodwill	510	635	361
Intangible assets other than goodwill	319	130	153
Property, plant and equipment, of which [A]	3,673	8,182	1,799
Exploration and production	783	4,820	868
Manufacturing, supply and distribution	1,278	2,785	474
Other	1,612	577	457
Total [B]	4,502	8,947	2,313
Impairment reversals			
Intangible assets other than goodwill	–	135	–
Property, plant and equipment, of which [A]	333	627	6,177
Exploration and production	74	528	5,954
Manufacturing, supply and distribution	114	91	72
Other	145	8	151
Total [B]	333	762	6,177

[A] Includes right-of-use assets under leases. (See Note 22).
[B] See Note 7.

Discount rate and other assumptions

The discount rates applied in determining value in use reflect a current market assessment of the time value of money, adjusted for risks not included in forecast cash flows. The discount rate applied is based on a nominal post-tax weighted average cost of capital (WACC), derived from the following key assumptions:

WACC assumptions

Risk-free rate
Derived from a range of benchmark US Treasury yields of varying maturities, to reflect the range of useful economic lives of Shell's assets and to appropriately adjust, where relevant, for pricing anomalies and short-term volatility of specific tenors.

Cost of debt [A]
Derived from observable risk premiums on corporate debt issued by a group of comparable energy companies, adjusted for a blended statutory tax rate.

Cost of equity [A]
Calculated per the capital asset pricing model. Equity risk premiums are derived from a range of published sources, adjusted to reflect a beta derived from a peer group of comparable energy companies, and subsequently calibrated to ensure that total cost of equity is consistent with market practice.

[A] The peer group of comparable energy companies is tailored to reflect relevant integrated power companies (for power activities in the Renewables and Energy Solutions segment) and integrated oil and gas companies (for the rate applied to all other assets). The proportion of debt and equity in the WACC calculation reflects a target gearing ratio, tailored for power activities and oil and gas activities as appropriate.

This rate is reassessed throughout the reporting period, with adjustments made when changes in assumptions applied would lead to a change in an investor's expected rate of return on a portfolio of similar assets. This assessment considers a range of factors, including macroeconomic forecasts, the historical volatility of key assumptions and the level of risking reflected in cash flow forecasts, including the extent to which systemic risks have been reflected in Shell's Operating Plan, which forms the basis of forecast cash flows in determining value in use.

Cash flow projections used in the determination of value in use were made using management's forecasts of commodity prices, market supply and demand, forecast expenditures, potential costs associated with operational GHG emissions, product margins including forecast refining margins, chemical margins and expected production volumes (see Note 2). The level of risking reflected in these assumptions is a consideration in management's assessment of the discount rate to be applied in order to avoid duplication of systemic and asset-specific risking in calculating value in use, and to ensure the discount rate applied is commensurate with risks included in forecast cash flows.

The discount rate applied was a nominal post-tax WACC of 6% (2023: 6%) for the power activities in the Renewables and Energy Solutions segment and a nominal post-tax WACC of 7.5% (2023: 7.5%) for all other businesses. Management assessed the appropriateness of these discount rates as a result of rising bond yields towards the end of 2024. Management concluded that the discount rates remain appropriate and materially commensurate with other significant cash flow assumptions.

13. Impairment of property, plant and equipment, goodwill and other intangible assets continued

Recoverable value was predominantly assessed by reference to value in use in segments other than the Renewables and Energy Solutions segment. The pre-tax discount rates applied for value in use impairment testing vary according to the characteristics of the asset, including its useful life and cash flow profiles. The weighted average pre-tax discount rate applied in the recognition of impairment charges during the year was 9.0% for segments other than the Renewables and Energy Solutions segment.

The near-term commodity price assumptions applied in impairment testing were as follows:

Commodity price assumptions [A]

2024	2025	2026	2027	2028
Brent crude oil ($/b)	70	70	70	74
Henry Hub natural gas ($/MMBtu)	3.30	4.00	4.00	4.24

2023	2024	2025	2026	2027
Brent crude oil ($/b)	70	70	70	74
Henry Hub natural gas ($/MMBtu)	4.00	4.00	4.00	4.00

[A] Money of the day.

For periods after 2028, the real-term price assumptions applied were: $70 per barrel (/b) (2023: $70/b) for Brent crude oil, and a linear increase from $4.05 per million British thermal units (/MMBtu) to $5.00/MMBtu in 2048 (2023: $4.00/MMBtu) for Henry Hub natural gas.

Oil and gas price assumptions applied for impairment testing are reviewed and, where necessary, adjusted on a periodic basis. Reviews include comparison with available market data and forecasts that reflect developments in demand such as global economic growth, technology efficiency, policy measures and, in supply, consideration of investment and resource potential, cost of development of new supply, and behaviour of major resource holders.

For certain assets in the Chemicals and Products and Renewables and Energy Solutions segments, the recoverable value was determined by reference to fair value less costs of disposal. In determining fair value, adjustments are made to forecast cash flows to reflect assumptions used by market participants. These adjustments predominantly relate to the discount rate applied and commodity price assumptions. For certain assets in the Renewables and Energy Solutions segment, the valuation methodology incorporates other adjustments to reflect comparable transactions.

The total carrying value of property, plant and equipment, goodwill and other intangible assets at December 31, 2024, for which recoverable value was tested in 2024 by reference to fair value less costs of disposal was $0.9 billion related to assets in Renewables and Energy Solutions and $1 billion in Marketing. The majority of the assets for which the recoverable value was determined by reference to fair value less costs of disposal are related to assets classified as held for sale (see Note 19).

The total carrying value of property, plant and equipment, goodwill and other intangible assets at December 31, 2023, for which recoverable value was tested in 2023 by reference to fair value less costs of disposal was $2.6 billion related to assets in Renewables and Energy Solutions and $2.5 billion in Chemicals and Products. The weighted average post-tax discount rate applied to impairments recognised during 2023 is 12% for Renewables and Energy Solutions and 10% for Chemicals and Products.

Goodwill

Goodwill impairments of $510 million in 2024 are mainly recognised in Renewables and Energy Solutions, triggered by a portfolio choice regarding renewable generation assets in North America.

Goodwill impairments of $635 million in 2023 were mainly recognised in Renewables and Energy Solutions primarily related to an asset in North America, triggered by annual goodwill impairment testing reflecting factors including the impact of the deteriorated macro environment.

Property, plant and equipment

Exploration and production

Impairment losses recognised in Exploration and production in 2024 of $783 million related to various assets in Integrated Gas ($543 million) and Upstream ($240 million). Impairments recognised in Integrated Gas mainly related to an asset located in Australia, triggered by factors including revised price, production and cost estimates. Impairment losses recognised in Upstream principally relate to projects in North America and Europe, triggered by portfolio choices.

Impairment losses recognised in Exploration and production in 2023 of $4,820 million related to various assets in Integrated Gas ($3,472 million) and Upstream ($1,348 million). Impairments recognised in Integrated Gas mainly related to an asset located in North America, triggered by a change in the discount rate applied, and a project in Australia, triggered by factors including revised production estimates and regulatory changes. Impairment losses recognised in Upstream principally relate to projects in North America, Nigeria and the UK triggered by factors including revised reserves estimates and portfolio choices.

Manufacturing, supply and distribution

Impairment losses recognised in Manufacturing, supply and distribution in 2024 of $1,278 million mainly related to an energy and chemicals park located in Singapore, due to remeasurement of the fair value less costs of disposal triggered by a sales agreement reached, and to various smaller assets in Chemicals and Products.

13. Impairment of property, plant and equipment, goodwill and other intangible assets continued

Impairment losses recognised in Manufacturing, supply and distribution in 2023 of $2,785 million mainly related to chemical assets in Singapore in Chemicals and Products, triggered by lower expected chemical margins and associated with portfolio choices.

Other

Other impairment losses in 2024 of $1,612 million mainly related to the impairments in Marketing ($1,518 million), assets in Renewables and Energy Solutions ($52 million) and various smaller assets in Integrated Gas, Upstream and Chemicals and Products. The impairment in Marketing principally relates to a biofuels facility located in the Netherlands, triggered by a temporary pause of on-site construction work.

Other impairment losses in 2023 of $577 million related to various assets in Marketing ($292 million) and assets in Renewables and Energy Solutions mainly in Europe ($273 million).

Impairment reversals in 2024 of $333 million are mainly triggered by the reassessment of value in use in Renewables and Energy Solutions ($134 million) and divestments in Chemicals and Products ($114 million).

Impairment reversals in 2023 of $627 million were mainly triggered by the reassessment of fair value less costs of disposal in Integrated Gas ($325 million) and revised reserves estimates in Upstream ($203 million).

Impairment losses in 2022 mainly related to the withdrawal from Russia ($854 million), the classification of an Upstream asset as held for sale ($320 million) and an impairment of capital expenditure additions in fully impaired sites in Chemicals and Products ($257 million).

The recognition of impairment reversals in 2022 was mainly triggered by the revision of Shell's mid- and long-term commodity price assumptions reflecting the energy market demand and supply fundamentals. They are related to: i) Integrated Gas for $3,449 million, mainly relating to the Queensland Curtis LNG asset; and ii) Upstream for $2,504 million, mainly related to two offshore projects in Brazil and an asset in the Gulf of America.

Sensitivities

The main sensitivities in relation to value in use impairment assessment are the commodity price assumptions in Integrated Gas and Upstream, refining and chemical margins in Chemicals and Products, and discount rates in all segments.

Commodity price assumptions

A change of -10% or +10% in the commodity price assumptions over the entire cash flow projection period would ceteris paribus result in $5-9 billion in impairments or $2-5 billion in impairment reversal, respectively, in Integrated Gas and Upstream.

Refining margins

Refining margins applied for impairment testing by reference to value in use are at an average of $10/bbl. A change of -$1/bbl or +$1/bbl in long-term refining margins over the entire cash flow projection period would ceteris paribus result in no impairments or up to $0.5 billion in impairment reversal, respectively, in Chemicals and Products.

Chemical margins

Chemical margins applied for impairment testing by reference to value in use are at an average of $197.5/tonne. A change of -$30/tonne or +$30/tonne in long-term chemical margins over the entire cash flow projection period would ceteris paribus result in up to $0.5 billion in impairments or no impairment reversal, respectively, in Chemicals and Products.

Discount rates

A change of +1% in the discount rate would ceteris paribus result in $1-3 billion in impairments in Integrated Gas and Upstream, and would have no significant impact in other segments.

Where applicable, the above sensitivities include impairment charges that would arise in respect of associates and joint ventures. Where carrying values have been supported by reference to fair value less costs of disposal, recoverable amounts are less sensitive to Shell's planning assumptions. This is on the basis that key assumptions (including discount rates and commodity prices) have been adjusted to reflect those used by market participants.

In calculating recoverable value, key assumptions are not determined in isolation, to ensure relevant interdependencies are appropriately reflected. In particular, management considers the relationship between discount rates, forecast commodity prices and cash flow risking to ensure impairment testing assumptions result in an implicit expected return which is balanced and appropriate for the asset under review. Each of the sensitivities described above has been tested under a ceteris paribus assumption where all other factors remain unchanged, and as such does not reflect the potential offsetting effects of corresponding changes in other assumptions.

14. Joint ventures and associates

Shell share of comprehensive income of joint ventures and associates

$ million

	2024			2023			2022		
	Joint ventures	Associates	Total	Joint ventures	Associates	Total	Joint ventures	Associates	Total
Income for the period	970	2,023	2,993 [A]	1,619	2,106	3,725	2,589	1,383 [B]	3,972
Other comprehensive (loss)/income for the period	(71)	–	(71)	(183)	–	(183)	21	–	21
Comprehensive income for the period	899	2,023	2,922	1,436	2,106	3,542	2,610	1,383	3,993

[A] Includes impairment charges of $873 million, mainly related to joint ventures and associates in the Renewables and Energy Solutions segment.
[B] Includes an impairment charge of $1,614 million related to Sakhalin-2 following the withdrawal from Russia.

Carrying amount of interests in joint ventures and associates

$ million

	Dec 31, 2024			Dec 31, 2023		
	Joint ventures	Associates	Total	Joint ventures	Associates	Total
Net assets	15,783	7,662	23,445	17,382	7,075	24,457

Transactions with joint ventures and associates [A]

$ million

	2024	2023	2022
Sales and charges to joint ventures and associates	9,652	10,223	12,230
Purchases and charges from joint ventures and associates	13,076	15,084	22,286

[A] Includes 19% (2023: 25%) of sales and 14% (2023: 19%) purchases in transactions with one joint venture operating in the oil trading business.

These transactions principally comprise sales and purchases of goods and services in the ordinary course of business. Related balances outstanding at December 31, 2024, and 2023, are presented in Notes 16 and 20.

Other arrangements in respect of joint ventures and associates

$ million

	Dec 31, 2024	Dec 31, 2023
Commitments to make purchases from joint ventures and associates [A]	1,078	1,397
Commitments to provide debt or equity funding to joint ventures and associates	323	405

[A] Commitments to make purchases from joint ventures and associates mainly relate to contracts associated with LNG processing fees and transportation capacity. Shell has other purchase obligations related to joint ventures and associates that are not fixed or determinable and are principally intended to be resold in a short period of time through sales agreements with third parties. These include long-term LNG and natural gas purchase commitments and commitments to purchase refined products or crude oil at market prices.

15. Investments in securities

Investments in securities

		$ million
	Dec 31, 2024	Dec 31, 2023
Equity securities:	1,104	1,605
Equity securities at fair value through other comprehensive income	1,104	1,605
Debt securities:	1,151	1,641
Debt securities at amortised cost	37	28
Debt securities at fair value through other comprehensive income	1,017	1,285
Debt securities at fair value through profit or loss	97	328
Total	2,255	3,246
At fair value		
Measured by reference to prices in active markets for identical assets	1,197	1,983
Measured by reference to other observable inputs	95	92
Measured using predominantly unobservable inputs	926	1,143
Total	2,218	3,218
At cost	37	28
Total	2,255	3,246

As at December 31, 2024, investments included equity securities comprising interests in which Shell has no significant influence; debt securities, principally comprising a portfolio required to be held by the Company's internal insurance entities as security for their activities; and assets held in escrow in relation to the Group's UK pension arrangements.

Investments in securities measured using predominantly unobservable inputs [A]

		$ million
	2024	2023
At January 1	1,143	1,299
Losses recognised in other comprehensive income	(16)	(126)
Purchases	63	146
Sales	(260)	(207)
Other movements	(4)	31
At December 31	926	1,143

[A] Based on expected dividend flows, adjusted for country and other risks as appropriate and discounted to their present value.

16. Trade and other receivables

$ million

	Dec 31, 2024		Dec 31, 2023	
	Current	Non-current	Current	Non-current
Trade receivables	31,041	–	36,273	–
Lease receivables	189	875	188	1,032
Other receivables	8,014	3,528	9,642	2,801
Amounts due from joint ventures and associates	903	152	1,014	278
Prepayments and deferred charges	5,713	1,463	6,156	2,187
Total	45,860	6,018	53,273	6,298

The fair value of financial assets included above approximates the carrying amount and was determined from predominantly unobservable inputs.

Other receivables at December 31, 2024, included current indirect tax receivables of $1.5 billion (2023: $1.5 billion), government subsidies of $795 million (2023:$484 million), non-current income tax receivables of $680 million (2023: $568 million) and current income tax receivables of $391 million (2023: $558 million).

Provisions for impairments deducted from trade and other receivables amounted to $1,253 million at December 31, 2024 (2023: $1,251 million).

Allowance for expected credit losses – trade receivables

Shell uses a provision matrix to calculate expected credit losses (ECLs) for trade receivables. The provision matrix is initially based on Shell's historical observed default rates. Shell calculates the ECL to adjust the historical credit loss experienced with forward-looking information. The ECL at December 31, 2024, was $113 million (2023: $185 million), which represents 0.36-0.51% (2023: 0.51-0.54%) of all trade receivables.

A loss allowance provision of $414 million (2023: $415 million) was established in addition to all other impairments to trade receivables as at December 31, 2024, that are outside of the provision matrix calculations.

Lease receivables

Lease contracts where Shell is the lessor are classified as finance leases or operating leases. Receivables for lease contracts classified as finance leases are as follows:

$ million

	Dec 31, 2024	Dec 31, 2023
Less than one year	234	238
Between 1 and 5 years	732	848
5 years and later	316	453
Total undiscounted lease payments receivable	1,282	1,539
Unearned finance income	218	260
Net investment in leases	1,064	1,279

In addition, at December 31, 2024, Shell is entitled to future contractual payments under operating leases of $277 million (2023: $312 million).

17. Inventories

$ million

	Dec 31, 2024	Dec 31, 2023
Oil, gas and chemicals	20,211	22,232
Environmental certificates	1,602	2,108
Materials	1,613	1,679
Total	23,426	26,019

Inventories at December 31, 2024, included write-downs to net realisable value of $483 million (2023: $1,567 million).

18. Cash and cash equivalents

$ million

	Dec 31, 2024	Dec 31, 2023
Cash	5,551	5,886
Short-term bank deposits	10,706	6,590
Money market funds, reverse repos and other cash equivalents	22,853	26,298
Total	39,110	38,774

In 2024, cash continued to be invested with an emphasis on capital preservation. Information about credit risk is presented in Note 26. Included in cash and cash equivalents at December 31, 2024, were amounts totalling $1,274 million (2023: $460 million) subject to currency controls or other legal restrictions. The increase mainly relates to cash recognised in respect of joint arrangements.

19. Assets held for sale

$ million

	Dec 31, 2024			Dec 31, 2023 [A]		
	Current	Non-current	Total	Current	Non-current	Total
Intangible assets	–	67	67	–	71	71
Property, plant and equipment	–	8,283	8,283	–	250	250
Joint ventures and associates	–	–	–	–	19	19
Deferred tax	–	–	–	–	10	10
Retirement benefits	–	–	–	–	1	1
Trade and other receivables	276	47	323	103	34	137
Derivative financial instruments	4	–	4	–	–	–
Inventories	1,180	–	1,180	463	–	463
Assets classified as held for sale	1,460	8,397	9,857	566	385	951
Debt	49	575	624	2	82	84
Trade and other payables	476	8	484	94	–	94
Deferred tax	–	2,042	2,042	–	–	–
Retirement benefits	–	–	–	–	53	53
Decommissioning and other provisions	134	2,919	3,053	7	68	75
Income taxes payable	–	–	–	1	–	1
Liabilities directly associated with assets classified as held for sale	659	5,544	6,203	104	203	307

[A] In 2024, Shell ceased to classify an energy and chemicals park in Europe in Chemicals and Products as held for sale as it no longer met the criteria. All other assets classified as held for sale at December 31, 2023, were sold in 2024.

At December 31, 2024, assets held for sale mainly related to Shell's UK offshore oil and gas assets in Upstream, and mining interests in North America and an energy and chemicals park in Singapore, both in Chemicals and Products. The disposal of assets classified as held for sale at December 31, 2024, are expected to be completed in 2025.

20. Trade and other payables

$ million

	Dec 31, 2024		Dec 31, 2023	
	Current	Non-current	Current	Non-current
Trade payables	29,767	–	34,591	–
Other payables [A]	9,838	2,990	9,887	2,835
Sales taxes, excise duties and similar levies	3,439	–	3,105	–
Amounts due to joint ventures and associates	6,410	67	7,519	33
Accruals and deferred income	11,239	233	13,135	235
Total	60,693	3,290	68,237	3,103

[A] Includes obligations under environmental compliance schemes of $3,935 million as at December 31, 2024 (2023: $4,046 million). (See Note 5).

The fair value of financial liabilities included above approximates the carrying amount and was determined from predominantly unobservable inputs.

Other payables include amounts due to joint arrangement partners and in respect of other project-related items.

Information about offsetting, collateral and liquidity risk is presented in Note 26.

21. Debt

Debt

$ million

	Dec 31, 2024			Dec 31, 2023		
	Debt (excluding lease liabilities)	Lease liabilities [A]	Total	Debt (excluding lease liabilities)	Lease liabilities [A]	Total
Current debt:	6,920	4,710	11,630	5,288	4,643	9,931
Short-term debt	642		642	845		845
Long-term debt due within 1 year	6,278	4,710	10,988	4,443	4,643	9,086
Non-current debt	41,456	23,992	65,448	48,544	23,066	71,610
Total	48,376	28,702	77,078	53,832	27,709	81,541

[A] Further analysis of lease liabilities is provided in Note 22.

Net debt is the sum of current and non-current debt, less cash and cash equivalents, adjusted for the fair value of derivative financial instruments used to hedge the volatility caused by fluctuations in foreign exchange and interest rates relating to debt, and associated collateral balances. Net debt is a non-GAAP measure, providing additional information to help demonstrate the economic impacts of debt, associated hedges, and cash and cash equivalents.

Net debt

$ million

(Asset)/liability

	Current debt	Non-current debt	Derivative financial instruments	Cash and cash equivalents (see Note 18)	Net debt*
At January 1, 2024	9,931	71,610	775	(38,774)	43,542
Cash flow	(9,653)	35	(594)	(1,097)	(11,309)
Lease additions [A]	763	5,083			5,846
Other movements	10,909	(10,040)	(319)	–	550
Currency translation differences and foreign exchange losses/(gains)	(320)	(1,240)	979	761	180
At December 31, 2024	11,630	65,448	841	(39,110)	38,809
At January 1, 2023	9,001	74,794	1,288	(40,246)	44,837
Cash flow	(9,617)	(215)	723	1,778	(7,331)
Lease additions [A]	1,021	3,321			4,342
Other movements	9,619	(7,184)	(481)	–	1,954
Currency translation differences and foreign exchange (gains)/losses	(93)	894	(755)	(306)	(260)
At December 31, 2023	9,931	71,610	775	(38,774)	43,542

[A] Further analysis of lease liabilities is provided in Note 22.

Borrowing facilities and amounts undrawn

$ million

	Facility		Amount undrawn	
	Dec 31, 2024	Dec 31, 2023	Dec 31, 2024	Dec 31, 2023
CP programmes	20,000	20,000	20,000	20,000
EMTN programme	N/A	unlimited	N/A	N/A
US shelf registration	unlimited	unlimited	N/A	N/A
Committed credit facilities	8,000	9,920	8,000	9,920

* Non-GAAP measure (see page 445).

21. Debt continued

During 2024, Shell had access to international debt capital markets via two commercial paper (CP) programmes, a US universal shelf (US shelf) registration and a Euro medium-term note (EMTN) programme. Issuances under the CP programmes are supported by a committed credit facility and cash.

Under the CP programmes, Shell can issue debt of up to $10,000 million with maximum maturities ranging between 183 days and 364 days depending on the form of the notes issued; and $10,000 million with maturities not exceeding 397 days.

The US shelf registration provides Shell with the flexibility to issue debt securities, ordinary shares, preferred shares and warrants. The registration is updated once every three years and was last updated in December 2023. During 2024, no debt was issued under this registration (2023: no debt issued).

The EMTN programme lapsed in November 2024 and will be renewed during 2025. During 2024, no debt was issued under this programme (2023: no debt issued).

On December 13, 2019, Shell refinanced its revolving credit facility (RCF), which is linked to the Secured Overnight Financing Rate (SOFR), at pre-agreed margins. Shell elected not to extend the short-dated tranche of $1,920 million in 2024. The remaining $8,000 million expires in 2026 (2023: $8,000 million expiring in 2026). The terms and availability are not conditional on Shell's financial ratios nor its credit ratings. The interest and fees related to these facilities are linked to Shell's progress towards reaching its short-term Net Carbon Intensity target.

The following tables compare contractual cash flows for debt, excluding lease liabilities at December 31, with the carrying amount in the Consolidated Balance Sheet. Contractual amounts reflect the effects of changes in foreign exchange rates; differences from carrying amounts reflect the effects of discounting, premiums and, where fair value hedge accounting is applied, fair value adjustments. Interest is estimated assuming that interest rates applicable to variable-rate debt remain constant and there is no change in aggregate principal amounts of debt other than repayment at scheduled maturity, as reflected in the table.

2024

$ million

	Contractual payments								
	Less than 1 year	Between 1 and 2 years	Between 2 and 3 years	Between 3 and 4 years	Between 4 and 5 years	5 years and later	Total	Difference from carrying amount	Carrying amount
Bonds	6,036	3,792	2,344	5,207	2,333	27,369	47,081	(395)	46,686
EMTN	3,286	1,042	2,344	3,707	833	6,469	17,681	(260)	17,421
US shelf	2,750	2,750	–	1,500	1,500	20,900	29,400	(135)	29,265
Bank and other borrowings	885	169	69	289	32	246	1,690	–	1,690
Total (excluding interest)	6,921	3,961	2,413	5,496	2,365	27,615	48,771	(395)	48,376
Interest	1,437	1,265	1,184	1,162	1,055	12,214	18,317		

2023

$ million

	Contractual payments								
	Less than 1 year	Between 1 and 2 years	Between 2 and 3 years	Between 3 and 4 years	Between 4 and 5 years	5 years and later	Total	Difference from carrying amount	Carrying amount
Bonds	4,292	6,194	3,856	2,489	5,442	30,049	52,322	(567)	51,755
EMTN	3,042	3,444	1,106	2,489	3,942	7,649	21,672	(414)	21,258
US shelf	1,250	2,750	2,750	–	1,500	22,400	30,650	(153)	30,497
Bank and other borrowings	1,060	230	73	346	53	316	2,078	(1)	2,077
Total (excluding interest)	5,352	6,424	3,929	2,835	5,495	30,365	54,400	(568)	53,832
Interest	1,569	1,452	1,285	1,207	1,177	13,366	20,056		

Interest rate swaps have been entered into against certain fixed rate debt affecting the effective interest rate on these balances (see Note 26). The fair value of debt excluding lease liabilities at December 31, 2024, was $44,119 million (2023: $50,866 million), mainly determined from the prices quoted for those securities. The difference between the fair value of debt and the carrying amount is predominantly related to the difference between the fixed rate and the current market rate.

22. Leases

Shell has lease contracts in Integrated Gas and Upstream, principally for floating production storage and offloading units, pipeline assets, subsea equipment, drilling and ancillary equipment, service vessels, LNG vessels and land and buildings; in Marketing, principally for land and retail sites; in Chemicals and Products, principally for plant pipeline and machinery, tankers and storage capacity; in Renewables and Energy Solutions, principally for power generation assets, storage capacity and land; and in Corporate, principally for land and buildings. Shell's obligations under its leases are secured on the leased assets.

Right-of-use assets

Right-of-use assets are included in property, plant and equipment for the following amounts:

2024

$ million

	Production	Manufacturing, supply and distribution	Other [C]	Total
Cost				
At January 1	12,597	19,485	12,151	44,233
Additions	1,669	4,912	660	7,241
Sales, retirements and other movements [A]	(554)	(565)	(2,463)	(3,582)
Currency translation differences	(147)	(94)	(421)	(662)
At December 31	13,565	23,738	9,927	47,230
Depreciation, depletion and amortisation, including impairments				
At January 1	7,146	8,049	4,959	20,154
Charge for the year [B]	1,525	2,837	1,066	5,428
Sales, retirements and other movements [A]	(891)	(1,552)	(2,130)	(4,573)
Currency translation differences	(26)	(29)	(177)	(232)
At December 31	7,754	9,305	3,718	20,777
Carrying amount at December 31	5,811	14,433	6,209	26,453

[A] Includes the reclassification of right-of-use assets to assets held for sale.
[B] Includes impairment losses ($438 million) and reversals ($11 million).
[C] Other mainly includes lease contracts for retail sites, land, and buildings in Marketing, Renewables and Energy Solutions and Corporate.

2023

$ million

	Production	Manufacturing, supply and distribution	Other [D]	Total
Cost				
At January 1	14,675	16,463	9,899	41,037
Additions	790	2,442	1,308	4,540
Sales, retirements and other movements [A]	(116)	29	(1,040)	(1,127)
Reclassifications [B]	(2,779)	527	2,252	–
Currency translation differences	27	24	(268)	(217)
At December 31	12,597	19,485	12,151	44,233
Depreciation, depletion and amortisation, including impairments				
At January 1	8,275	6,695	2,950	17,920
Charge for the year [C]	1,382	2,428	998	4,808
Sales, retirements and other movements [A]	(303)	(1,149)	(1,042)	(2,494)
Reclassifications [B]	(2,217)	63	2,154	–
Currency translation differences	9	12	(101)	(80)
At December 31	7,146	8,049	4,959	20,154
Carrying amount at December 31	5,451	11,436	7,192	24,079

[A] Includes the reclassification of right-of-use assets to assets held for sale.
[B] Reclassification from Production to Manufacturing, supply and distribution and Other.
[C] Includes impairment losses ($72 million) and reversals ($2 million).
[D] Other mainly includes lease contracts for retail sites, land, and buildings in Marketing, Renewables and Energy Solutions and Corporate.

22. Leases continued

Lease arrangements

Shell also has certain lease contracts of items with lease terms of 12 months or less. For these lease contracts, Shell applies the short-term lease recognition exemption. Lease expenses not included in the measurement of lease liability are:

Lease expenses not included in the measurement of lease liability

$ million

	2024	2023
Expense relating to short-term leases	360	495
Expense relating to variable lease payments	1,448	1,415

The total cash outflow in respect of leases representing repayments of principal and payment of interest in 2024 was $6,891 million (2023: $7,512 million), recognised in Repayment and interest paid in the Consolidated Statement of Cash Flows.

The future lease payments under lease contracts and the carrying amounts at December 31, by payment date are as follows:

2024

$ million

	Contractual lease payments	Interest	Lease liabilities
Less than 1 year	6,367	1,657	4,710
Between 1 and 5 years	15,772	4,662	11,110
5 years and later	19,814	6,932	12,882
Total	41,953 [A]	13,251	28,702

[A] Future cash outflows in respect of leases may differ from lease liabilities recognised due to future decisions that may be taken by Shell in respect of the use of leased assets. These decisions may result in variable lease payments being made. In addition, Shell may reconsider whether it will exercise extension options or termination options, which are not reflected in the lease liabilities. There is no exposure to these potential additional payments in excess of the recognised lease liabilities until these decisions have been taken by Shell.

2023

$ million

	Contractual lease payments	Interest	Lease liabilities
Less than 1 year	6,182	1,539	4,643
Between 1 and 5 years	16,105	4,443	11,662
5 years and later	16,794	5,390	11,404
Total	39,081	11,372	27,709

23. Taxation

Taxation charge

$ million

	2024	2023	2022
Current tax:			
Charge in respect of current period	13,648	13,066	16,383
Adjustments in respect of prior periods	58	(422)	(947)
Total	13,706	12,644	15,436
Deferred tax:			
Relating to the origination and reversal of temporary differences, tax losses and credits	(491)	(305)	5,196
Relating to changes in tax rates and legislation	112	242	785
Adjustments in respect of prior periods	74	410	524
Total	(305)	347	6,505
Total taxation charge	13,401	12,991	21,941

23. Taxation continued

Adjustments in respect of prior periods relate to events in the current period and reflect the effects of changes in rules, facts or other factors compared with those used in establishing the current tax position or deferred tax balance in prior periods.

In 2022, adjustments in respect of changes in tax rates and legislation of $524 million principally relate to the introduction of the UK Energy Profits Levy Act 2022 (EPL).

Pillar Two

$ million

	2024	2023	2022
Taxation charge	13,401	12,991	21,941
Of which:			
Income tax excluding Pillar Two income tax	13,150	12,991	21,941
Income tax related to Pillar Two income tax	251	–	–

On June 20, 2023, the UK substantively enacted Pillar Two Model Rules, effective as from January 1, 2024. The Pillar Two rules are designed to ensure large multinational enterprises (meeting certain conditions) pay a minimum level of tax on the income arising in each jurisdiction where they operate. Shell has applied the exception, as set out in the amendments to IAS 12 Income Taxes, to recognising and disclosing information about deferred tax assets and liabilities related to Pillar Two income taxes.

Reconciliation of applicable tax charge at statutory tax rates to taxation charge

$ million

	2024	2023	2022
Income before taxation	29,922	32,627	64,815
Less: share of profit of joint ventures and associates	(2,993)	(3,725)	(3,972)
Income before taxation and share of profit of joint ventures and associates	26,929	28,902	60,843
Applicable tax charge at standard statutory tax rates	11,782	11,921	22,170
Adjustments in respect of prior periods	132	(12)	(424)
Tax effects of:			
Expenses not deductible for tax purposes	747	1,225	849
Incentives for investment and development	(374)	(553)	(1,388)
Derecognition/(recognition) of deferred tax assets	255	243	(457)
Changes in tax rates and legislation	112	242	785
Income not subject to tax at standard statutory rates	360	(213)	234
Disposals	(134)	(113)	39
Exchange rate differences	(12)	89	(102)
Other reconciling items	533	162	235
Taxation charge	13,401	12,991	21,941
Weighted average of statutory tax rates [A]	44%	41%	36%
Effective tax rate based on income before taxation [B]	45%	40%	34%
Effective tax rate based on income before taxation excluding share of profit of joint ventures and associates [C]	50%	45%	36%

[A] The weighted average of statutory tax rates is calculated by dividing the applicable tax charge at standard statutory tax rates by Income before taxation and share of profit of joint ventures and associates.
[B] The effective tax rate based on income before taxation is calculated by dividing Taxation charge by Income before taxation.
[C] The effective tax rate based on income before taxation excluding share of profit of joint ventures and associates is calculated by dividing Taxation charge by Income before taxation and share of profit of joint ventures and associates.

23. Taxation continued

Compared with 2023, the increase in the weighted average of statutory tax rates mainly reflects a higher proportion of total earnings subject to relatively higher tax rates in Upstream.

2024 – Deferred tax

$ million

Deferred tax asset	Decommissioning and other provisions	Property, plant and equipment	Tax losses and credits carried forward	Retirement benefits	Other	Total
At January 1, 2024	7,577	1,584	4,280	1,750	4,432	19,623
Credit/(charge) to income	528	254	(388)	–	799	1,193
Currency translation differences	(94)	(7)	(129)	(77)	(31)	(338)
Other comprehensive income	–	–	33	(162)	46	(83)
Other movements	(1,170)	(17)	(229)	343	(11)	(1,084)
At December 31, 2024	6,841	1,814	3,567	1,854	5,235	19,311
Deferred tax liability						
At January 1, 2024		(21,996)		(2,880)	(3,640)	(28,516)
(Charge)/credit to income		(799)		(138)	49	(888)
Currency translation differences		231		386	68	685
Other comprehensive income		(2)		(267)	(15)	(284)
Other movements		3,652		(351)	(257)	3,044
At December 31, 2024		(18,914)		(3,250)	(3,795)	(25,959)
Net deferred tax liability at December 31, 2024						(6,648)
Deferred tax asset/(liability) as presented in the balance sheet at December 31, 2024						
Deferred tax asset						6,857
Deferred tax liability						(13,505)

2023 – Deferred tax

$ million

Deferred tax asset	Decommissioning and other provisions	Property, plant and equipment	Tax losses and credits carried forward	Retirement benefits	Other	Total
At January 1, 2023	6,049	4,290	6,446	1,977	4,827	23,589
(Charge)/credit to income	61	(680)	(2,025)	27	557	(2,060)
Currency translation differences	89	18	66	28	(11)	190
Other comprehensive income	–	–	(5)	104	23	122
Other movements	1,378	(2,044)	(202)	(386)	(964)	(2,218)
At December 31, 2023	7,577	1,584	4,280	1,750	4,432	19,623
Deferred tax liability						
At January 1, 2023		(24,818)		(3,189)	(3,953)	(31,960)
Credit/(charge) to income		2,109		(228)	(168)	1,713
Currency translation differences		(173)		227	–	54
Other comprehensive income		(3)		(90)	(3)	(96)
Other movements		889		400	484	1,773
At December 31, 2023		(21,996)		(2,880)	(3,640)	(28,516)
Net deferred tax asset at December 31, 2023						(8,893)
Deferred tax asset/(liability) as presented in the balance sheet at December 31, 2023						
Deferred tax asset						6,454
Deferred tax liability						(15,347)

The presentation in the balance sheet takes into consideration the offsetting of deferred tax assets and deferred tax liabilities within the same tax jurisdiction, where this is permitted. The overall deferred tax position in a particular tax jurisdiction determines if a deferred tax balance related to that jurisdiction is presented within deferred tax assets or deferred tax liabilities.

23. Taxation continued

Other movements in deferred tax assets and liabilities are mainly related to assets classified as held for sale and liabilities directly associated with assets classified as held for sale (see note 19).

The deferred tax category Other primarily includes deferred tax positions in respect of leases, financial assets and liabilities, inventories, intangible assets other than goodwill and investments in subsidiaries, joint ventures and associates.

The deferred tax category property, plant and equipment also includes deferred tax positions in respect of investments in partnerships in the USA which are considered pass-through entities by its parent for tax purposes.

Deferred tax assets of $6,857 million (2023: $6,454 million) are recognised only to the extent it is considered probable that those assets will be recoverable. This involves an assessment of when those assets are likely to be recovered, and a judgement as to whether or not there will be sufficient taxable profits available to offset the assets. It is considered probable based on business forecasts that such taxable profits will be available. For Marketing, as well as Chemicals and Products, additional judgement is required; in some jurisdictions the assessment of forecasted taxable profits resulting in deferred tax asset recognition of $315 million (2023: $455 million) extends for an additional 10 years beyond Shell's regular 10-year planning horizon. In those situations, additional risking has been applied to the forecast of taxable profits. For Integrated Gas and Upstream, deferred tax assets recognised are expected to be recovered within the period of production of each asset. For deferred tax assets of $625 million (2023: $241 million) as at December 31, 2024, this period extends beyond 10 years.

The amount of deferred tax assets which are dependent on future taxable profits not arising from the reversal of existing deferred tax liabilities, and which relate to tax jurisdictions where Shell has suffered a loss in the current or preceding year, was $4,022 million at December 31, 2024 (2023: $2,027 million). The increase compared with 2023 is primarily attributable to a higher number of entities which have generated losses in 2024.

Expected expiration of unused tax losses, unrecognised deductible temporary differences and tax credits

$ million

Expected expiration	Dec 31, 2024	Dec 31, 2023
Less than 1 year	375	1,496
Between 1 and 5 years	1,318	1,475
5 years and later [A]	75,768	71,709
Total	77,461	74,680

[A] Includes unrecognised losses for Petroleum Resource Rent Tax (PRRT) in Australia which, due to the annual augmentation, increased to $49,893 million as at the end of the most recent PRRT fiscal year, June 30, 2024 (June 30, 2023: $46,220 million).

Unrecognised taxable temporary differences associated with undistributed retained earnings of investments in subsidiaries, joint ventures and associates amounted to $4,504 million at December 31, 2024 (2023: $5,311 million). These retained earnings are subject to withholding tax upon distribution.

Excluding unrecognised tax losses for PRRT, the unrecognised deductible temporary differences, unused tax losses and credits carried forward amounted to $27,568 million at December 31, 2024 (2023: $28,460 million), and included amounts of $25,875 million (2023: $25,489 million) that are subject to time limits for utilisation of five years or later, or are not time limited.

24. Retirement benefits

Retirement benefits are provided in most of the countries where Shell has operational activities. Shell offers these benefits through funded and unfunded defined benefit plans and defined contribution plans. The most significant pension plans are in the Netherlands, UK and USA.

Other post-employment benefits (OPEB) comprising retirement health care and life insurance are also provided in certain countries. The most significant OPEB plan is in the USA.

24. Retirement benefits continued

Financial position

		$ million
	Dec 31, 2024	Dec 31, 2023
Obligations	(66,054)	(78,024)
Plan assets	69,707	79,961
Asset ceilings	(402)	(335)
Surplus	3,251	1,602
Retirement benefits in the Consolidated Balance Sheet:		
Non-current assets	10,003	9,151
Non-current liabilities:	(6,752)	(7,549)
Non-current liabilities - Pensions	(3,874)	(4,448)
Non-current liabilities - OPEB	(2,878)	(3,101)
Total	3,251	1,602

Retirement benefit expense

			$ million
	2024	2023	2022
Defined benefit plans:			
Current service cost, net of plan participants' contributions	802	731	1,100
Interest expense on defined pension benefit obligations	2,757	3,072	1,584
Interest income on plan assets	(2,999)	(3,417)	(1,732)
Interest expense on OPEB obligations	154	166	120
Current OPEB service cost	38	36	57
Other [A]	(457)	262	246
Total	295	850	1,375
Defined contribution plans	514	474	420
Total retirement benefit expense	809	1,324	1,795

[A] Mainly related to plan amendments and curtailments on pension plans and OPEB plans.

Retirement benefit expenses are presented principally within production and manufacturing expenses and selling, distribution and administrative expenses in the Consolidated Statement of Income. Interest income on plan assets is calculated using the same rate as that applied to the related defined benefit obligations for each plan to determine interest expense.

Remeasurements

			$ million
	2024	2023	2022
Actuarial gains/(losses) on obligations:			
Due to changes in financial assumptions on pensions [A]	4,445	(1,513)	28,840
Due to changes in financial assumptions on OPEB [A]	249	(264)	527
Due to experience adjustments on pensions [B]	(701)	(491)	(2,956)
Due to experience adjustments on OPEB [B]	(259)	230	1,480 [D]
Due to changes in demographic assumptions on pensions [C]	445	(299)	27
Due to changes in demographic assumptions on OPEB [C]	87	(38)	25
Total	4,266	(2,375)	27,943
Return on plan assets in (shortage)/excess of interest income	(2,319)	1,243	(20,612)
Other movements	(93)	44	(349)
Total remeasurements	1,854	(1,088)	6,982

[A] Mainly relates to changes in the discount rate and inflation assumptions.
[B] Experience adjustments arise from differences between the actuarial assumptions made in respect of the year and actual outcomes.
[C] Mainly relates to updates in mortality assumptions.
[D] In 2022, experience adjustments in OPEB includes $782 million to reflect the impact of prescription drug rebates.

24. Retirement benefits continued

Defined benefit plan obligations

2024

$ million, except where indicated

	Pension benefits				Other post-employment benefits	
	The Netherlands	UK	USA	Rest of the world	OPEB [C]	Total
At January 1	26,746	19,074	15,579	13,524	3,101	78,024
Current service cost	186	148	239	215	38	826
Interest expense	847	847	507	556	154	2,911
Actuarial gains	(1,377)	(1,793)	(997)	(22)	(77)	(4,266)
Benefit payments	(1,076)	(1,081)	(702)	(770)	(141)	(3,770)
Other movements	(251)	(1)	(5,030) [A]	540	(95)	(4,837)
Currency translation differences	(1,498)	(237)	–	(997)	(102)	(2,834)
At December 31	23,577	16,957	9,596	13,046 [B]	2,878	66,054
Comprising:						
Funded pension plans	23,577	16,638	8,787	10,913		59,915
Weighted average duration	15 years	12 years	12 years	13 years		13 years
Unfunded pension plans		319	809	2,133		3,261
Weighted average duration		15 years	8 years	11 years		11 years
Unfunded OPEB plans					2,878	2,878
Weighted average duration					12 years	12 years

[A] Other movements mainly include the contract that the defined benefit pension plan in the USA, Shell Pension Plan, has entered into with a third-party insurance company to settle $5,052 million of pension liabilities. The settlement price consisted of $4,920 million of pension assets.
[B] Rest of the world includes pension plans in Germany ($3,234 million) and Canada ($3,641 million) which are the largest pension plans in this category.
[C] Mainly related to post-retirement medical benefits in the USA.

2023

$ million, except where indicated

	Pension benefits				Other post-employment benefits	
	The Netherlands	UK	USA	Rest of the world	OPEB [B]	Total
At January 1	24,608	17,791	14,793	13,410	2,879	73,481
Current service cost	184	145	215	179	36	759
Interest expense	904	881	695	592	166	3,238
Actuarial losses	929	257	832	285	72	2,375
Benefit payments	(1,032)	(1,014)	(956)	(757)	(88)	(3,847)
Other movements	252	–	–	(63)	–	189
Currency translation differences	901	1,014	–	(122)	36	1,829
At December 31	26,746	19,074	15,579	13,524 [A]	3,101	78,024
Comprising:						
Funded pension plans	26,746	18,734	14,695	11,298		71,473
Weighted average duration	16 years	15 years	11 years	13 years		14 years
Unfunded pension plans		340	884	2,226		3,450
Weighted average duration		16 years	8 years	11 years		11 years
Unfunded OPEB plans					3,101	3,101
Weighted average duration					13 years	13 years

[A] Rest of the world includes pension plans in Germany ($3,647 million) and Canada ($3,930 million) which are the largest pension plans in this category.
[B] Mainly related to post-retirement medical benefits in the USA.

24. Retirement benefits continued

Defined benefit plan assets

2024

$ million

	Pension benefits				
	The Netherlands	UK	USA	Rest of the world	Total
At January 1	30,266	22,320	14,835	12,540	79,961
Return on plan assets in excess of interest income	(34)	(2,435)	(566)	716	(2,319)
Interest income	946	995	487	571	2,999
Employer contributions	2	36	262	109 [B]	409
Plan participants' contributions	12	17	–	7	36
Benefit payments	(1,076)	(1,081)	(702)	(731)	(3,590)
Other movements	(9)	(22)	(4,891) [A]	470	(4,452)
Currency translation differences	(1,777)	(270)	–	(1,290)	(3,337)
At December 31	28,330	19,560	9,425	12,392 [C]	69,707

[A] Other movements mainly include the contract that the defined benefit pension plan in the USA, Shell Pension Plan, has entered into with a third-party insurance company to settle $5,052 million of pension liabilities. The settlement price consisted of $4,920 million of pension assets.
[B] Includes a netted amount of $108 million received from a captive structure in relation to pension plans reinsured in Rest of the world.
[C] Rest of the world includes pension plans in Germany ($2,705 million) and Canada ($3,179 million) which are the largest pension plans in this category.

2023

$ million

	Pension benefits				
	The Netherlands	UK	USA	Rest of the world	Total
At January 1	27,986	21,963	14,243	12,564	76,756
Return on plan assets in excess of interest income	833	(999)	609	800	1,243
Interest income	1,035	1,094	679	609	3,417
Employer contributions	419	34	274	(23) [A]	704
Plan participants' contributions	11	16	–	7	34
Benefit payments	(1,032)	(1,014)	(957)	(703)	(3,706)
Other movements	(6)	(16)	(13)	17	(18)
Currency translation differences	1,020	1,242	–	(731)	1,531
At December 31	30,266	22,320	14,835	12,540 [B]	79,961

[A] Includes the netted amount of $212 million received from the captive structure in relation to pension plans reinsured in Rest of the world.
[B] Rest of the world includes pension plans in Germany ($2,730 million) and Canada ($3,504 million) which are the largest pension plans in this category.

The table below presents percentages derived from a weighted average calculation of the investments in the plan assets.

Type of pension assets

	2024	2023
Quoted in active markets:		
Equities [A]	12%	12%
Debt securities [B]	68%	71%
Real estate	2%	1%
Unquoted		
Equities	13%	12%
Debt securities	4%	4%
Real estate	6%	7%
Investment funds	3%	3%
Debt repurchase agreements [C]	(12)%	(11)%
Other	1%	–%
Cash	3%	1%

[A] Equity securities (quoted) are mainly related to investments of the Netherlands pension fund.
[B] Debt securities (quoted) are mainly related to the investments of the UK and the Netherlands pension funds.
[C] Debt repurchase agreements are mainly related to UK member-defined pension plans to fund liability-driven investments. In addition to these contracts, derivatives including interest rate and inflation swaps are used in the principal defined benefit plan in the Netherlands for liability matching strategies.

24. Retirement benefits continued

Employer contributions to funded defined benefit pension plans are based on actuarial valuations in accordance with local regulations and are estimated to be $862 million in 2025.

Characteristics of significant defined benefit and defined contribution plans and regulatory framework

The Netherlands

The principal defined benefit pension plan in the Netherlands is a funded career-averaged pension arrangement with retired employees drawing benefits as an annuity, with a surplus of $4,753 million reported as at December 31, 2024, (2023: $3,520 million surplus). While the plan was closed to employees hired or rehired after July 1, 2013, it currently remains open for ongoing accrual for existing active members. Active members account for 21% (2023: 23%) of the total defined benefit liability in the Netherlands. From July 1, 2013 onwards, new employees in the Netherlands are entitled to membership of a defined contribution pension plan.

In line with Dutch regulations, the defined benefit pension plan has a joint Trustee Board with trustee representatives nominated by the Company, the Central Staff Council and retired members. The defined benefit pension plan also has an Accountability Council comprising members nominated by the Company, the Central Staff Council and retired members. Furthermore, there is a Supervisory Committee, which includes external experts from the pension industry, to oversee management, compliance and operations of the fund. The defined contribution pension plan has a one-tier Trustee Board with an independent chair, trustee representatives nominated by the Company and the Central Staff Council, as well as two executive board members. The defined contribution fund also has an Accountability Council comprised of members nominated by the Company and the Central Staff Council. Both Trustee Boards are responsible for administering the plans in line with the Dutch "Pensioenwet" (PW), including corporate governance, investment strategy for the pension plans' assets and paying member benefits, and are required to act in the best interests of the members.

Dutch pension reform

As per July 1, 2023, new pension legislation ("Wet Toekomst Pensioenen" (WTP)) came into effect in the Netherlands, with implementation required prior to January 2028. This legislation aims to create a more resilient and adaptable pensions system that can better accommodate demographic changes and economic fluctuations while providing adequate retirement income. The legislation requires all future pension accruals to be in a defined contribution framework, with the intention that existing benefits accrued in pension funds are also converted into a defined contribution framework. The new regulatory framework will impact Shell's existing defined benefit pension plan, net pension scheme and defined contribution pension plan in the Netherlands.

In response to the new pension legislation the Company, with the consent of the Central Staff Council in the Netherlands, decided on June 25, 2024, that all future pension accruals from January 1, 2027, will be under a defined contribution framework. The new pension scheme(s) and associated transition measures were laid down in separate transition plans. In July 2024, these were formally submitted to the Trustee Boards of the pension funds for their acceptance. It is the intention that the gross defined benefit scheme of Shell will be transferred into a new defined contribution plan from January 1, 2027, and that the defined contribution plan of Shell will be transformed on January 1, 2026.

The transition plan for the defined benefit plan states that the transfer into a new defined contribution plan is subject to the local funding level of the plan remaining above an agreed level (125%) during the predetermined transition period. If the Trustee Board of the defined benefit plan formally accepts the transition plan (expected in 2025), Shell will derecognise the pension surplus, based on asset ceiling principles, resulting in a loss in other comprehensive income and an additional "minimum funding requirement" for an expected final cash contribution. Subsequently, at the date of transition (December 31, 2026), a charge to the Consolidated Statement of Income is expected in respect of the surplus previously derecognised. The likelihood of acceptance of the plan, and the extent to which the funding level will meet the agreed 125% threshold, is subject to uncertainty. If the funding level of the defined benefit plan falls below 125% during the transition period, the transition plan and anticipated cash contributions may need to be reassessed.

The amounts to be recognised which will be determined at each respective date are subject to uncertainty and market risks and may have a material impact on Shell's financial condition, results of operations and cash flows.

UK

The four largest defined benefit pension plans for employees in the UK are funded final salary pension arrangements with retired employees mainly drawing benefits as an annuity with the option to take a portion as a lump sum. The three plans are separate and independent plans and cannot be netted against each other. In total, the plans reported a surplus of $2,603 million as at December 31, 2024 (2023: surplus of $3,246 million), which is after netting of unfunded plans of $319 million (2023: $340 million) which are reported as non-current liabilities on the balance sheet. All three plans were closed to new employees hired or rehired. However, two plans currently remain open for ongoing accrual for existing active members. Active members account for 14% (2023: 16%) of the total defined benefit liability in the UK. From March 1, 2013, onwards new employees in the UK are entitled to membership of a defined contribution pension plan.

In line with UK regulations, the principal defined benefit pension plan is governed by a corporate trustee whose board comprises four trustee directors nominated by the Company, including the chair and four member-nominated trustee directors. The defined contribution pension plan is governed by a corporate trustee whose board comprises of three company-nominated directors, including the chair and two member-nominated trustee directors. The trustees are responsible for administering the plans in line with the Trust Deed and Regulations, including setting the investment strategy for the pension plans' assets and paying member benefits, and are required to act in the best interests of the members of the pension plans.

For the funded defined benefit pension plan for former BG employees, the BG Pension Scheme (BGPS), the Board of Trustees of the BG Pension Scheme decided to enter into a qualifying insurance contract for the full scheme (buy in) with a third-party insurer which was executed on September 11, 2024. This policy replaces the previous investments held to support the BGPS's benefits, and as a consequence, the longevity and investment risks have been transferred in full to the insurer. The liabilities relating to the scheme remain on the balance sheet but are now fully insured. The scheme has defined benefit liabilities of $1,270 million and a surplus of $105 million reported at December 31, 2024.

24. Retirement benefits continued

USA

The principal defined benefit pension plan in the USA is a funded final average pay pension plan with a surplus of $638 million reported as at December 31, 2024 (2023: $140 million surplus). After retirement, all retirees can choose to draw their benefits as an annuity, whereas others also have the choice to take their benefit in a lump sum. There is also an unfunded defined benefit pension plan with a deficit of $809 million (2023: $884 million deficit). The benefits under this plan are taken primarily in a lump sum. In addition, the Company provides a defined contribution benefit plan. The funded defined benefit, unfunded defined benefit, and Shell's defined contribution pension plans are subject to the provisions of the Employee Retirement Income Security Act (ERISA).

In line with Shell Group's strategic objectives and risk management, on January 30, 2024, the principal defined benefit pension plan in the USA, Shell Pension Plan, entered into a contract with a third-party insurance company to settle $5,052 million of pension liabilities. The settlement price consisted of $4,920 million of pension assets. As a result of this transaction, all legal and constructive obligations for a tranche of benefits provided by the Shell Pension Plan have been eliminated. A gain on settlement of $101 million (after associated adjustment for deferred tax) has been recognised in Shell's Consolidated Statement of Income. As a consequence, as of December 31, 2024, the total active members increased to 30% (2023: 23%) of the total defined benefit liability in the USA.

Both the funded defined benefit pension plan and the defined contribution pension plan are governed by trustees who are appointed by the Plan Sponsor and are named fiduciaries with respect to the plans. The trustees are generally responsible for investment-related matters, appointing the Plan Administrator, maintaining general oversight and deciding appeals of participants.

USA OPEB

The Company also sponsors other post-retirement employee benefits (OPEB), mainly in the USA. The OPEB plans in the USA provide medical, dental and vision benefits, as well as life insurance benefits to eligible retired employees. The plans are unfunded, and the Company and retirees share the costs of the premiums with a deficit of $2,337 million reported as at December 31, 2024 (2023: $2,267 million deficit). The plan that provides post-retirement medical benefits in the USA is closed to employees hired or rehired on or after January 1, 2017. Certain life insurance benefits are paid by the Company.

Significant funding requirements:

- Additional contributions to the Dutch defined benefit pension plan would be required if the 12-month rolling average local funding percentage falls below 105% for six months or more. At the most recent 2024 funding valuation, the local funding percentage was above this level.
- There are no set minimum statutory funding requirements for the UK plans. A professional qualified independent actuary, appointed by the trustee board, undertakes a local funding valuation typically every three years. The most recent completed funding valuation for the principal defined benefit plan was undertaken as at December 31, 2023, and revealed a funding ratio of 108% and therefore no sponsor contributions (except for salary sacrifice contributions) were payable under the schedule of contributions.
- Under the Pension Protection Act, US pension plans are subject to minimum required contribution levels based on the funding position. No contributions are required based on the most recent funding valuation.

Associated risks to which retirement benefits are exposed

There are inherent risks associated with defined benefit pension and OPEB plans. These risks are related to various assumptions made on valuation of the liabilities and the cash funding requirement of the underlying plans. Volatility in capital markets or government policies, and the resulting consequences for investment performance, interest and inflation rates, as well as changes in assumptions for mortality, retirement age or pensionable remuneration at retirement, could result in significant changes to the funding level of future liabilities. In case of a shortfall, there could be a requirement to make substantial cash contributions (depending on the applicable local regulations).

These inherent risks are managed by a pension forum, chaired by the Chief Financial Officer, which oversees Shell's pension strategy, policy and operations. The forum is supported by a risk committee in reviewing the results of the assurance process with respect to pension risk.

Investment strategies

Long-term investment strategies of plans are generally determined by the relevant pension plan trustees using a structured asset/liability modelling approach to define the asset mix that best meets the objectives of optimising returns within agreed risk levels, while maintaining adequate funding levels.

Principal and actuarial assumptions

The principal assumptions applied in determining the present value of defined benefit obligations and their bases were as follows:

- rates of increase in pensionable remuneration, pensions in payment and health care costs: historical experience and management's long-term expectation;
- discount rates: prevailing long-term AA corporate bond yields, chosen to match the currency and duration of the relevant obligation; and
- mortality rates: published standard mortality tables for the individual countries concerned adjusted for Shell experience where statistically significant.

The weighted averages for those assumptions and related sensitivity information as at December 31, 2024 are presented below. Sensitivity information indicates by how much the defined benefit obligations would increase or decrease if a given assumption were to increase or decrease with no change in other assumptions. The sensitivity analyses may not be representative of an actual change in the defined benefit obligation as it is unlikely that changes in assumptions would occur in isolation from one another. The weighted averages are at nominal terms and based on market expectations at December 31, 2024.

24. Retirement benefits continued

$ million, except where indicated

	Assumptions used at nominal rates		Effect of using alternative assumptions				
				Increase/(decrease) in defined benefit obligations			
	Dec 31, 2024	Dec 31, 2023	Range of assumptions	Dec 31, 2024		Dec 31, 2023	
Rate of increase in pensionable remuneration [A]	3.9%	3.9%	-1% to +1%	(421)	469	(828)	915
of which the Netherlands [B]	3.3%	3.3%					
of which the UK	3.5%	4.1%					
of which the USA	4.6%	4.6%					
Rate of increase in pensions in payment	2.0%	1.9%	-1% to +1%	(4,978)	6,045	(5,599)	6,713
of which the Netherlands	2.1%	2.4%					
of which the UK	2.9%	2.8%					
of which the USA	–%	–%					
Discount rate for pension plans	4.5%	4.1%	-1% to +1%	8,641	(6,925)	10,560	(8,472)
of which the Netherlands	3.5%	3.3%					
of which the UK	5.5%	4.6%					
of which the USA	5.6%	4.9%					
Inflation rate for defined benefit obligation [C]	2.1%	2.0%	-1% to +1%	(5,328)	6,494	(6,034)	7,300
of which the Netherlands	2.1%	2.4%					
of which the UK	3.0%	2.9%					
Expected age at death for persons aged 60:							
Men	88 years	88 years	-1 year to +1 year	(970)	981	(1,166)	1,143
of which the Netherlands	88 years	88 years					
of which the UK	87 years	87 years					
of which USA	88 years	87 years					
Women	89 years	89 years	-1 year to +1 year	(850)	874	(1,006)	1,041
of which the Netherlands	90 years	90 years					
of which the UK	89 years	89 years					
of which the USA	89 years	89 years					
Rate of increase in health care costs [D]	8.0%	7.0%	-1% to +1%	(295)	359	(338)	422
Discount rate for health care plans [D]	6.0%	5.6%	-1% to +1%	390	(314)	457	(358)

[A] Based on active members.
[B] Decrease is mainly due to the Netherlands (WTP).
[C] Excluding US funds in the weighted average inflation rate, because of the insignificant impact on the defined benefit obligation.
[D] Mainly related to post-retirement health care benefits in the USA.

25. Decommissioning and other provisions

$ million

	Decommissioning and restoration	Legal	Onerous contracts	Environmental	Redundancy	Other	Total
At January 1, 2024							
Current	1,296	508	224	318	367	1,328	4,041
Non-current	18,157	1,548	880	638	123	1,185	22,531
	19,453	2,056	1,104	956	490	2,513	26,572
Additions	629	261	184	125	1,258	665	3,122
Amounts charged against provisions	(1,034)	(409)	(227)	(148)	(354)	(316)	(2,488)
Accretion expense	830	76	35	14	3	9	967
Disposals and liabilities classified as held for sale	(3,115)	–	–	(3)	2	11	(3,105)
Remeasurements and other movements	1,994	(161)	(33)	(39)	(241)	(505)	1,015
Currency translation differences	(273)	(2)	(1)	(22)	(37)	(52)	(387)
	(969)	(235)	(42)	(73)	631	(188)	(876)
At December 31, 2024							
Current	1,356	457	238	267	932	1,219	4,469
Non-current	17,128	1,364	824	616	189	1,106	21,227
	18,484	1,821	1,062	883	1,121	2,325	25,696
At January 1, 2023							
Current	856	224	277	321	171	1,061	2,910
Non-current	19,429	1,177	1,207	730	153	1,149	23,845
	20,285	1,401	1,484	1,051	324	2,210	26,755
Additions	617	853	26	208	424	806	2,934
Amounts charged against provisions	(777)	(195)	(345)	(233)	(154)	(203)	(1,907)
Accretion expense	643	21	24	13	4	9	714
Disposals and liabilities classified as held for sale	(60)	(1)	–	(16)	(1)	(1)	(79)
Remeasurements and other movements	(1,499)	(24)	(83)	(74)	(113)	(321)	(2,114)
Currency translation differences	244	1	(2)	7	6	13	269
	(832)	655	(380)	(95)	166	303	(183)
At December 31, 2023							
Current	1,296	508	224	318	367	1,328	4,041
Non-current	18,157	1,548	880	638	123	1,185	22,531
	19,453	2,056	1,104	956	490	2,513	26,572

The amount and timing of settlement in respect of these provisions are uncertain and dependent on various factors that are not always within management's control. Reviews of estimated future decommissioning and restoration costs and the discount rate applied are carried out regularly. The discount rate applied at December 31, 2024, was 4.5% (2023: 4.5%).

In 2024, there was a decrease of $3,105 million in provisions due to disposals and liabilities classified as held for sale. Of this total $3,053 million relate to liabilities classified as held for sale (see Note 19).

An increase of 0.5% or a decrease of 0.5% in the discount rate could result in a decrease of $0.9 billion (2023: $0.9 billion) or an increase of $1.0 billion (2023: $1.0 billion) in decommissioning and restoration provisions, respectively. Where applicable, the associated increase in the carrying amount of the related asset would be tested for impairment.

Other provisions at December 31, 2024, include amounts recognised in respect of employee benefits.

The decommissioning and restoration provision at December 31, 2024, is expected to be utilised within:

$ million

	Dec 31, 2024
Between 1 to 5 years	5,127
Between 6 to 10 years	3,486
11 years and later	9,871
Total	18,484

26. Financial instruments

Financial instruments in the Consolidated Balance Sheet include investments in securities (see Note 15), trade and other receivables (see Note 16), cash and cash equivalents (see Note 18), trade and other payables (see Note 20), debt (see Note 21) and derivative contracts.

2024

$ million

		Carrying amount			
	Note	Amortised cost	Fair value through profit or loss	Fair value through other comprehensive income	Total carrying amount
Financial assets					
Investments in securities	15	37	97	2,121	2,255
Trade and other receivables	16	51,878			51,878
Derivative financial instruments (non-designated)			10,007		10,007
Derivative hedging instruments (designated)			40		40
		51,915	10,144	2,121	64,180
Cash and cash equivalents	18				39,110
At December 31, 2024		51,915	10,144	2,121	103,290
Financial liabilities					
Debt	21	48,376			48,376
Trade and other payables	20	63,983			63,983
Derivative financial instruments (non-designated)			7,065		7,065
Derivative financial instruments (designated)			2,511		2,511
At December 31, 2024		112,359	9,576		121,935

2023

$ million

		Carrying amount			
	Note	Amortised cost	Fair value through profit or loss	Fair value through other comprehensive income	Total carrying amount
Financial assets					
Investments in securities	15	28	328	2,890	3,246
Trade and other receivables	16	59,571			59,571
Derivative financial instruments (non-designated)			15,708		15,708
Derivative hedging instruments (designated)			191		191
		59,599	16,227	2,890	78,716
Cash and cash equivalents	18				38,774
At December 31, 2023		59,599	16,227	2,890	117,490
Financial liabilities					
Debt	21	53,832			53,832
Trade and other payables	20	71,340			71,340
Derivative financial instruments (non-designated)			9,773		9,773
Derivative financial instruments (designated)			2,057		2,057
At December 31, 2023		125,172	11,830		137,002

26. Financial instruments continued

Risks

In the normal course of business, financial instruments of various kinds are used for the purposes of managing exposure to interest rate, foreign exchange and commodity price movements.

Treasury standards are applicable to all subsidiaries and each subsidiary is required to adopt a treasury policy consistent with these standards. These policies cover: financing structure; interest rate and foreign exchange risk management; insurance; counterparty risk management; and use of derivative contracts. Wherever possible, treasury operations are carried out through specialist regional organisations without removing from each subsidiary the responsibility to formulate and implement appropriate treasury policies.

Apart from forward foreign exchange contracts to meet known commitments, the use of derivative contracts by most subsidiaries is not permitted by their treasury policy.

Other than in exceptional cases, the use of external derivative contracts is confined to specialist trading and central treasury organisations that have appropriate skills, experience, supervision, control and reporting systems.

Shell's operations expose it to market, credit and liquidity risk, as described below.

Market risk

Market risk is the possibility that changes in interest rates, foreign exchange rates or commodity prices will adversely affect the value of assets, liabilities or expected future cash flows.

Interest rate risk

Most debt is raised from central borrowing programmes. Shell's policy is to have debt principally denominated in dollars and to retain a balanced exposure to fixed and floating rates over time. Shell has issued a significant amount of fixed rate debt in recent years, taking advantage of historically low interest rates. As a result, the majority of the debt portfolio at December 31, 2024, is fixed.

The financing of most subsidiaries is structured on a floating-rate basis, and any further interest rate risk management is only applied under exceptional circumstances.

On the basis of the floating-rate net cash position at December 31, 2024, (both issued and hedged), and assuming other factors (principally foreign exchange rates and commodity prices) remained constant and that no further interest rate management action was taken, an increase in interest rates of 1% would have increased 2024 income before taxation by $268 million (2023: $226 million increase).

The carrying amounts and maturities of debt and borrowing facilities are presented in Note 21. Interest expense is presented in Note 10.

Foreign exchange risk

Many of the markets in which Shell operates are priced, directly or indirectly, in dollars. As a result, the functional currency of most Integrated Gas and Upstream entities and those with significant cross-border business is the dollar. For Chemicals and Products entities, the functional currency is typically the local currency. Consequently, Shell is exposed to varying levels of foreign exchange risk: when an entity enters into transactions that are not denominated in its functional currency; when foreign currency monetary assets and liabilities are translated at the balance sheet date; and as a result of holding net investments in operations that are not dollar-functional. Each entity is required to adopt treasury policies that are designed to measure and manage its foreign exchange exposures by reference to its functional currency.

26. Financial instruments continued

Foreign exchange gains and losses arise in the normal course of business from the recognition of receivables and payables and other monetary items in currencies other than an entity's functional currency. Foreign exchange risk may also arise in connection with capital expenditure. For major projects, an assessment is made at the final investment decision stage of whether to hedge any resulting exposure.

Assuming other factors (principally interest rates and commodity prices) remained constant and that no further foreign exchange risk management actions were taken, a 10% appreciation against the dollar at December 31 of the main currencies to which Shell is exposed would have had the following effects:

$ million

	Increase/(decrease) in income before taxation		Increase in net assets	
	2024	2023	2024	2023
10% appreciation against the dollar of:				
Sterling	(69)	(270)	789	1,022
Euro	98	(46)	2,410	2,434
Malaysian ringgit	34	49	274	279
Australian dollar	(103)	(129)	625	780
Canadian dollar	20	9	1,353	1,392

The above sensitivity information was calculated by reference to carrying amounts of assets and liabilities at December 31 only. The effect on income before taxation arises in connection with monetary balances denominated in currencies other than an entity's functional currency; the effect on net assets arises principally from the translation of assets and liabilities of entities that are not dollar-functional.

Foreign exchange gains and losses included in income are presented in Note 9.

Commodity price risk

Certain subsidiaries have a mandate to trade crude oil, natural gas, LNG, refined products, chemical feedstocks, power and environmental certificates, and to use commodity derivative contracts (forwards, futures, swaps and options) as a means of managing price and timing risks arising from this trading activity. In effecting these transactions, the entities concerned operate within procedures and policies designed to ensure that risks are managed within authorised limits. A department that is independent from Shell's traders monitors market risk exposures daily.

Value-at-risk (VAR) techniques based on variance/covariance or Monte Carlo simulation models are used to make a statistical assessment of the market risk arising from possible future changes in market values for commodity positions held by these subsidiaries over a 1-day holding period and within a 95% confidence level. The calculation of potential changes in fair value takes into account positions, the history of price movements and the correlation of these price movements. Models are regularly reviewed against actual fair value movements to ensure integrity is maintained. The VAR average and year-end positions in respect of commodities traded in liquid markets, which are presented in the table below, are calculated on a diversified basis in order to reflect the effect of offsetting risk within combined portfolios.

Value-at-risk (pre-tax)

$ million

	2024		2023	
	Average	Year-end	Average	Year-end
Global oil	29	22	43	25
North America gas and power	15	16	13	10
Europe gas and power	13	13	31	12
Australia gas and power	3	3	4	2
Environmental certificates	5	2	9	4

Furthermore, commodity derivative hedge contracts are used to partially mitigate price volatility on future LNG sales and purchases.

As contracts to buy and sell physical LNG are accounted for on an accrual basis (see Note 2) and commodity derivatives are accounted for on a fair-value basis, this creates an accounting mismatch over periods. The fair value accounting of commodity derivatives can result in gains or losses in the Consolidated Statement of Income. These derivative contracts are based on a mix of European and North American gas price indices, global crude price indices and Asian LNG price indices. In previous years, Shell has seen high volatility in these markets. On that basis, a sensitivity analysis has been performed for a 50% price increase or decrease of this basket of derivative contracts at year-end 2024, which would result in a pre-tax loss or gain of $0.6 billion in the Consolidated Statement of Income (2023: $1.5 billion pre-tax gain or loss), whereas the same sensitivity analysis applied to the average exposures for the period was a gain or loss of $0.3 billion (2023: $0.8 billion pre-tax).

26. Financial instruments continued

Credit risk

Comprehensive policies are in place to ensure that credit risk is appropriately managed and remains within risk appetite. These policies include requirements for assessment of internal credit ratings, the assignment of credit limits based on counterparty creditworthiness, and monitoring of exposure against these credit limits. Credit information is regularly shared between business and finance functions, with dedicated teams in place to quickly identify and respond to cases of credit deterioration. Mitigation measures are defined and implemented for higher-risk business partners and customers, and include shortened payment terms, collateral, credit insurance, or other security posting and timely collections.

Surplus cash is invested in a range of short-dated, secure and liquid instruments including short-term bank deposits, money market funds, reverse repos and similar instruments. The portfolio of these investments is diversified to avoid concentrating risk in any one instrument, country or counterparty. Management monitors the investments regularly and adjusts the investment portfolio in light of new market information where necessary to ensure credit risk is effectively diversified.

In commodity trading, additional requirements are established to manage credit risk. Credit checks are performed by a department independent of traders, and are undertaken before contractual commitment. In addition, a defined portfolio credit risk appetite is in place to manage credit risk concentrations. It includes a set of thresholds and alerts set at different portfolio levels (e.g. country, industry sector, creditworthiness). Utilisation against these thresholds, including identification of credit risk concentrations with particular counterparties, is actively monitored, and actions are taken to ensure compliance where appropriate. There were no material concentrations of credit risk, with individual customers or geographically, at December 31, 2024.

Shell routinely enters into offsetting, master netting and similar arrangements with trading and other counterparties to manage credit risk. Where there is a legally enforceable right of offset under such arrangements and Shell has the intention to settle on a net basis or realise the asset and settle the liability simultaneously, the net asset or liability is recognised in the Consolidated Balance Sheet, otherwise assets and liabilities are presented gross. These amounts, as presented net and gross within trade and other receivables, trade and other payables and derivative financial instruments in the Consolidated Balance Sheet at December 31, were as follows:

2024

$ million

		Amounts offset		Amounts not offset		
	Gross amounts before offset	Amounts offset	Net amounts as presented	Cash collateral received/pledged	Other offsetting instruments	Net amounts
Assets:						
Within trade receivables	18,569	11,452	7,117	58	227	6,832
Within derivative financial instruments	12,200	4,490	7,710	951	1,730	5,029
Liabilities:						
Within trade payables	17,106	11,449	5,657	121	227	5,309
Within derivative financial instruments	12,760	4,490	8,270	2,049	1,730	4,491

2023

$ million

		Amounts offset		Amounts not offset		
	Gross amounts before offset	Amounts offset	Net amounts as presented	Cash collateral received/pledged	Other offsetting instruments	Net amounts
Assets:						
Within trade receivables	20,810	12,350	8,460	18	356	8,086
Within derivative financial instruments	26,166	13,140	13,026	1,688	2,616	8,722
Liabilities:						
Within trade payables	18,423	12,351	6,072	69	356	5,647
Within derivative financial instruments	23,037	13,163	9,874	2,040	2,636	5,198

Amounts not offset principally relate to contracts where the intention to settle on a net basis was not clearly established at December 31.

26. Financial instruments continued

The carrying amount of financial assets pledged as collateral for liabilities or contingent liabilities at December 31, 2024, presented within trade and other receivables, was $2,519 million (2023: $3,437 million). The carrying amount of collateral held at December 31, 2024, presented within trade and other payables, was $581 million (2023: $1,404 million). In addition, Shell has utilised guarantees and letters of credit as non-cash collateral to cover margining requirements of $1,359 million as at December 31, 2024 (2023: $1,506 million). Collateral mainly relates to initial margins held with commodity exchanges/brokers and over-the-counter counterparty variation margins. Some derivative contracts are fully cash collateralised, thereby eliminating both counterparty risk and the Group's own non-performance risk.

Liquidity risk

Liquidity risk is the risk that suitable sources of funding for Shell's business activities may not be available. Management believes that it has access to sufficient cash and cash equivalents, debt funding sources (capital markets) and to undrawn committed borrowing facilities to meet foreseeable requirements. Information about borrowing facilities is presented in Note 21.

Derivative contracts and hedges

Derivative contracts such as forwards, futures, options and swaps are used principally to hedge or mitigate risks arising from interest rate changes, currency fluctuations and commodity price volatility. However, hedge accounting is not always applied, therefore, movements in the carrying amounts of derivative contracts that are recognised in income may not be matched in the same period by the recognition of the income effects of the related hedged items.

In the course of trading operations, certain contracts are entered into for delivery of commodities that are accounted for as derivatives. The resulting price exposures are managed by entering into related derivative contracts.

Derivative contracts classified below as "other contracts" include certain contracts for the sale or purchase of commodities and others containing embedded derivatives. These contracts are required to be recognised at fair value because of pricing or delivery conditions, even though they were entered into to meet operational requirements.

For certain commodity derivatives contracts, carrying amounts cannot be derived from quoted market prices or other observable inputs, in which case fair value is estimated using valuation techniques, such as Black-Scholes; option spread models; and extrapolation, using quoted spreads with assumptions developed internally based on observable market activity.

Carrying amounts, maturities and hedges

The carrying amounts of derivative contracts at December 31, designated and not designated as hedging instruments for hedge accounting purposes, were as follows:

2024

$ million

	Assets			Liabilities			
	Designated	Not designated	Total	Designated	Not designated	Total	Net
Interest rate swaps	7	1	8	64	–	64	(56)
Forward foreign exchange contracts	–	682	682	–	379	379	303
Currency swaps and options	33	5	38	2,447	42	2,489	(2,451)
Commodity derivatives	–	9,204	9,204	–	6,630	6,630	2,574
Other contracts	–	115	115	–	14	14	101
Total	40	10,007	10,047	2,511	7,065	9,576	471

2023

$ million

	Assets			Liabilities			
	Designated	Not designated	Total	Designated	Not designated	Total	Net
Interest rate swaps	14	2	16	98	–	98	(82)
Forward foreign exchange contracts	–	697	697	–	592	592	105
Currency swaps and options	177	–	177	1,959	13	1,972	(1,795)
Commodity derivatives	–	14,783	14,783	–	9,161	9,161	5,622
Other contracts	–	226	226	–	7	7	219
Total	191	15,708	15,899	2,057	9,773	11,830	4,069

26. Financial instruments continued

Net gains before tax on derivative contracts, excluding those designed as hedges, were $1,314 million in 2024 (2023: $5,189 million gains; 2022: $1,331 million gains).

Certain contracts, mainly to hedge price risk relating to forecast commodity transactions, were designated in cash flow hedging relationships and are presented after the offset of related margin balances with exchanges. Contracts to hedge foreign exchange risks were also designated in cash flow hedging relationships and the net carrying amount of these contracts at December 31, 2024, was a liability of $579 million (2023: $373 million liability). See Note 29 for the accumulated balance recognised within other comprehensive income.

Certain interest rate and currency swaps were designated in fair value hedges, principally in respect of debt for which the net carrying amount of the related derivative contracts, net of accrued interest, at December 31, 2024, was a liability of $1,872 million (2023: $1,441 million liability).

At December 31, 2024, no debt instruments (2023: nil) were designated as hedges of net investments in foreign operations, relating to the foreign exchange risk arising between certain intermediate holding companies and their subsidiaries. See Note 29 for the accumulated balance recognised within other comprehensive income.

The following table compares contractual maturities of derivative liabilities at December 31 with their carrying amounts in the Consolidated Balance Sheet.

2024

$ million

	Contractual maturities								
	Less than 1 year	Between 1 and 2 years	Between 2 and 3 years	Between 3 and 4 years	Between 4 and 5 years	5 years and later	Total	Difference from carrying amount [A]	Carrying amount
Interest rate swaps	20	16	16	16	–	–	68	(4)	64
Forward foreign exchange contracts	393	84	3	(3)	–	–	477	(98)	379
Currency swaps and options	925	693	627	423	316	1,008	3,992	(1,503)	2,489
Commodity derivatives	4,345	1,088	524	326	184	458	6,925	(295)	6,630
Other contracts	6	5	2	–	–	–	13	1	14
Total	5,689	1,886	1,172	762	500	1,466	11,475	(1,899)	9,576

[A] Mainly related to the effect of discounting.

2023

$ million

	Contractual maturities								
	Less than 1 year	Between 1 and 2 years	Between 2 and 3 years	Between 3 and 4 years	Between 4 and 5 years	5 years and later	Total	Difference from carrying amount [A]	Carrying amount
Interest rate swaps	78	9	3	3	5	–	98	–	98
Forward foreign exchange contracts	465	77	25	1	–	(3)	565	27	592
Currency swaps and options	551	609	521	392	186	859	3,118	(1,146)	1,972
Commodity derivatives	5,767	1,902	799	381	225	597	9,671	(510)	9,161
Other contracts	2	4	2	–	–	–	8	(1)	7
Total	6,863	2,601	1,350	777	416	1,453	13,460	(1,630)	11,830

[A] Mainly related to the effect of discounting.

26. Financial instruments continued

Fair value measurements

The net carrying amounts of derivative contracts held at December 31 categorised according to the predominant source and nature of inputs used in determining the fair value of each contract were as follows:

2024

$ million

	Prices in active markets for identical assets/liabilities	Other observable inputs	Unobservable inputs	Total
Interest rate swaps	–	(56)	–	(56)
Forward foreign exchange contracts	–	303	–	303
Currency swaps and options	–	(2,451)	–	(2,451)
Commodity derivatives	44	487	2,043	2,574
Other contracts	–	107	(6)	101
Total	44	(1,610)	2,037	471

2023

$ million

	Prices in active markets for identical assets/liabilities	Other observable inputs	Unobservable inputs	Total
Interest rate swaps	–	(82)	–	(82)
Forward foreign exchange contracts	–	105	–	105
Currency swaps and options	–	(1,795)	–	(1,795)
Commodity derivatives	(39)	3,191	2,470	5,622
Other contracts	–	223	(4)	219
Total	(39)	1,642	2,466	4,069

Net carrying amounts of derivative contracts measured using predominantly unobservable inputs

$ million

	2024	2023
At January 1	2,466	1,909
Net (losses)/gains recognised in revenue	(191)	576
Purchases	310	271
Sales	(363)	(185)
Settlements	–	(125)
Recategorisations (net)	(127)	25
Currency translation differences	(58)	(5)
At December 31	2,037	2,466

Included in net losses recognised in revenue in 2024 were unrealised net gains totalling $591 million relating to assets and liabilities held at December 31, 2024 (2023: $797 million gains).

Unrecognised day one gains or losses

Certain long-term commodity contracts extend to periods where observable pricing data are limited and their value may include estimates. Where this is more than an insignificant part of the overall contract valuation, any gains or losses will be deferred. Valuation techniques are further described in Note 2. The unrecognised gains on these derivative contracts at December 31, 2024, were as follows:

$ million

	2024	2023
At January 1	1,607	1,620
Movements	(862)	(13)
At December 31	745	1,607

27. Share capital

Issued and fully paid ordinary shares of €0.07 each

	Number of shares	Nominal value $ million
At January 1, 2024	6,524,109,049	544
Repurchases of shares	(409,077,891)	(34)
At December 31, 2024	6,115,031,158	510
At January 1, 2023	7,003,503,393	584
Repurchases of shares	(479,394,344)	(40)
At December 31, 2023	6,524,109,049	544

At the Company's Annual General Meeting (AGM) on May 21, 2024, the Board was authorised to allot ordinary shares in the Company, and to grant rights to subscribe for or to convert any security into ordinary shares in the Company, up to an aggregate nominal amount of approximately €150 million (representing approximately 2,147 million ordinary shares of €0.07 each), and to list such shares or rights on any stock exchange. This authority expires at the earlier of the close of business on August 20, 2025, and the end of the AGM to be held in 2025, unless previously renewed, revoked or varied by the Company in a general meeting.

At the May 21, 2024, AGM, shareholders granted the Company the authority to repurchase (i) up to 644.2 million ordinary shares "on-market" (excluding any treasury shares), less the number of ordinary shares purchased or committed to be purchased in terms of the buyback contracts ("off-market"), made under the authority in (ii); and (ii) up to 644.2 million ordinary shares off-market, less any on-market purchases made under the authority in (i).

In the case of both on-market and off-market purchases of the ordinary shares, the minimum price, exclusive of expenses, which may be paid for an ordinary share is €0.07 and the maximum price, exclusive of expenses, which may be paid for an ordinary share is the higher of: (i) an amount equal to 5% above the average market value for an ordinary share for the five business days immediately preceding the date of the purchase; and (ii) the higher of the price of the last independent trade and the highest current independent bid in relation to ordinary shares on the trading venues where the purchase is carried out. The authorities for both on-market and off-market purchases of the ordinary shares will expire at the earlier of the close of business on August 20, 2025, and the end of the AGM of the Company to be held in 2025. Ordinary shares purchased by the Company pursuant to these authorities will either be cancelled or held in treasury. Treasury shares are shares in the Company which are owned by the Company itself.

28. Share-based compensation plans and shares held in trust

Share-based compensation expense

			$ million
	2024	2023	2022
Equity-settled [A]	732	700	807

[A] On an incidental basis awards may be cash-settled, where an equity settlement is not possible under local regulations.

The principal share-based employee compensation plans are the PSP and LTIP. Awards of shares and American Depositary Shares (ADS) of the Company under the PSP and LTIP are granted upon certain conditions to eligible employees. The actual number of shares that may vest ranges from 0% to 200% of the awards, depending on the outcomes of prescribed performance conditions over a three-year period beginning on January 1 of the award year.

Share awards

	Number of ordinary shares (million)	Number of ADSs (million)	Weighted average remaining contractual life (years)
At January 1, 2024	58	10	0.9
Granted	20	3	
Vested	(26)	(4)	
Forfeited	(3)	–	
At December 31, 2024	49	9	0.9
At January 1, 2023	58	10	1.1
Granted	19	3	
Vested	(17)	(3)	
Forfeited	(2)	–	
At December 31, 2023	58	10	0.9

28. Share-based compensation plans and shares held in trust continued

Other plans offer eligible employees opportunities to acquire shares and ADSs of the Company or receive cash benefits measured by reference to the Company's share price.

Shell employee share ownership trusts and trust-like entities purchase the Company's shares in the open market to meet delivery commitments under employee share plans. At December 31, 2024, they held a total of 22.6 million ordinary shares (2023: 24.2 million) and 4.1 million ADS (2023: 6.8 million).

29. Other reserves

Other reserves attributable to Shell plc shareholders

$ million

	Merger reserve	Share premium reserve	Capital redemption reserve	Share plan reserve	Accumulated other comprehensive income	Total
At January 1, 2024	37,298	154	236	1,308	(17,851)	21,145
Other comprehensive income attributable to Shell plc shareholders	–	–	–	–	(1,715)	(1,715)
Transfer from other comprehensive income	–	–	–	–	193	193
Repurchases of shares	–	–	34	–	–	34
Share-based compensation	–	–	–	109	–	109
At December 31, 2024	37,298	154	270	1,417	(19,373)	19,766
At January 1, 2023	37,298	154	196	1,140	(17,656)	21,132
Other comprehensive income attributable to Shell plc shareholders	–	–	–	–	(83)	(83)
Transfer from other comprehensive income	–	–	–	–	(112)	(112)
Repurchases of shares	–	–	40	–	–	40
Share-based compensation	–	–	–	168	–	168
At December 31, 2023	37,298	154	236	1,308	(17,851)	21,145
At January 1, 2022	37,298	154	139	964	(19,646)	18,909
Other comprehensive loss attributable to Shell plc shareholders	–	–	–	–	2,024	2,024
Transfer from other comprehensive income	–	–	–	–	(34)	(34)
Repurchases of shares	–	–	57	–	–	57
Share-based compensation	–	–	–	176	–	176
At December 31, 2022	37,298	154	196	1,140	(17,656)	21,132

The merger reserve and share premium reserve were established as a consequence of the Company becoming the single parent company of Royal Dutch Petroleum Company and The "Shell" Transport and Trading Company, plc, now The Shell Transport and Trading Company Limited, in 2005. The merger reserve increased in 2016 following the issuance of shares for the acquisition of BG Group plc.

The capital redemption reserve was established in connection with repurchases of shares of the Company.

The share plan reserve is in respect of equity-settled share-based compensation plans (see Note 28). The movement comprises the net of the charge for the year and the release as a result of vested awards.

29. Other reserves continued

Accumulated other comprehensive income comprises the following:

Accumulated other comprehensive income attributable to Shell plc shareholders

$ million

	Currency translation differences	Equity instruments remeasurements	Debt instruments remeasurements	Cash flow hedging (losses)/ gains	Net investment hedging (losses)/ gains	Deferred cost of hedging	Retirement benefits remeasurements	Total
At January 1, 2024	(11,213)	73	(34)	(451)	(2,008)	(174)	(4,044)	(17,851)
Recognised in other comprehensive income	(4,574)	(7)	20	211	–	(137)	1,854	(2,633)
Reclassified to income	1,256	–	16	29	–	24	–	1,325
Reclassified to the balance sheet	–	–	(11)	32	–	–	–	21
Reclassified to retained earnings	–	(182)	–	–	–	–	375	193
Tax on amounts recognised/reclassified	70	35	(20)	(56)	–	40	(447)	(378)
Total, net of tax	(3,248)	(154)	5	216	–	(73)	1,782	(1,472)
Share of joint ventures and associates	(42)	43	–	(76)	–	–	4	(71)
Other comprehensive (loss)/income for the period	(3,290)	(111)	5	140	–	(73)	1,786	(1,543)
Less: non-controlling interest	21	(2)	–	–	–	–	2	21
Attributable to Shell plc shareholders	(3,269)	(113)	5	140	–	(73)	1,788	(1,522)
At December 31, 2024	(14,482)	(40)	(29)	(311)	(2,008)	(247)	(2,256)	(19,373)
At January 1, 2023	(12,590)	487	(75)	(524)	(1,964)	(26)	(2,964)	(17,656)
Recognised in other comprehensive income	1,393	(67)	33	(196)	(44)	(273)	(1,088)	(242)
Reclassified to income	1	–	9	162	–	61	–	233
Reclassified to the balance sheet	–	–	(1)	117	–	1	–	117
Reclassified to retained earnings	–	(112)	–	–	–	–	–	(112)
Tax on amounts recognised/reclassified	3	(32)	–	(12)	–	63	5	27
Total, net of tax	1,397	(211)	41	71	(44)	(148)	(1,083)	23
Share of joint ventures and associates	16	(202)	–	2	–	–	1	(183)
Other comprehensive income/(loss) for the period	1,413	(413)	41	73	(44)	(148)	(1,082)	(160)
Less: non-controlling interest	(36)	(1)	–	–	–	–	2	(35)
Attributable to Shell plc shareholders	1,377	(414)	41	73	(44)	(148)	(1,080)	(195)
At December 31, 2023	(11,213)	73	(34)	(451)	(2,008)	(174)	(4,044)	(17,851)
At January 1, 2022	(9,563)	1,294	3	(536)	(2,144)	(226)	(8,474)	(19,646)
Recognised in other comprehensive income	(3,422)	(524)	(90)	426	180	64	6,982	3,616
Reclassified to income	437	–	12	(636)	–	81	–	(106)
Reclassified to the balance sheet	–	–	–	(81)	–	–	–	(81)
Reclassified to retained earnings	–	(32)	–	–	–	–	(2)	(34)
Tax on amounts recognised/reclassified	(1)	33	–	59	–	55	(1,516)	(1,370)
Total, net of tax	(2,986)	(523)	(78)	(232)	180	200	5,464	2,025
Share of joint ventures and associates	30	(283)	–	244	–	–	30	21
Other comprehensive income/(loss) for the period	(2,956)	(806)	(78)	12	180	200	5,494	2,046
Less: non-controlling interest	(71)	(1)	–	–	–	–	16	(56)
Attributable to Shell plc shareholders	(3,027)	(807)	(78)	12	180	200	5,510	1,990
At December 31, 2022	(12,590)	487	(75)	(524)	(1,964)	(26)	(2,964)	(17,656)

30. Dividends

Interim dividends

	$ per share			$ million		
	2024	2023	2022	2024	2023	2022
Cash:						
March	0.344	0.2875	0.24	2,210	2,030	1,829
June	0.344	0.2875	0.25	2,177	1,984	1,850
September	0.344	0.3310	0.25	2,169	2,179	1,818
December	0.344	0.3310	0.25	2,112	2,196	1,786
Total	1.376	1.237	0.99	8,668	8,389	7,283

On January 30, 2025, the Directors announced a further interim dividend in respect of 2024 of $0.3580 per ordinary share. The total dividend is payable on March 24, 2025, to shareholders on the register at February 14, 2025.

Shareholders will be able to elect to receive their dividends in US dollars, sterling or euros.

31. Earnings per share

	2024	2023	2022
Income attributable to Shell plc shareholders ($ million)	16,094	19,359	42,309
Weighted average number of shares used as the basis for determining:			
Basic earnings per share (million of shares)	6,299.6	6,733.5	7,347.5
Diluted earnings per share (million of shares)	6,363.7	6,799.8	7,410.5

Basic earnings per share are calculated by dividing the income attributable to Shell plc shareholders for the year by the weighted average number of shares outstanding during the year. The weighted average number of shares outstanding excludes shares held in trust.

Diluted earnings per share are based on the same income figures. The weighted average number of shares outstanding during the year is increased by dilutive shares related to share-based compensation plans. If the inclusion of potentially issuable shares could decrease diluted loss per share, the potentially issuable shares are excluded from the weighted average number of shares outstanding used to calculate diluted earnings per share.

32. Legal proceedings and other contingencies

General

In the ordinary course of business, Shell subsidiaries are subject to a number of contingencies arising from litigation and claims brought by governmental authorities, including tax authorities and private parties. The operations and earnings of Shell subsidiaries continue, from time to time, to be affected to varying degrees by political, legislative, fiscal and regulatory developments, including those relating to the protection of the environment and indigenous groups in the countries where they operate. The industries in which Shell subsidiaries are engaged are also subject to physical risks of various types.

The amounts claimed in relation to such events and, if such claims against Shell were successful, the costs of implementing the remedies sought in the various cases could be substantial. Based on information available to date and taking into account that in some cases it is not practicable to estimate the possible magnitude or timing of any resultant payments, management believes that the foregoing are not expected to have a material adverse impact on Shell's Consolidated Financial Statements. However, there remains a high degree of uncertainty around these contingencies, as well as their potential effect on future operations, earnings, cash flows and Shell's financial condition.

Costs in respect of decommissioning and restoration obligations are subject to uncertain timing and amount, and are dependent on various factors that are not always within management's control (see Note 25). In certain divestment transactions, liabilities related to decommissioning and restoration are de-recognised upon transfer of these obligations to the buyer. In certain cases, Shell retains a secondary obligation for decommissioning activities, either via reversionary legislation or the issuance of guarantees, in case the primary obligor is not able to meet its obligation. These exposures are actively monitored, and the likelihood of a liability arising in respect of these obligations is not considered probable.

Decommissioning and restoration of manufacturing facilities

For long-lived manufacturing facilities, where decommissioning would generally be more than 50 years away, while there is a present obligation that has arisen from past events, the amount of the obligation cannot be reliably measured. This is because the settlement dates are indeterminate; and other estimates, such as extremely long-term discount rates for which there is no observable measure, cannot be reliably determined. Consequently, the decommissioning and restoration obligation that exists for such long-lived manufacturing facilities cannot be reliably quantified and is disclosed as a contingent liability. There remains a high degree of uncertainty concerning such obligations and their potential effects on future operations, earnings, cash flows, reputation and Shell's financial condition.

32. Legal proceedings and other contingencies continued

Pesticide litigation

Shell, along with another agricultural chemical pesticide manufacturer and several distributors, has been sued by public and quasi-public water purveyors, water storage districts and private landowners alleging responsibility for groundwater contamination caused by applications of chemical pesticides. There are approximately nine such cases currently pending, four claims made but not yet filed, and an active subpoena for records. These matters assert various theories of strict liability and negligence, seeking to recover actual damages, including drinking well treatment and remediation costs. Most assert claims for punitive damages. Shell continues to vigorously defend these actions. Based on the claims asserted and Shell's history regarding amounts paid to resolve varying actions, management does not expect the outcome of the matters pending at December 31, 2024, to have a material adverse impact on Shell USA. However, there remains a high degree of uncertainty regarding the potential outcome of some of these pending lawsuits, as well as their potential effect on future operations, earnings, cash flows and Shell's financial condition.

Climate change litigation

In the USA, energy companies (including Shell), industry associations, and others have been named in several matters alleging responsibility for the impacts of climate change due to the use of fossil fuels. These matters assert various theories of liability for a wide variety of harms, including but not limited to, impacts to public and private infrastructure, natural resources, and public health and services. As of December 31, 2024, 31 lawsuits naming Shell as a defendant were pending.

In the Netherlands, in a case against Shell brought by a group of environmental non-governmental organisations and individual claimants (referred to herein as "Milieudefensie"), the Hague District Court in 2021 found that while Shell was not acting unlawfully, Shell had the obligation to reduce the aggregate annual volume of CO_2 emissions of Shell operations and energy-carrying products sold across Scope 1, 2 and 3 by 45% (net) by the end of 2030 relative to its 2019 emissions levels. For Scopes 2 and 3, this was a significant best-efforts obligation. Shell appealed that ruling. On November 12, 2024, the Hague Court of Appeal upheld Shell's appeal and dismissed the claim against Shell. In doing so, the Court of Appeal annulled the earlier judgment of the District Court in its entirety with immediate effect. On February 11, 2025, Milieudefensie filed an appeal to the Supreme Court of the Netherlands.

Management believes the outcome of these matters should be resolved in a manner favourable to Shell, but there remains a high degree of uncertainty regarding the ultimate outcome of these lawsuits, as well as their potential effect on future operations, earnings, cash flows and Shell's financial condition.

NAM (Groningen gas field) litigation

Since 1963, NAM – a joint venture between Shell and ExxonMobil (50%:50%) – has been producing gas from the Groningen field, the largest gas field in Western Europe. After smaller tremors in the 1990s and the late 2000s, an earthquake measuring 3.6 on the Richter scale occurred in 2012, causing damage to properties in the affected area. NAM has successfully settled close to 80,000 claims for physical damage to property. The Dutch State has taken over the damage-claim-handling from NAM for all claim categories, and the strengthening operation in the region, while NAM remains financially responsible insofar as the costs corresponded to NAM's liability. In 2022, NAM started arbitrations with the Dutch government to have its financial liability determined for costs which the Dutch government compensated to claimants and subsequently charged to NAM. These claims include but are not limited to physical damage to property, housing value loss, emotional damage, and loss of living enjoyment. Arbitral awards in the strengthening and damages arbitrations are expected to be rendered in March and Summer 2025 respectively.

Shell is seeking to reach a final, all-encompassing settlement with the Dutch government on the new design of the Dutch "Gasgebouw" earthquake costs and the wind-down of natural gas production in Groningen. Shell, ExxonMobil and the Dutch government reached agreements in 2018 (Heads of Agreement) and 2019 (Interim Agreement) and subsequently have been engaged in discussions on the interpretation and implementation of these agreements and on a final and all-encompassing settlement. As these discussions have not led to such a settlement, in December 2023, the NAM shareholders asked an independent arbitration panel to rule on the interpretation and implementation of the agreements made in 2018/2019. The purpose of this arbitration is for a neutral third party to assess the situation and provide clarity. The arbitration is expected to take several years, and the judgement will be binding. The arbitration does not preclude a final and all-encompassing settlement, provided Shell, ExxonMobil and the Dutch government agree to pursue such a settlement.

There remains a high degree of uncertainty concerning the ultimate outcome of these disputes and their potential effect on future operations, earnings, cash flows, reputation and Shell's financial condition.

32. Legal proceedings and other contingencies continued

Kazakhstan

Shell has several matters in dispute involving the Republic of Kazakhstan. One litigation matter involving a Shell NOV relates to a Sulphur permitting inspection outcome. An unfavourable ruling was issued by the Administrative Collegium of Astana City Court in February 2024. The Shell NOV filed an appeal in March 2024 to the Kazakhstan Supreme Court which is pending.

The other matters are ongoing disputes involving two Shell NOVs under the applicable production-sharing contracts.

At this time, it is not possible to reliably estimate the magnitude and timing of any possible obligations or payments in respect of the matters above or whether any payments will be due. There remains a high degree of uncertainty regarding the ultimate outcomes, as well as the potential effect on future operations, earnings, cash flows and Shell's financial condition.

Nigerian litigation

Shell (in its capacity as previous owner of SPDC) and various subsidiaries and associates operating in Nigeria are parties to various environmental, non-environmental and contractual disputes brought in the courts of Nigeria, the USA and England. These disputes are at different stages in arbitration and litigation, including at the appellate stage, where judgements have been rendered against Shell entities in some of these disputes. If taken at face value, the aggregate amount of these judgements could be seen as material. Management, however, believes that the outcomes of these disputes, once determined, will be favourable to Shell. However, there remains a high degree of uncertainty regarding these cases, as well as their potential effect on future operations, earnings, cash flows and Shell's financial condition.

OPL 245

In March 2017, criminal charges alleging official corruption and conspiracy to commit official corruption were filed against SNEPCO, one then current now former Shell employee and third parties including ENI SpA and one of its subsidiaries. Those charges were struck out for want of diligent prosecution and the proceedings have been dismissed. However, they can be refiled. In March 2017, parties alleging to be shareholders of Malabu Oil and Gas Company Ltd. (Malabu) filed two actions to challenge the 2011 settlement of litigation pertaining to Oil Prospecting Licence 245 (OPL 245) with regard to potential anti-bribery, anti-corruption and anti-money laundering laws and the award of OPL 245 to SNEPCO and an ENI SpA subsidiary by the Federal Government of Nigeria. Both actions are currently stayed awaiting the outcome of appeals filed against procedural decisions. Those appeal proceedings are ongoing. On May 8, 2018, Human Environmental Development Agenda (HEDA) sought permission from the Federal High Court of Nigeria to apply for an order to direct the Attorney General of the Federation to revoke OPL 245 on grounds that the entire Malabu transaction in relation to the OPL is unconstitutional, illegal and void as it was obtained through fraudulent and corrupt practice. On July 3, 2019, the Nigerian Federal High Court upheld objections from SNEPCO and NAE and struck the lawsuit filed by HEDA. The suit was struck because of the statute of limitations and lack of jurisdiction to hear the matter. HEDA has appealed the judgement, which is ongoing.

On July 21, 2022, the Dutch Public Prosecutor's office announced it had dismissed its investigation into bribery allegations related to OPL 245. On October 24, 2022, Re:Common, HEDA and The Corner House announced that they filed a complaint at the Court of Appeal in The Hague, pursuant to Article 12 of the Dutch Code for Criminal Procedure, challenging the decision by the Dutch Public Prosecutor to dismiss its investigation. On March 20, 2025, the Court of Appeal in The Hague dismissed this complaint. There remains a high degree of uncertainty around the OPL 245 matters and contingencies discussed above, as well as their potential effect on future operations, earnings, cash flows and Shell's financial condition. Accordingly, at this time, it is not possible to reliably estimate the possible obligations and timing of any payments. Any violation of anti-bribery, anti-corruption or anti-money laundering legislation could have a material adverse effect on Shell plc's earnings, cash flows and financial condition.

Russia

On October 2, 2024, the Russian prosecutor filed a Moscow court claim against eight Shell-group entities (including Shell plc and Shell Energy Europe Limited ("SEEL")). The prosecutor seeks (i) declarations that Shell illegally abandoned in support of Sakhalin Energy Investment Company ("Sakhalin"); (ii) monetary relief of approximately €1.5 billion from SEEL to Gazprom Export ("GPE") for alleged unpaid gas deliveries in 2022; and (iii) a declaration that GPE can take 94₽ billion purportedly set aside for Shell for Sakhalin equity compensation from a Type-C account to net off against part of the alleged debt owed by SEEL to GPE. On January 30, 2025, SEEL filed a written postponement motion in the Moscow court proceedings regarding SEEL's non-payment of GPE gas invoices and Sakhalin. At a court hearing on February 14, 2025, the judge postponed the proceedings until the next hearing, which is scheduled for April 14, 2025.

At this time, it is not possible to reliably estimate the magnitude and timing of any possible obligations or payments in respect of the matters above or whether any payments will be due. There remains a high degree of uncertainty regarding the ultimate outcomes, as well as the potential effect on future operations, earnings, cash flows and Shell's financial condition.

33. Employees

Employee costs

			$ million
	2024	2023	2022
Remuneration	10,928	10,648	10,509
Social security contributions	983	957	860
Retirement benefits (see Note 24)	809	1,324	1,795
Share-based compensation (see Note 28)	732	700	807
Total [A]	13,452	13,629	13,971

[A] Excludes employees seconded to joint ventures and associates.

Average employee numbers [A]

			Thousand
	2024	2023	2022
Integrated Gas	6	6	6
Upstream	13	11	12
Marketing	24	26	17
Chemicals and Products	22	22	21
Renewables and Energy Solutions	3	5	4
Corporate [B]	30	30	27
Total [C]	98	100	87

[A] The employee numbers are based on headcount.
[B] Includes 23,000 employees (2023: 23,000; 2022: 20,000) working in business service centres irrespective of the segment they support.
[C] Excludes employees seconded to joint ventures and associates (2024: 1,000 employees; 2023: 2,000 employees; 2022: 2,000 employees).

34. Directors and Senior Management

Remuneration of Directors of the Company

			$ million
	2024	2023	2022
Emoluments	13	12	12
Value of released awards under long-term incentive plans	10	4	7
Employer contributions to pension plans	1	1	1

Emoluments comprise salaries and fees, annual bonuses (for the period for which performance is assessed) and other benefits. The value of released awards under long-term incentive plans for the period is in respect of the performance period ending in that year. In 2024, no Director accrued retirement benefits in respect of qualifying services under defined benefit plans.

Directors and Senior Management expense

			$ million
	2024	2023	2022
Short-term benefits	33	31	33
Retirement benefits	2	2	2
Share-based compensation	11	17	17
Termination and related amounts	–	7	1
Total	46	57	53

Directors and Senior Management comprise members of the Executive Committee and the Non-executive Directors of the Company.

Short-term benefits comprise salaries and fees, annual bonuses delivered in cash and shares (for the period for which performance is assessed), other benefits and employer social security contributions.

35. Auditor's remuneration

$ million

	2024	2023	2022
Fees in respect of the audit of the Consolidated and Parent Company Financial Statements, including audit of consolidation returns	41	42	45
Other audit fees, principally in respect of audits of accounts of subsidiaries	19	19	18
Total audit fees	60	61	63
Audit-related fees	3	3	3
Fees in respect of other non-audit services	3	2	3
Total	66	66	69

In addition, the auditor provided audit services to retirement benefit plans for employees of subsidiaries. Remuneration paid by those benefit plans amounted to $1 million in 2024 (2023: $1 million; 2022: $1 million).

36. Post-balance sheet events

On January 23, 2025, and March 4, 2025, Shell announced changes to the Executive Committee. As per the announcements, with effect from April 1, 2025, the most senior leadership structure will be delayered to reflect the three primary areas of business value – Integrated Gas; Upstream; and Downstream, Renewables and Energy Solutions, while elevating Trading and Supply. These changes will not affect Shell's reporting segments as the changes do not impact how the Chief Executive Officer, who serves as the Chief Operating Decision Maker, makes decisions about allocating resources and assessing performance.

On January 30, 2025, Shell announced the commencement of a $3.5 billion share buyback programme (the "programme") covering an aggregate contract term of approximately three months. The purpose of the programme is to reduce the issued share capital of the Company. All shares repurchased as part of the programme will be cancelled. It is intended that, subject to market conditions, the programme will be completed prior to the Company's first quarter 2025 results announcement, scheduled for May 2, 2025. The Company has entered into an arrangement with a single broker consisting of two irrevocable, non-discretionary contracts, to enable the purchase of ordinary shares.

On March 13, 2025, Shell completed the sale of The Shell Petroleum Development Company of Nigeria Limited (SPDC) to Renaissance, as announced on January 16, 2024. The divestment of SPDC aligns with Shell's intent to simplify its presence in Nigeria through an exit of onshore oil production in the Niger Delta and a focus of future disciplined investment in its deep-water and integrated gas positions. As part of the transaction, Shell has also provided loan facilities. No significant impairments are expected as a result of completion of the transaction.

Supplementary information – oil and gas (unaudited)

About this section

The purpose of this section is to comply with the requirements of the Financial Accounting Standards Board (FASB) "Extractive Activities – Oil and Gas (Topic 932)". Extractive activities for this purpose include exploration and production activities to extract oil, condensates, natural gas liquids, oil sands and natural gas from their natural reservoirs.

In Shell, extractive activities, or oil and gas exploration and production activities, are undertaken within the Integrated Gas, Upstream and the Chemicals and Products (includes oil sands) segments. Shell's extractive activities do not represent the full extent of Integrated Gas, Upstream and Chemicals and Products activities, and exclude GTL processing, some LNG activities, trading and optimisation, as well as other non-extractive activities. As a result, the information in this extractive activities section is not suitable for modelling Shell's integrated businesses, for which we refer to the segment information. Full segment information to the Consolidated Financial Statements is available on pages 268-273.

The information set out on pages 313-332 is referred to as "unaudited" as a means of clarifying that it is not covered by the audit opinion of the independent registered public accounting firm that has audited and reported on the Consolidated Financial Statements.

Proved reserves

Proved reserves estimates are calculated pursuant to the US Securities and Exchange Commission (SEC) Rules and the FASB's Topic 932. Proved reserves can be either developed or undeveloped. The definitions used are in accordance with the SEC Rule 4–10 (a) of Regulation S-X. We include proved reserves associated with future production that will be consumed in operations.

Proved reserves shown are net of any quantities of crude oil or natural gas that are expected to be (or could be) taken as royalties in kind. Proved reserves outside North America include quantities that will be settled as royalties in cash. Proved reserves include certain quantities of crude oil or natural gas that will be produced under arrangements that involve Shell subsidiaries, joint ventures and associates in risks and rewards but do not transfer title of the product to those entities.

Subsidiaries' proved reserves at December 31, 2024, were divided into 78% developed and 22% undeveloped on a barrel of oil equivalent (boe) basis. For the Shell share of joint ventures and associates, the proved reserves at December 31, 2024, were divided into 35% developed and 65% undeveloped on a boe basis.

Proved reserves are recognised under various forms of contractual agreements. Shell's proved reserves volumes at December 31, 2024, present in agreements such as production-sharing contracts (PSC), tax/variable royalty contracts or other forms of economic entitlement contracts, where the Shell share of reserves can vary with commodity prices, were 2,153 million barrels of liquids, and 10,240 thousand million standard cubic feet (scf) of natural gas.

Proved reserves cannot be measured exactly because estimation of reserves involves subjective judgement (see "Risk factors" on page 136 and our "Proved reserves assurance process" below). These estimates remain subject to revision and are unaudited supplementary information.

Proved reserves assurance process

A central group of reserves experts, who on average have around 28 years' experience in the oil and gas industry, undertake the primary assurance of the proved reserves bookings. This group of experts is part of the Resources Assurance and Reporting (RAR) organisation within Shell. A Vice President with 39 years' experience in the oil and gas industry currently heads the RAR organisation. He is a member of the Society of Petroleum Engineers, Society of Petroleum Evaluation Engineers and holds a BA in mathematics from Oxford University and an MEng in Petroleum Engineering from Heriot-Watt University. The RAR organisation reports directly to an Executive Vice President of Finance, who is a member of the Upstream Reserves Committee (URC). The URC is a multidisciplinary committee consisting of senior representatives from the Finance, Legal, Integrated Gas and Upstream organisations. The URC reviews and endorses all major (larger than 30 million barrels of oil equivalent) proved reserves bookings and debookings and endorses the total aggregated proved reserves. Final approval of all proved reserves bookings remains with Shell's CEO, and all proved reserves bookings are reviewed by Shell's Audit and Risk Committee. The Internal Audit function also provides secondary assurance through audits of the control framework.

Crude oil, natural gas liquids, synthetic crude oil and bitumen

Shell subsidiaries' proved reserves of crude oil, natural gas liquids (NGLs), synthetic crude oil and bitumen at the end of the year; their share of the proved reserves of joint ventures and associates at the end of the year; and the changes in such reserves during the year are set out on pages 314-318. Significant changes in these proved reserves are discussed below (except where specific disclosures are prohibited), where "revisions and reclassifications" are changes based on new information that resulted from development drilling, production history and changes in economic factors.

Proved reserves 2024–2023
Shell subsidiaries
Asia
- The increase of 115 million barrels in revisions and reclassifications was mainly in Oman and Kazakhstan.

USA
- The increase of 92 million barrels in revisions and reclassifications was mainly in Vito, Appomattox, Kaikias and Mars.

South America
- The increase of 162 million barrels in revisions and reclassifications was mainly due to an FID of an additional FPSO in Atapu, Brazil.

Proved reserves 2023–2022
Shell subsidiaries
Asia
- The increase of 149 million barrels in revisions and reclassifications was mainly in Oman.

Africa
- The increase of 79 million barrels in revisions and reclassifications was mainly in Bonga, Nigeria.

USA
- The increase of 69 million barrels in extensions and discoveries was due to an FID of Sparta.
- The increase of 46 million barrels in revisions and reclassifications was mainly in Appomattox.
- The decrease of 110 million barrels in sales in place was in Aera.

South America
- The increase of 165 million barrels in revisions and reclassifications was mainly in Mero and Atapu, Brazil.

Proved developed and undeveloped reserves 2024

Million barrels

	Europe	Asia	Oceania	Africa	North America			South America	Total		
					USA	Canada					
	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Synthetic crude oil	Oil and NGL	Oil and NGL	Synthetic crude oil	All products
Shell subsidiaries											
At January 1	160	1,392	79	259	439	5	757	1,178	3,512	757	4,269
Revisions and reclassifications	32	115	(2)	13	92	(4)	(13)	162	408	(13)	395
Improved recovery	–	9	–	39	–	–	–	–	48	–	48
Extensions and discoveries	–	5	–	24	14	–	–	9	52	–	52
Purchases of minerals in place	–	1	–	–	–	–	16	12	13	16	29
Sales of minerals in place	–	–	–	–	–	–	–	–	–	–	–
Production [A]	(34)	(161)	(12)	(41)	(108)	(1)	(19)	(150)	(507)	(19)	(526)
At December 31	158	1,361	65	294	437	–	741	1,211	3,526	741	4,267
Shell share of joint ventures and associates											
At January 1	2	390	–	–	–	–	–	–	392	–	392
Revisions and reclassifications	–	(5)	–	–	–	–	–	–	(5)	–	(5)
Improved recovery	–	–	–	–	–	–	–	–	–	–	–
Extensions and discoveries	–	–	–	–	–	–	–	–	–	–	–
Purchases of minerals in place	–	–	–	–	–	–	–	–	–	–	–
Sales of minerals in place	–	–	–	–	–	–	–	–	–	–	–
Production	(1)	(23)	–	–	–	–	–	–	(24)	–	(24)
At December 31	1	362	–	–	–	–	–	–	363	–	363
Total [B] [C] [D]	159	1,723	65	294	437	–	741	1,211	3,889	741	4,630
Reserves attributable to non-controlling interest in Shell subsidiaries at December 31	–	–	–	–	–	–	370	–	–	370	370

[A] Includes 1 million barrels consumed in operations for synthetic crude oil.
[B] On March 13, 2025, Shell completed the sale of its Nigerian onshore subsidiary The Shell Petroleum Development Company of Nigeria Limited (SPDC) which holds a 30% interest in the SPDC JV to Renaissance. As of December 31, 2024, Shell had proved reserves of 134 million barrels in crude oil in SPDC.
[C] Pursuant to Shell's 2017 agreement with Canadian Natural Resources Limited, its remaining mining interest and associated synthetic crude oil reserves will be swapped for an additional 10% interest in the Scotford Upgrader and Quest CCS project. The transaction is expected to close by the end of the first half of 2025, subject to regulatory approvals. The associated proved reserves as of December 31, 2024 were 741 million barrels in synthetic crude oil (of which 50% attributable to non-controlling interest).
[D] On December 5, 2024, Shell along with Equinor ASA, announced the combination of their UK offshore oil and gas assets and expertise to form a new company which will be the UK North Sea's biggest independent producer. On deal completion, the new independent producer will be jointly owned by Equinor (50%) and Shell (50%) and 112 million barrels crude oil (as of December 31, 2024) of Shell's proved reserves will be contributed to the new joint venture alongside proved reserves contributed by Equinor. Subsequently, Shell will report 50% of the proved reserves of the new joint venture as part of Shell's share of proved reserves from joint ventures and associates.

Proved developed reserves 2024

Million barrels

	Europe	Asia	Oceania	Africa	North America			South America	Total		
					USA	Canada					
	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Synthetic crude oil	Oil and NGL	Oil and NGL	Synthetic crude oil	All products
Shell subsidiaries											
At January 1	122	985	53	230	305	2	757	841	2,538	757	3,295
At December 31	115	1,183	43	216	285	–	741	886	2,728	741	3,469
Shell share of joint ventures and associates											
At January 1	2	113	–	–	–	–	–	–	115	–	115
At December 31	1	135	–	–	–	–	–	–	136	–	136

Proved undeveloped reserves 2024

Million barrels

	Europe	Asia	Oceania	Africa	North America			South America	Total		
					USA	Canada					
	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Synthetic crude oil	Oil and NGL	Oil and NGL	Synthetic crude oil	All products
Shell subsidiaries											
At January 1	38	407	26	29	134	3	–	337	974	–	974
At December 31	43	178	22	78	152	–	–	325	798	–	798
Shell share of joint ventures and associates											
At January 1	–	277	–	–	–	–	–	–	277	–	277
At December 31	–	227	–	–	–	–	–	–	227	–	227

Proved developed and undeveloped reserves 2023

Million barrels

	Europe	Asia	Oceania	Africa	North America			South America	Total		
					USA	Canada					
	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Synthetic crude oil	Oil and NGL	Oil and NGL	Synthetic crude oil	All products
Shell subsidiaries											
At January 1	192	1,411	106	218	543	4	731	1,138	3,612	731	4,343
Revisions and reclassifications	2	149	(17)	79	46	1	35	165	425	35	460
Improved recovery	–	3	–	–	–	–	–	–	3	–	3
Extensions and discoveries	–	2	–	–	69	1	–	25	97	–	97
Purchases of minerals in place	–	–	1	–	3	–	11	–	4	11	15
Sales of minerals in place	–	(11)	–	–	(110)	–	–	–	(121)	–	(121)
Production [A]	(34)	(162)	(11)	(38)	(112)	(1)	(20)	(150)	(508)	(20)	(528)
At December 31	160	1,392	79	259	439	5	757	1,178	3,512	757	4,269
Shell share of joint ventures and associates											
At January 1	3	327	–	–	–	–	–	7	337	–	337
Revisions and reclassifications	–	–	–	–	–	–	–	(7)	(7)	–	(7)
Improved recovery	–	–	–	–	–	–	–	–	–	–	–
Extensions and discoveries	–	–	–	–	–	–	–	–	–	–	–
Purchases of minerals in place	–	85	–	–	–	–	–	–	85	–	85
Sales of minerals in place	–	–	–	–	–	–	–	–	–	–	–
Production	(1)	(22)	–	–	–	–	–	–	(23)	–	(23)
At December 31	2	390	–	–	–	–	–	–	392	–	392
Total	162	1,782	79	259	439	5	757	1,178	3,904	757	4,661
Reserves attributable to non-controlling interest in Shell subsidiaries at December 31	–	–	–	–	–	–	378	–		378	378

[A] Includes 1 million barrels consumed in operations for synthetic crude oil.

Proved developed reserves 2023

Million barrels

	Europe	Asia	Oceania	Africa	North America			South America	Total		
					USA	Canada					
	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Synthetic crude oil	Oil and NGL	Oil and NGL	Synthetic crude oil	All products
Shell subsidiaries											
At January 1	140	999	73	187	356	3	731	831	2,589	731	3,320
At December 31	122	985	53	230	305	2	757	841	2,538	757	3,295
Shell share of joint ventures and associates											
At January 1	3	154	–	–	–	–	–	7	164	–	164
At December 31	2	113	–	–	–	–	–	–	115	–	115

Proved undeveloped reserves 2023

Million barrels

	Europe	Asia	Oceania	Africa	North America			South America	Total		
					USA	Canada					
	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Synthetic crude oil	Oil and NGL	Oil and NGL	Synthetic crude oil	All products
Shell subsidiaries											
At January 1	52	412	33	31	187	1	–	307	1,023	–	1,023
At December 31	38	407	26	29	134	3	–	337	974	–	974
Shell share of joint ventures and associates											
At January 1	–	173	–	–	–	–	–	–	173	–	173
At December 31	–	277	–	–	–	–	–	–	277	–	277

Proved developed and undeveloped reserves 2022

Million barrels

	Europe	Asia	Oceania	Africa	North America			South America	Total		
					USA	Canada					
	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Synthetic crude oil	Oil and NGL	Oil and NGL	Synthetic crude oil	All products
Shell subsidiaries											
At January 1	208	1,521	80	265	610	5	533	1,131	3,820	533	4,353
Revisions and reclassifications	16	34	11	(18)	48	(1)	(25)	47	137	(25)	112
Improved recovery	–	–	–	–	–	–	–	32	32	–	32
Extensions and discoveries	5	13	24	–	7	1	–	11	61	–	61
Purchases of minerals in place	–	12	–	–	–	–	240	55	67	240	307
Sales of minerals in place	–	(1)	–	–	–	–	–	–	(1)	–	(1)
Production [A]	(37)	(168)	(9)	(29)	(122)	(1)	(17)	(138)	(504)	(17)	(521)
At December 31	192	1,411	106	218	543	4	731	1,138	3,612	731	4,343
Shell share of joint ventures and associates											
At January 1	7	217	–	–	–	–	–	4	228	–	228
Revisions and reclassifications	(3)	(23)	–	–	–	–	–	1	(25)	–	(25)
Improved recovery	–	–	–	–	–	–	–	–	–	–	–
Extensions and discoveries	–	–	–	–	–	–	–	4	4	–	4
Purchases of minerals in place	–	159	–	–	–	–	–	–	159	–	159
Sales of minerals in place	–	–	–	–	–	–	–	–	–	–	–
Production	(1)	(26)	–	–	–	–	–	(2)	(29)	–	(29)
At December 31	3	327	–	–	–	–	–	7	337	–	337
Total [B]	195	1,738	106	218	543	4	731	1,145	3,949	731	4,680
Reserves attributable to non-controlling interest in Shell subsidiaries at December 31							365			365	365

[A] Includes 1 million barrels consumed in operations for synthetic crude oil.
[B] As announced on February 28, 2023, Shell completed the sale of its 100% interest in Shell Onshore Ventures LLC, which held a 51.8% membership interest in Aera Energy LLC, to IKAV. As of December 31, 2022, Shell had proved reserves of 112 million barrels in crude oil.

Proved developed reserves 2022

Million barrels

	Europe	Asia	Oceania	Africa	North America			South America	Total		
					USA	Canada					
	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Synthetic crude oil	Oil and NGL	Oil and NGL	Synthetic crude oil	All products
Shell subsidiaries											
At January 1	140	1,348	71	218	397	2	533	786	2,962	533	3,495
At December 31	140	999	73	187	356	3	731	831	2,589	731	3,320
Shell share of joint ventures and associates											
At January 1	7	197	–	–	–	–	–	4	208	–	208
At December 31	3	154	–	–	–	–	–	7	164	–	164

Proved undeveloped reserves 2022

Million barrels

	Europe	Asia	Oceania	Africa	North America			South America	Total		
					USA	Canada					
	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Synthetic crude oil	Oil and NGL	Oil and NGL	Synthetic crude oil	All products
Shell subsidiaries											
At January 1	68	173	9	47	213	3	–	345	858	–	858
At December 31	52	412	33	31	187	1	–	307	1,023	–	1,023
Shell share of joint ventures and associates											
At January 1	–	20	–	–	–	–	–	–	20	–	20
At December 31	–	173	–	–	–	–	–	–	173	–	173

Natural gas

Shell subsidiaries' proved reserves of natural gas at the end of the year, their share of the proved reserves of joint ventures and associates at the end of the year, and the changes in such reserves during the years are set out on pages 319-322. Significant changes in these proved reserves are discussed below (except where specific disclosures are prohibited).

Volumes are not adjusted to standard heat content. Apart from integrated projects, volumes of gas are reported on an "as-sold" basis. The price used to calculate future revenue and cash flows from proved gas reserves is the contract price or the 12-month average on "as-sold" volumes. Volumes associated with integrated projects are those measured at a designated transfer point between the upstream and downstream portions of the integrated project. Natural gas volumes are converted into oil equivalent using a factor of 5,800 scf per barrel.

Proved reserves 2024–2023

Shell subsidiaries

Europe

- The increase of 280 thousand million scf in revisions and reclassifications was mainly in Troll, Norway.

Asia

- The increase of 490 thousand million scf in revisions and reclassifications was mainly in Malaysia.

Canada

- The decrease of 1,329 thousand million scf in revisions and reclassifications was mainly due to the low year-average AECO (Alberta Energy Company) price in 2024 in Groundbirch, Canada.

South America

- The increase of 1,664 thousand million scf in extensions and discoveries was mainly due to an FID on Manatee, Trinidad and Tobago.

Proved reserves 2023–2022

Shell subsidiaries

Asia

- The increase of 952 thousand million scf in revisions and reclassifications was mainly in Oman.

Oceania

- The increase of 1,043 thousand million scf in revisions and reclassifications was mainly in Surat QGC and Gorgon, Australia.

Canada

- The increase of 443 thousand million scf in revisions and reclassifications was mainly in Groundbirch, Canada.

Proved developed and undeveloped reserves 2024

Thousand million standard cubic feet

	Europe	Asia	Oceania	Africa	North America		South America	Total
					USA	Canada		
Shell subsidiaries								
At January 1	2,508	9,168	6,229	1,847	485	1,483	1,556	23,276
Revisions and reclassifications	280	490	232	89	77	(1,329)	79	(82)
Improved recovery	–	–	–	7	–	–	–	7
Extensions and discoveries	4	37	51	181	46	–	1,664	1,983
Purchases of minerals in place	–	86	–	–	–	–	15	101
Sales of minerals in place	(1)	–	–	–	–	–	–	(1)
Production [A]	(284)	(890)	(817)	(172)	(110)	(154)	(299)	(2,726)
At December 31	2,507	8,891	5,695	1,952	498	–	3,015	22,558
Shell share of joint ventures and associates								
At January 1	122	6,103	228	–	–	–	–	6,453
Revisions and reclassifications	5	84	59	–	–	–	–	148
Improved recovery	–	–	–	–	–	–	–	–
Extensions and discoveries	–	1	148	–	–	–	–	149
Purchases of minerals in place	–	–	–	–	–	–	–	–
Sales of minerals in place	–	–	–	–	–	–	–	–
Production [B]	(38)	(288)	(40)	–	–	–	–	(366)
At December 31	89	5,900	395	–	–	–	–	6,384
Total [C] [D]	2,596	14,791	6,090	1,952	498	–	3,015	28,942
Reserves attributable to non-controlling interest in Shell subsidiaries at December 31	–	–	–	–	–	–	–	–

[A] Includes 238 thousand million standard cubic feet consumed in operations.
[B] Includes 27 thousand million standard cubic feet consumed in operations.
[C] On March 13, 2025, Shell completed the sale of its Nigerian onshore subsidiary The Shell Petroleum Development Company of Nigeria Limited (SPDC) which holds a 30% interest in the SPDC JV to Renaissance. As of December 31, 2024, Shell had proved reserves of 1,850 thousand million standard cubic feet in natural gas in SPDC.
[D] On December 5, 2024, Shell along with Equinor ASA, announced the combination of their UK offshore oil and gas assets and expertise to form a new company which will be the UK North Sea's biggest independent producer. On deal completion, the new independent producer will be jointly owned by Equinor (50%) and Shell (50%) and 262 thousand million standard cubic feet in natural gas (as of December 31, 2024) of Shell's proved reserves will be contributed to the new joint venture alongside proved reserves contributed by Equinor. Subsequently, Shell will report 50% of the proved reserves of the new joint venture as part of Shell's share of proved reserves from joint ventures and associates.

Proved developed reserves 2024

Thousand million standard cubic feet

	Europe	Asia	Oceania	Africa	North America		South America	Total
					USA	Canada		
Shell subsidiaries								
At January 1	2,205	7,348	4,870	875	268	706	1,273	17,545
At December 31	2,054	7,693	4,521	1,072	226	–	1,120	16,686
Shell share of joint ventures and associates								
At January 1	120	1,936	228	–	–	–	–	2,284
At December 31	88	1,855	265	–	–	–	–	2,208

Proved undeveloped reserves 2024

Thousand million standard cubic feet

	Europe	Asia	Oceania	Africa	North America		South America	Total
					USA	Canada		
Shell subsidiaries								
At January 1	303	1,820	1,359	972	217	777	283	5,731
At December 31	453	1,198	1,174	880	272	–	1,895	5,872
Shell share of joint ventures and associates								
At January 1	2	4,167	–	–	–	–	–	4,169
At December 31	1	4,045	130	–	–	–	–	4,176

Proved developed and undeveloped reserves 2023

Thousand million standard cubic feet

	Europe	Asia	Oceania	Africa	North America		South America	Total
					USA	Canada		
Shell subsidiaries								
At January 1	2,884	9,078	5,949	1,841	521	956	1,819	23,048
Revisions and reclassifications	(103)	952	1,043	139	64	443	64	2,602
Improved recovery	–	–	–	–	–	–	–	–
Extensions and discoveries	–	55	–	–	43	224	14	336
Purchases of minerals in place	–	–	14	–	2	–	–	16
Sales of minerals in place	–	(82)	–	–	(31)	–	–	(113)
Production [A]	(273)	(835)	(777)	(133)	(114)	(140)	(341)	(2,613)
At December 31	2,508	9,168	6,229	1,847	485	1,483	1,556	23,276
Shell share of joint ventures and associates								
At January 1	175	5,008	169	–	–	–	7	5,359
Revisions and reclassifications	3	(141)	60	–	–	–	(6)	(84)
Improved recovery	–	–	–	–	–	–	–	–
Extensions and discoveries	–	–	30	–	–	–	–	30
Purchases of minerals in place	–	1,516	–	–	–	–	–	1,516
Sales of minerals in place	–	–	–	–	–	–	–	–
Production [B]	(56)	(280)	(31)	–	–	–	(1)	(368)
At December 31	122	6,103	228	–	–	–	–	6,453
Total	2,630	15,271	6,457	1,847	485	1,483	1,556	29,729
Reserves attributable to non-controlling interest in Shell subsidiaries at December 31	–	–	–	–	–	–	–	–

[A] Includes 233 thousand million standard cubic feet consumed in operations.
[B] Includes 27 thousand million standard cubic feet consumed in operations.

Proved developed reserves 2023

Thousand million standard cubic feet

	Europe	Asia	Oceania	Africa	North America		South America	Total
					USA	Canada		
Shell subsidiaries								
At January 1	2,460	6,698	4,111	984	275	712	1,582	16,822
At December 31	2,205	7,348	4,870	875	268	706	1,273	17,545
Shell share of joint ventures and associates								
At January 1	175	2,261	129	–	–	–	7	2,572
At December 31	120	1,936	228	–	–	–	–	2,284

Proved undeveloped reserves 2023

Thousand million standard cubic feet

	Europe	Asia	Oceania	Africa	North America		South America	Total
					USA	Canada		
Shell subsidiaries								
At January 1	424	2,380	1,838	857	246	244	237	6,226
At December 31	303	1,820	1,359	972	217	777	283	5,731
Shell share of joint ventures and associates								
At January 1	–	2,747	40	–	–	–	–	2,787
At December 31	2	4,167	–	–	–	–	–	4,169

Proved developed and undeveloped reserves 2022

Thousand million standard cubic feet

	Europe	Asia	Oceania	Africa	North America USA	North America Canada	South America	Total
Shell subsidiaries								
At January 1	2,991	9,573	5,307	2,016	615	1,540	1,753	23,795
Revisions and reclassifications	131	(906)	959	15	22	(540)	288	(31)
Improved recovery	–	–	–	–	–	–	–	–
Extensions and discoveries	64	581	453	–	10	81	81	1,270
Purchases of minerals in place	–	682	–	–	–	–	33	715
Sales of minerals in place	–	(53)	–	–	–	–	–	(53)
Production [A]	(302)	(799)	(770)	(190)	(126)	(125)	(336)	(2,648)
At December 31	2,884	9,078	5,949	1,841	521	956	1,819	23,048
Shell share of joint ventures and associates								
At January 1	312	3,560	71	–	–	–	6	3,949
Revisions and reclassifications	(3)	(776)	45	–	–	–	1	(733)
Improved recovery	–	–	–	–	–	–	–	–
Extensions and discoveries	–	–	77	–	–	–	3	80
Purchases of minerals in place	–	2,549	–	–	–	–	–	2,549
Sales of minerals in place	–	–	–	–	–	–	–	–
Production [B]	(134)	(325)	(24)	–	–	–	(3)	(486)
At December 31	175	5,008	169	–	–	–	7	5,359
Total [C]	3,059	14,086	6,118	1,841	521	956	1,826	28,407
Reserves attributable to non-controlling interest in Shell subsidiaries at December 31	–		–	–	–	–	–	–

[A] Includes 228 thousand million standard cubic feet consumed in operations.
[B] Includes 31 thousand million standard cubic feet consumed in operations.
[C] As announced on February 28, 2023, Shell completed the sale of its 100% interest in Shell Onshore Ventures LLC, which held a 51.8% membership interest in Aera Energy LLC, to IKAV. As of December 31, 2022, Shell had proved reserves of 31 thousand million standard cubic feet.

Proved developed reserves 2022

Thousand million standard cubic feet

	Europe	Asia	Oceania	Africa	North America USA	North America Canada	South America	Total
Shell subsidiaries								
At January 1	2,532	8,789	4,089	981	373	757	1,301	18,822
At December 31	2,460	6,698	4,111	984	275	712	1,582	16,822
Shell share of joint ventures and associates								
At January 1	265	3,097	71	–	–	–	6	3,439
At December 31	175	2,261	129	–	–	–	7	2,572

Proved undeveloped reserves 2022

Thousand million standard cubic feet

	Europe	Asia	Oceania	Africa	North America USA	North America Canada	South America	Total
Shell subsidiaries								
At January 1	459	784	1,218	1,035	242	783	452	4,973
At December 31	424	2,380	1,838	857	246	244	237	6,226
Shell share of joint ventures and associates								
At January 1	47	463	–	–	–	–	–	510
At December 31	–	2,747	40	–	–	–	–	2,787

Standardised measure of discounted future cash flows

SEC Form 20-F requires the disclosure of a standardised measure of discounted future net cash flows, relating to proved reserves quantities and based on a 12-month unweighted arithmetic average sales price, calculated on a first-day-of-the-month basis, with cost factors based on those at the end of each year, currently enacted tax rates and a 10% annual discount factor. In our view, the information so calculated does not provide a reliable measure of future cash flows from proved reserves, nor does it permit a realistic comparison to be made of one entity with another because the assumptions used cannot reflect the varying circumstances within each entity. In addition, a substantial but unknown proportion of future real cash flows from oil and gas production activities is expected to derive from reserves which have already been discovered, but which cannot yet be regarded as proved.

Standardised measure of discounted future cash flows relating to proved reserves at December 31

2024 – Shell subsidiaries

$ million

					North America		South America	
	Europe	Asia	Oceania	Africa	USA	Canada		Total
Future cash inflows	37,955	123,846	55,232	28,879	32,916	48,952	102,670	430,450
Future production costs	11,866	29,048	24,991	10,232	12,472	19,831	46,858	155,298
Future development costs	6,522	13,124	8,866	5,971	9,953	4,905	18,146	67,487
Future tax expenses	16,295	35,843	3,306	6,345	1,710	5,492	10,910	79,901
Future net cash flows	3,272	45,831	18,069	6,331	8,781	18,724	26,756	127,764
Effect of discounting cash flows at 10%	703	19,582	6,456	2,793	1,386	13,675	11,592	56,187
Standardised measure of discounted future net cash flows	2,569	26,249	11,613	3,538	7,395	5,049	15,164	71,577
Non-controlling interest included	–	–	–	–	–	2,525	–	2,525

2024 – Shell share of joint ventures and associates

$ million

					North America		South America	
	Europe	Asia	Oceania	Africa	USA	Canada		Total
Future cash inflows	1,068	68,554	2,542	–	–	–	–	72,164
Future production costs	571	26,367	1,697	–	–	–	–	28,635
Future development costs	608	8,260	491	–	–	–	–	9,359
Future tax expenses	132	23,786	–	–	–	–	–	23,918
Future net cash flows	(243)	10,141	354	–	–	–	–	10,252
Effect of discounting cash flows at 10%	(151)	5,338	81	–	–	–	–	5,268
Standardised measure of discounted future net cash flows	(92)	4,803	273	–	–	–	–	4,984

2023 – Shell subsidiaries

$ million

					North America		South America	
	Europe	Asia	Oceania	Africa	USA	Canada		Total
Future cash inflows	47,840	130,018	61,283	25,740	34,456	54,604	96,804	450,745
Future production costs	13,367	29,098	28,065	10,844	14,506	23,944	43,320	163,144
Future development costs	6,013	13,744	8,902	3,446	8,771	6,633	15,862	63,371
Future tax expenses	23,310	37,566	3,562	6,805	1,561	5,485	11,674	89,963
Future net cash flows	5,150	49,610	20,754	4,645	9,618	18,542	25,948	134,267
Effect of discounting cash flows at 10%	1,351	21,769	7,594	1,392	1,644	13,453	9,320	56,523
Standardised measure of discounted future net cash flows	3,799	27,841	13,160	3,253	7,974	5,089	16,628	77,744
Non-controlling interest included	–	–	–	–	–	2,544	–	2,544

2023 – Shell share of joint ventures and associates

$ million

					North America		South	
	Europe	Asia	Oceania	Africa	USA	Canada	America	Total
Future cash inflows	1,885	71,003	1,478	–	–	–	–	74,366
Future production costs	792	27,725	1,136	–	–	–	–	29,653
Future development costs	601	8,267	155	–	–	–	–	9,023
Future tax expenses	386	24,495	–	–	–	–	–	24,881
Future net cash flows	106	10,516	187	–	–	–	–	10,809
Effect of discounting cash flows at 10%	(83)	6,539	(59)	–	–	–	–	6,397
Standardised measure of discounted future net cash flows	189	3,977	246	–	–	–	–	4,412

2022 – Shell subsidiaries

$ million

					North America		South	
	Europe	Asia	Oceania	Africa	USA	Canada	America	Total
Future cash inflows	82,513	157,030	67,551	28,054	52,231	66,059	115,529	568,967
Future production costs	16,781	32,416	22,764	9,762	23,546	28,520	46,947	180,736
Future development costs	6,125	15,240	8,696	3,004	7,720	5,269	15,917	61,971
Future tax expenses	43,626	50,771	6,917	9,670	3,821	7,004	15,074	136,883
Future net cash flows	15,981	58,603	29,174	5,618	17,144	25,266	37,591	189,377
Effect of discounting cash flows at 10%	5,193	25,770	10,529	1,580	4,056	17,478	13,104	77,710
Standardised measure of discounted future net cash flows	10,788	32,833	18,645	4,038	13,088	7,788	24,487	111,667
Non-controlling interest included	–	–	–	–	–	3,314	–	3,314

2022 – Shell share of joint ventures and associates

$ million

					North America		South	
	Europe	Asia	Oceania	Africa	USA	Canada	America	Total
Future cash inflows	6,576	86,464	1,227	–	–	–	577	94,844
Future production costs	3,626	31,569	760	–	–	–	162	36,117
Future development costs	778	7,139	536	–	–	–	15	8,468
Future tax expenses	2,257	34,551	–	–	–	–	81	36,889
Future net cash flows	(85)	13,205	(69)	–	–	–	319	13,370
Effect of discounting cash flows at 10%	85	6,152	(130)	–	–	–	67	6,174
Standardised measure of discounted future net cash flows	(170)	7,053	61	–	–	–	252	7,196

Change in standardised measure of discounted future net cash flows relating to proved reserves

2024

$ million

	Shell subsidiaries	Shell share of joint ventures and associates	Total
At January 1	77,744	4,412	82,156
Net changes in prices and production costs	(6,032)	813	(5,219)
Revisions of previous reserves estimates	16,196	2,180	18,376
Extensions, discoveries and improved recovery	6,559	277	6,836
Purchases and sales of minerals in place	475	0	475
Development cost related to future production	(12,193)	(668)	(12,861)
Sales and transfers of oil and gas, net of production costs	(40,034)	(3,767)	(43,801)
Development cost incurred during the year	11,298	1,260	12,558
Accretion of discount	11,892	1,144	13,036
Net change in income tax	5,672	(667)	5,005
At December 31	71,577	4,984	76,561

2023

$ million

	Shell subsidiaries	Shell share of joint ventures and associates	Total
At January 1	111,667	7,196	118,863
Net changes in prices and production costs	(57,249)	(8,991)	(66,240)
Revisions of previous reserves estimates	17,624	(1,507)	16,117
Extensions, discoveries and improved recovery	5,007	60	5,067
Purchases and sales of minerals in place	(4,039)	3,365	(674)
Development cost related to future production	(8,339)	(2,011)	(10,350)
Sales and transfers of oil and gas, net of production costs	(41,345)	(1,976)	(43,321)
Development cost incurred during the year	9,797	1,337	11,134
Accretion of discount	17,482	1,855	19,337
Net change in income tax	27,139	5,084	32,223
At December 31	77,744	4,412	82,156

2022

$ million

	Shell subsidiaries	Shell share of joint ventures and associates	Total
At January 1	70,465	5,058	75,523
Net changes in prices and production costs	107,637	10,441	118,078
Revisions of previous reserves estimates	12,378	(5,544)	6,834
Extensions, discoveries and improved recovery	7,422	439	7,861
Purchases and sales of minerals in place	3,187	10,374	13,561
Development cost related to future production	(11,233)	(1,619)	(12,852)
Sales and transfers of oil and gas, net of production costs	(54,486)	(7,029)	(61,515)
Development cost incurred during the year	10,079	1,545	11,624
Accretion of discount	9,796	888	10,684
Net change in income tax	(43,578)	(7,357)	(50,935)
At December 31	111,667	7,196	118,863

Oil and gas exploration and production activities capitalised costs

The aggregate amount of property, plant and equipment and intangible assets, excluding goodwill, relating to oil and gas exploration and production activities, and the aggregate amount of the related depreciation, depletion and amortisation at December 31 are shown in the tables below. Furthermore, long-lived assets that are classified as held for sale are presented separately in the balance sheet and are not included in the capitalised costs for oil and gas producing activities.

Shell subsidiaries

$ million

	2024	2023
Cost		
Proved properties [A]	247,001	260,979
Unproved properties	7,214	8,711
Support equipment and facilities	12,164	11,767
	266,379	281,457
Depreciation, depletion and amortisation		
Proved properties [A]	159,802	164,860
Unproved properties	3,106	3,400
Support equipment and facilities	7,658	6,953
	170,566	175,213
Net capitalised costs	95,813	106,244

[A] Includes capitalised asset decommissioning and restoration costs and related depreciation.

Shell share of joint ventures and associates

$ million

	2024	2023
Cost		
Proved properties [A]	50,270	48,424
Unproved properties	1,309	1,372
Support equipment and facilities	4,752	4,673
	56,331	54,469
Depreciation, depletion and amortisation		
Proved properties [A]	38,068	36,844
Unproved properties	452	452
Support equipment and facilities	3,213	3,053
	41,733	40,349
Net capitalised costs	14,598	14,120

[A] Includes capitalised asset decommissioning and restoration costs and related depreciation.

Oil and gas exploration and production activities costs incurred

Costs incurred during the year in oil and gas property acquisition, exploration and development activities, whether capitalised or charged to income currently, are shown in the tables below. Development costs include capitalised asset decommissioning and restoration costs (including increases or decreases arising from changes to cost estimates or to the discount rate applied to the obligations) and exclude costs of acquiring support equipment and facilities, but include depreciation thereon.

Shell subsidiaries

2024

$ million

					North America		South	
	Europe	Asia	Oceania	Africa	USA	Other [A]	America	Total
Acquisition of properties								
Proved	1			1				2
Unproved				9	68	1	19	97
Exploration	264	187	91	398	499	85	342	1,866
Development	1,728	1,812	1,904	1,002	4,302	402	2,568	13,718

[A] Comprises Canada, Mexico and Barbados.

2023

$ million

	Europe	Asia	Oceania	Africa	North America USA	North America Other [A]	South America	Total
Acquisition of properties								
Proved	1	–	–	–	3	–	–	4
Unproved	–	–	–	(6)	18	34	45	91
Exploration	352	201	62	536	1,159	293	365	2,968
Development	1,431	1,701	1,039	353	3,265	309	1,982	10,080

[A] Comprises Canada, Mexico and Barbados.

2022

$ million

	Europe	Asia	Oceania	Africa	North America USA	North America Other [A]	South America	Total
Acquisition of properties								
Proved	(1)	–	–	102	–	–	184	285
Unproved	–	–	–	(1)	66	8	27	100
Exploration	422	141	21	259	721	140	591	2,295
Development	981	1,001	547	727	1,951	213	3,966	9,386

[A] Comprises Canada and Mexico.

Shell share of joint ventures and associates

Joint ventures and associates did not incur costs in the acquisition of oil and gas properties in 2024, 2023, and 2022.

2024

$ million

	Europe	Asia	Oceania	Africa	North America USA	North America Other	South America	Total
Exploration		43	10					53
Development	34	2,746	96					2,876

2023

$ million

	Europe	Asia	Oceania	Africa	North America USA	North America Other	South America	Total
Exploration	–	65	5	–	–	–	–	70
Development	2	2,809	189	–	–	–	–	3,000

2022

$ million

	Europe	Asia	Oceania	Africa	North America USA	North America Other	South America	Total
Exploration	–	50	3	–	–	–	51	104
Development	(8)	2,250	246	–	–	–	87	2,575

Oil and gas exploration and production activities earnings

The earnings disclosed in this "extractive activities" section are only a subset of Shell's total earnings and as a result are not suitable for modelling Shell's integrated businesses, for which we refer to the full segment earnings and descriptions of Integrated Gas, Upstream and Chemicals and Products. These are available on pages 31, 38, and 60 respectively. The earnings disclosed in this "extractive activities" section are not adjusted for items such as impairment charges, restructuring charges and charges for onerous contract provisions. Full segment information to the Consolidated Financial Statements is available on pages 268-273.

The results of operations for oil and gas producing activities are shown in the tables below. Taxes other than income tax include royalties in cash to governments, without option to pay in kind outside USA and Canada.

Shell subsidiaries

2024

$ million

					North America		South	
	Europe	Asia	Oceania	Africa	USA	Other [A]	America	Total
Revenue								
Third parties	1,263	3,166	591	1,535	181	1,322	1,963	10,021
Sales between businesses	6,663	11,905	7,596	2,667	8,261	1,907	10,093	49,092
Total	7,926	15,071	8,187	4,202	8,442	3,229	12,056	59,113
Production costs excluding taxes	1,389	1,878	1,097	817	1,269	565	1,488	8,503
Taxes other than income tax	82	176	405	332	–	–	2,911	3,906
Exploration	707	152	13	503	533	34	469	2,411
Depreciation, depletion and amortisation	1,249	1,551	2,309	831	4,371	347	3,930	14,588
Other costs/(income)	2,302	1,583	303	(33)	541	2,126	1,400	8,222
Earnings before taxation	2,197	9,731	4,060	1,752	1,728	157	1,858	21,483
Taxation charge/(credit)	2,119	5,920	1,145	1,280	345	56	507	11,372
Earnings after taxation	78	3,811	2,915	472	1,383	101	1,351	10,111

[A] Comprises Canada, Mexico and Barbados

2023

$ million

					North America		South	
	Europe	Asia	Oceania	Africa	USA	Other [A]	America	Total
Revenue								
Third parties	1,328	2,967	754	1,431	123	827	1,934	9,364
Sales between businesses	7,452	11,717	7,113	2,344	8,711	2,382	10,663	50,382
Total	8,780	14,684	7,867	3,775	8,834	3,209	12,597	59,746
Production costs excluding taxes	1,655	1,827	1,181	659	1,259	677	1,514	8,772
Taxes other than income tax	102	165	412	284	–	–	3,307	4,270
Exploration	146	256	13	317	446	336	236	1,750
Depreciation, depletion and amortisation	1,687	1,324	2,760	1,471	4,330	1,094	4,100	16,766
Other costs/(income)	1,846	1,350	118	(32)	886	1,595	1,774	7,537
Earnings before taxation	3,344	9,762	3,383	1,076	1,913	(493)	1,666	20,651
Taxation charge/(credit)	2,362	5,544	976	343	330	(13)	1,088	10,630
Earnings after taxation	982	4,218	2,407	733	1,583	(480)	578	10,021

[A] Comprises Canada, Mexico and Barbados.

2022

$ million

	Europe	Asia	Oceania	Africa	North America		South America	Total
					USA	Other [A]		
Revenue								
Third parties	1,986	3,832	1,394	2,173	257	888	2,459	12,989
Sales between businesses	11,115	14,503	8,457	2,013	12,221	2,713	12,107	63,129
Total	13,101	18,335	9,851	4,186	12,478	3,601	14,566	76,118
Production costs excluding taxes	2,151	1,956	1,331	825	1,556	731	1,331	9,881
Taxes other than income tax	102	831	688	238	(3)	–	3,837	5,693
Exploration	274	121	74	233	621	92	297	1,712
Depreciation, depletion and amortisation	1,468	2,090	(211)	1,090	4,462	403	1,722	11,024
Other costs/(income)	3,772	1,089	135	(336)	629	1,557	1,030	7,876
Earnings before taxation	5,334	12,248	7,834	2,136	5,213	818	6,349	39,932
Taxation charge/(credit)	5,151	7,561	3,025	527	739	229	1,681	18,913
Earnings after taxation	183	4,687	4,809	1,609	4,474	589	4,668	21,019

[A] Comprises Canada, Mexico and Barbados.

Shell share of joint ventures and associates

2024

$ million

	Europe	Asia	Oceania	Africa	North America		South America	Total
					USA	Canada		
Third-party revenue	1,607	3,849	313	–	–	–	–	5,769
Total	1,607	3,849	313	–	–	–	–	5,769
Production costs excluding taxes	200	625	132	–	–	–	–	957
Taxes other than income tax	3	876	22	–	–	–	–	901
Exploration	2	23	–	–	–	–	–	25
Depreciation, depletion and amortisation	51	630	59	–	–	–	1	741
Other costs/(income)	102	77	(20)				(1)	158
Earnings before taxation	1,249	1,618	120	–	–	–	–	2,987
Taxation charge	630	751	–	–	–	–	–	1,381
Earnings after taxation	619	867	120	–	–	–	–	1,606

2023

$ million

	Europe	Asia	Oceania	Africa	North America		South America	Total
					USA	Canada		
Third-party revenue	433	3,801	239	–	–	–	52	4,525
Total	433	3,801	239	–	–	–	52	4,525
Production costs excluding taxes	255	634	109	–	–	–	7	1,005
Taxes other than income tax	26	872	17	–	–	–	7	922
Exploration	–	9	–	–	–	–	–	9
Depreciation, depletion and amortisation	105	501	45	–	–	–	29	680
Other costs/(income)	(2)	29	17	–	(7)	–	(10)	27
Earnings before taxation	49	1,756	51	–	7	–	19	1,882
Taxation charge	25	868	–	–	2	–	(20)	875
Earnings after taxation	24	888	51	–	5	–	39	1,007

2022

$ million

	Europe	Asia	Oceania	Africa	North America		South America	Total
					USA	Canada		
Third-party revenue	2,899	5,997	190	–	–	–	219	9,305
Total	2,899	5,997	190	–	–	–	219	9,305
Production costs excluding taxes	289	617	97	–	–	–	23	1,026
Taxes other than income tax	231	1,402	18	–	–	–	25	1,676
Exploration	1	26	–	–	–	–	–	27
Depreciation, depletion and amortisation	155	2,910	46	–	–	–	47	3,158
Other costs/(income)	(2,061)	184	14	–	(2)	–	18	(1,847)
Earnings before taxation	4,284	858	15	–	2	–	106	5,265
Taxation charge	2,958	1,437	–	–	1	–	22	4,418
Earnings after taxation	1,326	(579)	15	–	1	–	84	847

Acreage and wells

The tables below reflect acreage and wells of Shell subsidiaries, joint ventures and associates. The term "gross" refers to the total activity in which Shell subsidiaries, joint ventures and associates have an interest. The term "net" refers to the sum of the fractional interests owned by Shell subsidiaries plus the Shell share of joint ventures and associates' fractional interests. Data below are rounded to the nearest whole number.

Oil and gas acreage (at December 31)

Thousand Acres

	2024				2023				2022			
	Developed		Undeveloped		Developed		Undeveloped		Developed		Undeveloped	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net
Europe	5,916	1,915	5,578	3,075	5,913	1,854	4,230	2,105	6,008	1,873	6,121	3,095
Asia	20,664	7,365	32,009	16,445	20,654	7,360	34,782	18,515	20,678	7,370	33,382	18,524
Oceania	2,394	885	7,492	4,262	2,381	879	7,618	4,337	2,368	854	8,978	4,940
Africa	3,086	1,141	51,735	24,210	3,086	1,141	57,376	28,471	3,086	1,141	71,934	37,199
North America - USA	427	264	1,650	1,264	388	242	1,984	1,318	486	286	2,180	1,457
North America - Mexico	–	–	4,870	3,067	–	–	5,406	3,335	–	–	5,406	3,335
North America - Canada	390	217	1,150	649	385	213	1,147	646	379	209	1,126	626
South America	1,687	767	37,825	22,532	1,678	761	31,164	20,183	1,669	755	26,156	14,393
Total	34,564	12,554	142,309	75,504	34,485	12,450	143,707	78,910	34,674	12,488	155,283	83,569

Number of productive wells [A] (at December 31)

	2024				2023				2022			
	Oil		Gas		Oil		Gas		Oil		Gas	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net
Europe	693	187	801	255	754	201	930	295	749	199	963	306
Asia	9,160	3,169	369	236	8,536	2,959	374	238	8,164	2,843	316	201
Oceania	–	–	3,776	2,240	–	–	3,579	2,127	–	–	3,382	1,964
Africa	324	107	92	36	328	108	83	33	321	106	84	34
North America – USA	178	107	21	15	172 [B]	108 [B]	23	16	13,021	6,617	26	18
North America – Canada	–	–	579	512	–	–	545	472	–	–	530	459
South America	418	204	69	44	345	170	63	39	293	144	58	35
Total	10,773	3,774	5,707	3,338	10,135 [C]	3,546 [C]	5,597	3,220	22,548	9,909	5,359	3,017

[A] The number of productive wells with multiple completions at December 31, 2024 was 313 Gross (125 Net); December 31, 2023: 346 Gross (142 Net); December 31, 2022: 869 Gross (400 Net).
[B] Corrected From 173 Gross (109 Net).
[C] Corrected From 10,136 Gross (3,547 Net).

Number of net productive wells and dry holes drilled [A]

	2024		2023		2022	
	Productive	Dry	Productive	Dry	Productive	Dry
Exploratory						
Europe	–	4	–	1	5	2
Asia	14	11	1	4	4	5
Oceania	4	0	24	–	20	1
Africa	3	4	–	2	–	2
North America - USA	1	1	2	5	–	5
North America - Canada	2	1	3	–	–	–
South America	8	2	10	–	18	2
Total	32	23	40	12	47	17
Development						
Europe	3	–	2	–	3	–
Asia	262	–	255	3	217	–
Oceania	102	1	166	25	84	1
Africa	2	–	2	–	5	–
North America - USA	5	1	12	–	54	–
North America - Canada	39	2	10	1	22	–
South America	24	–	20	–	23	–
Total	437	4	467	29	408	1

[A] Productive wells are wells with proved reserves allocated. Wells in the process of drilling are excluded and presented separately below.

Number of wells in the process of exploratory drilling [A]

2024

	At January 1		Wells in the process of drilling at January 1 and allocated proved reserves during the year		Wells in the process of drilling at January 1 and determined as dry during the year		New wells in the process of drilling at December 31		At December 31	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net
Europe	11	7	–	–	(4)	(4)	4	3	11	5
Asia	61 [B]	24 [B]	(34)	(12)	(7)	(4)	12	5	32	13
Oceania	30	11	(8)	(4)	–	–	5	5	27	12
Africa	26	15	(4)	(2)	(7)	(4)	–	–	15	9
North America - USA	6 [C]	5 [C]	(1)	(1)	(2)	(1)	2	–	5	3
North America - Canada	6	6	–	–	–	–	–	–	6	6
South America	34 [D]	16 [D]	(14)	(7)	(5)	(2)	30	12	45	20
Total	174 [E]	84 [E]	(61)	(26)	(25)	(15)	53	25	141	68

[A] Wells in the process of exploratory drilling includes wells pending further evaluation.
[B] Corrected from 62 Gross (26 Net).
[C] Corrected from 7 Gross (5 Net).
[D] Corrected from 26 Gross (12 Net).
[E] Corrected from 168 Gross (82 Net).

Number of wells in the process of development drilling

2024

	At January 1		At December 31	
	Gross	Net	Gross	Net
Europe	5	2	9	6
Asia	127	20	141	14
Oceania	165	94	80	41
Africa	3	1	4	1
North America - USA	5	3	16	9
North America - Canada	–	–	7	7
South America	26	6	32	11
Total	331	126	289	89

In addition to the present activities mentioned above, the following recovery methods are operational in the following countries: water flooding (Brazil (including water alternating gas), Brunei, Malaysia, Nigeria, Oman, the UK and the USA); gas injection (Brazil, Brunei, Kazakhstan, Malaysia, Nigeria and Oman); steam injection (the Netherlands, Oman and the USA), and polymer flooding (Oman).

Parent Company Financial Statements

The Parent Company Financial Statements have not been audited in accordance with the standards of the Public Company Accounting Oversight Board (United States of America).

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Statement of Income
for the year ended December 31, 2024

$ million

	Notes	2024	2023
Dividend income		18,499	28,498
Interest and other income	4	322	321
Administrative expenses		(329)	(340)
Income before taxation		**18,492**	**28,479**
Taxation credit/(charge)	8	1	(14)
Income for the period		**18,493**	**28,465**

Statement of Comprehensive Income
for the year ended December 31, 2024

$ million

	2024	2023
Income for the period	18,493	28,465
Comprehensive income for the period	**18,493**	**28,465**

Balance Sheet
as at December 31, 2024

$ million

	Notes	Dec 31, 2024	Dec 31, 2023
Assets			
Non-current assets			
Investments in subsidiaries	5	257,697	257,694
Deferred tax asset	8	4	2
		257,701	**257,696**
Current assets			
Accounts receivable	6	7,340	11,638
Tax receivables		6	35
Cash and cash equivalents		–	–
		7,346	**11,673**
Total assets		**265,047**	**269,369**
Liabilities			
Current liabilities			
Accounts payable and accrued liabilities	7	1,351	1,874
Total liabilities		**1,351**	**1,874**
Equity			
Share capital	10	510	544
Other reserves	11	236,072	235,929
Retained earnings		27,114	31,022
Total equity		**263,696**	**267,495**
Total liabilities and equity		**265,047**	**269,369**

Signed on behalf of the Board

/s/ Sinead Gorman

Sinead Gorman
Chief Financial Officer
March 25, 2025

Statement of Changes in Equity
for the year ended December 31, 2024

$ million

	Notes	Share capital	Other reserves	Retained earnings	Total equity
At January 1, 2024		**544**	**235,929**	**31,022**	**267,495**
Comprehensive income for the period		–	–	18,493	18,493
Dividends	12	–	–	(8,668)	(8,668)
Repurchases of shares	10	(34)	34	(14,057)	(14,057)
Share-based compensation	11	–	109	324	433
At December 31, 2024		**510**	**236,072**	**27,114**	**263,696**
At January 1, 2023		**584**	**235,721**	**25,175**	**261,480**
Comprehensive income for the period		–	–	28,465	28,465
Dividends	12	–	–	(8,387)	(8,387)
Repurchases of shares	10	(40)	40	(14,571)	(14,571)
Share-based compensation	11	–	168	340	508
At December 31, 2023		**544**	**235,929**	**31,022**	**267,495**

Statement of Cash Flows
for the year ended December 31, 2024

$ million

	Notes	2024	2023
Income before taxation for the period		18,492	28,479
Adjustment for:			
Dividend income		(18,499)	(28,498)
Interest income		(320)	(320)
Share-based compensation		11	13
(Increase)/decrease in net working capital		(659)	(185)
Cash flow from operating activities		**(975)**	**(511)**
Dividends received		18,499	28,498
Decrease/(increase) in deposits with subsidiary undertakings	15	4,293	(5,559)
Interest received		320	320
Share-based compensation		429	256
Cash flow from investing activities		**23,541**	**23,515**
Cash dividends paid	12	(8,668)	(8,387)
Shares repurchased		(13,898)	(14,617)
Cash flow from financing activities		**(22,566)**	**(23,004)**
Change in cash and cash equivalents		–	–
Cash and cash equivalents at beginning of the year		–	–
Cash and cash equivalents at end of the year		**–**	**–**

Notes to the Parent Company Financial Statements

1. Basis of preparation

The Financial Statements of Shell plc (the "Company") have been prepared in accordance with UK-adopted international accounting standards and with the requirements of the UK Companies Act 2006 as applicable to companies reporting under those standards. As applied to Shell, there are no material differences from International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB); therefore, the Financial Statements have been prepared in accordance with IFRS as issued by the IASB.

As described in the material accounting policies in Note 2, the Financial Statements have been prepared under the historical cost convention, except for certain items measured at fair value. Those accounting policies have been applied consistently in all periods.

The Financial Statements have been prepared on the going concern basis of accounting, as set out in Note 1 to the Consolidated Financial Statements (see page 245).

The preparation of financial statements in conformity with IFRS requires the use of certain accounting estimates. It also requires management to exercise its judgement in the process of applying the Company's accounting policies. Actual results may differ from those estimates.

The financial results of the Company are included in the Consolidated Financial Statements on pages 240-312. The financial results of the Company incorporate the results of the Royal Dutch Shell Dividend Access Trust (the "Trust").

The Company's principal activity is being the parent company for Shell, as described in Note 1 to the Consolidated Financial Statements (see page 245).

2. Material accounting policies, judgements and estimates

The Company's accounting policies follow those of Shell as set out in Note 2 to the Consolidated Financial Statements on pages 245-255. The following are Company-specific policies.

Presentation and functional currency

The Company's presentation and functional currency is US dollars (dollars).

Investments

Investments in subsidiaries are stated at cost, net of any impairment. Investments are tested for impairment whenever events or changes in circumstances indicate that the carrying amounts for those investments may not be recoverable. For the purposes of determining whether impairment of investments in subsidiaries has occurred, and the extent of any impairment loss or its reversal, management performs an assessment of value in use or fair value less costs of disposal. Management's conclusion may be determined by using one or both of these methodologies as appropriate. For key judgements applied in reaching management's conclusion, please see Note 5.

The original cost of the Company's investment in Royal Dutch Petroleum Company (Royal Dutch) was based on the fair value of the shares transferred to the Company by the former shareholders of Royal Dutch in exchange for A shares in the Company during the public exchange offer in 2005. The original cost of the Company's investment in The "Shell" Transport and Trading Company p.l.c., now The Shell Transport and Trading Company Limited (Shell Transport), was the fair value of the shares held by the former shareholders of The "Shell" Transport and Trading Company p.l.c., transferred in consideration for the issuance of B shares as part of the Scheme of Arrangement in 2005. The Company's investments in Royal Dutch and Shell Transport subsequently became an investment in Shell Petroleum N.V., now Shell Petroleum B.V. (Shell Petroleum); this change had no impact on the cost of investments in subsidiaries. On February 15, 2016, the Company acquired all the voting rights in BG Group plc via the issuance of shares and cash payments of a total fair value of $53,086 million. In September 2016, the Company's shares in BG Group Limited (BG), formerly BG Group plc, were exchanged for an increased investment in Shell Petroleum. This change had no impact on the cost of investments in subsidiaries.

On October 16, 2023, the Company contributed its investment in Shell Petroleum to another subsidiary, Shell Group Holding Limited, in exchange for the issuance of 99 shares with a nominal value of $1 issued at a premium of $257,493 million, reflecting the carrying amount of the Company's investment in Shell Petroleum. This transaction had no impact on the cost of investments in subsidiaries.

Dividend income

Dividends are recognised on a paid basis unless the dividend has been confirmed by a general meeting of Shell Group Holding Limited, in which case income is recognised on the date at which receipt is deemed virtually certain.

Share-based compensation plans

The fair value of share-based compensation for equity-settled plans granted to employees of subsidiaries under the Company's plans is recognised as an investment in subsidiaries from the date of grant over the vesting period with a corresponding increase in equity.

In the year of vesting of a plan, the costs for the actual deliveries are charged to the relevant employing subsidiaries. This is recognised as a realisation of the investment originally booked. If the actual vesting costs are higher than the cumulatively recognised share-based compensation charge, the difference is recognised in income.

See Note 28 to the Consolidated Financial Statements on pages 305-306 for information on the Company's principal plan.

2. Material accounting policies, judgements and estimates continued

Taxation

The Company is tax-resident in the UK (see Note 8).

3. Changes to IFRS not yet adopted

IFRS 18 Presentation and Disclosure in Financial Statements ("IFRS 18")

IFRS 18 was issued in April 2024 and will replace IAS 1 Presentation of Financial Statements. IFRS 18 will be effective from reporting periods beginning on or after January 1, 2027. This standard sets out requirements for the presentation and disclosure of information in financial statements, particularly the Statement of Income. From Shell's initial impact assessment of IFRS 18, it is expected that the implementation will have very limited impact on the Company financial statements.

4. Interest and other income

		$ million
	2024	2023
Interest and other income:		
Interest income	320	320
Foreign exchange gains	2	1
Total	322	321

5. Investments in subsidiaries

		$ million
	2024	2023
At January 1	257,694	257,455
Share-based compensation	739	705
Recovery of vested share-based compensation	(736)	(466)
At December 31	257,697	257,694

As at December 31, 2024, the market capitalisation of the Company and its subsidiaries (collectively referred to as the "Group") was less than the Company's carrying value of its investment in the Group. Management has therefore performed an impairment test to determine whether recoverable amount exceeded the cost of investment recognised.

Recoverable amount was assessed by reference to fair value less costs of disposal. This was calculated by comparing the cost of investment with the Group's market capitalisation, adjusted to reflect a control premium. In determining the premium and costs of disposal, available data from recent market transactions in comparable industries, conducted at arm's length for similar assets, have been taken into account.

This resulted in a recoverable amount exceeding the cost of investment recognised and is consistent with management's expectation of the future recoverability of the Company's investment in the Group. As fair value less costs of disposal exceeded cost, no separate value in use calculation was undertaken.

The recoverability of the Company's investment in the Group may be influenced by the risk factors of the Group, including commodity prices, market supply and demand, expected production volumes and developments related to climate change and the energy transition (see Note 4 to the Consolidated Financial Statements on pages 255-265).

6. Accounts receivable

		$ million
	Dec 31, 2024	Dec 31, 2023
Amounts due from subsidiaries (see Note 15)	7,335	11,633
Other receivables	5	5
Total	7,340	11,638

7. Accounts payable and accrued liabilities

		$ million
	Dec 31, 2024	Dec 31, 2023
Amounts due to subsidiaries (see Note 15)	239	920
Accruals and other liabilities	1,101	943
Unclaimed dividends	11	11
Total	1,351	1,874

Accruals and other liabilities at December 31, 2024, principally comprise commitments for share repurchases undertaken on the Company's behalf under irrevocable, non-discretionary arrangements of $1,061 million (2023: $904 million).

8. Taxation

Reconciliation of applicable tax charge at statutory tax rate to taxation charge

		$ million
	2024	2023
Income before taxation	18,492	28,479
Applicable tax charge at the statutory tax rate of 25% (2023: 23.52%)	4,623	6,698
Derecognition of deferred tax assets	–	–
Tax effects of:		
Income not subject to tax at statutory rates	(4,625)	(6,703)
Expenses not deductible for tax purposes	–	1
Controlled Foreign Companies charge	–	19
Adjustments in respect of prior periods	(2)	(1)
Taxes booked against Pillar 2 liabilities	3	–
Taxation (credit)/charge	(1)	14

The UK corporate income tax rate applicable for the year ended December 31, 2024, is 25%. Deferred taxes on the Balance Sheet have been measured at 25%, which represents the future corporate income tax rate that was enacted at the balance sheet date. The Finance Act 2021 (enacted on May 24, 2021) increased the main rate of UK corporate income tax to 25% with effect from April 1, 2023.

On June 20, 2023, the UK substantively enacted Pillar Two Model Rules, effective as from January 1, 2024. The Pillar Two rules are designed to ensure large multinational enterprises (meeting certain conditions) pay a minimum level of tax on the income arising in each jurisdiction where they operate. Shell has applied the exception, as set out in the amendments to IAS 12 Income Taxes, to recognising and disclosing information about deferred tax assets and liabilities related to Pillar Two income taxes.

9. Financial instruments

Financial assets and liabilities measured at amortised cost in the Company's Balance Sheet comprise amounts due from subsidiaries (see Note 15) and certain amounts reported within accounts payable and accrued liabilities (see Note 7). The fair value of financial assets and liabilities measured at amortised cost at December 31, 2024, and December 31, 2023, approximates their carrying amount.

Information on financial risk management is presented in Note 26 to the Consolidated Financial Statements (see pages 299-302). Foreign currency derivatives are used by the Company to manage foreign exchange risk, which arises when certain transactions are denominated in a currency that is not the Company's functional currency. No derivative financial instruments were held at December 31, 2024, or December 31, 2023.

10. Share capital

Issued and fully paid ordinary shares of €0.07 each

	Number of shares	Nominal value $ million
	Ordinary shares	Ordinary shares
At January 1, 2024	6,524,109,049	544
Repurchases of shares	(409,077,891)	(34)
At December 31, 2024	6,115,031,158	510
At January 1, 2023	7,003,503,393	584
Repurchases of shares	(479,394,344)	(40)
At December 31, 2023	6,524,109,049	544

At the Company's Annual General Meeting (AGM) on May 21, 2024, the Board was authorised to allot ordinary shares in the Company, and to grant rights to subscribe for or to convert any security into ordinary shares in the Company, up to an aggregate nominal amount of approximately €150 million (representing approximately 2,147 million ordinary shares of €0.07 each), and to list such shares or rights on any stock exchange. This authority expires at the earlier of the close of business on August 20, 2025, and the end of the AGM to be held in 2025, unless previously renewed, revoked or varied by the Company in a general meeting.

At the May 21, 2024 AGM, shareholders granted the Company the authority to repurchase (i) up to 644.2 million ordinary shares "on-market" (excluding any treasury shares), less the number of ordinary shares purchased or committed to be purchased under the buyback contracts ("off-market"), made under the authority in (ii); and (ii) up to 644.2 million ordinary shares off-market, less any on-market purchases made under the authority in (i).

10. Share capital continued

In the case of both on-market and off-market purchases of the ordinary shares, the minimum price, exclusive of expenses, which may be paid for an ordinary share is €0.07 and the maximum price, exclusive of expenses, which may be paid for an ordinary share is the higher of: (i) an amount equal to 5% above the average market value for an ordinary share for the five business days immediately preceding the date of the purchase; and (ii) the higher of the price of the last independent trade and the highest current independent bid in relation to ordinary shares on the trading venues where the purchase is carried out. The authorities for both on-market and off-market purchases of the ordinary shares will expire at the earlier of the close of business on August 20, 2025, and the end of the AGM of the Company to be held in 2025. Ordinary shares purchased by the Company pursuant to these authorities will either be cancelled or held in treasury. Treasury shares are shares in the Company which are owned by the Company itself.

All shares repurchased in 2024 under the Company's share buyback programme were cancelled except for repurchases on December 30 and December 31 which were cancelled in January 2025.

For information on the number of shares in the Company held by Shell employee share ownership trusts and trust-like entities to meet delivery commitments under employee share plans, see Note 28 to the Consolidated Financial Statements (see page 305-306).

Assimilation of A and B shares

On January 29, 2022, the Company completed the assimilation of A and B shares into a single class of share, following the change in tax residence to the UK with effect from December 31, 2021. After this date, dividend payments made by the Company with the use of the dividend access mechanism were restricted to the settlement of amounts unclaimed in respect of dividends declared on Class B shares prior to assimilation.

At December 31, 2024 unclaimed dividends of £3 million (December 31, 2023: £4 million) remain in respect of dividends declared on Class B shares prior to assimilation.

At the Company's Annual General Meeting (AGM) on May 23, 2023, the Articles of Association were amended to reduce the period after which unclaimed dividends are forfeited, from 12 years to 6 years.

11. Other reserves

$ million

	Merger reserve	Share premium reserve	Capital redemption reserve	Share plan reserve	Total
At January 1, 2024	234,231	154	236	1,308	235,929
Repurchases of shares	–	–	34	–	34
Share-based compensation	–	–	–	109	109
At December 31, 2024	234,231	154	270	1,417	236,072
At January 1, 2023	234,231	154	196	1,140	235,721
Repurchases of shares	–	–	40	–	40
Share-based compensation	–	–	–	168	168
At December 31, 2023	234,231	154	236	1,308	235,929

The merger reserve was established as a consequence of the Company becoming the single parent company of Royal Dutch and Shell Transport and represented the difference between the cost of the investment in those companies and the nominal value of shares issued in exchange for those investments as required by the prevailing legislation at that time, section 131 of the Companies Act 1985. On February 15, 2016, the Company acquired all shares in BG Group plc by means of a Scheme of Arrangement under Part 26 of the Act, via the issuance of 218.7 million A shares and 1,305.1 million B shares and cash payments. This resulted in an increase in the merger reserve, representing the difference between the fair value and the nominal value of the shares issued by the Company.

On January 6, 2006, loan notes were converted into 4,827,974 A shares. The difference between the carrying value of the loan notes and the nominal value of the new shares issued was credited to the share premium reserve. The capital redemption reserve was established in connection with repurchases of shares of the Company. The share plan reserve is in respect of equity-settled share-based compensation plans (see Note 28 to the Consolidated Financial Statements) and movement in share-based compensation for the year is the net of the charge to equity and the release as a result of vested awards.

12. Dividends

See Note 30 to the Consolidated Financial Statements (see page 308).

13. Legal proceedings and other contingencies

See Note 32 to the Consolidated Financial Statements (see pages 308-310).

14. Directors and Senior Management

See Note 34 to the Consolidated Financial Statements (see page 311) for the remuneration of Directors of the Company. In 2024, the Company recognised $14 million (2023: $14 million) in administrative expenses for the compensation of Directors and Senior Management.

15. Related parties

Information about the Company's subsidiaries, and whether these are held directly or indirectly, and other related undertakings (all of which are held indirectly), at December 31, 2024, is set out in "Appendix 1: Significant subsidiaries and other related undertakings (audited)".

$ million

	Amounts due from subsidiaries (see Note 6)		Amounts due to subsidiaries (see Note 7)	
	2024	2023	2024	2023
Shell Petroleum	–	–	122	820
Shell Treasury Centre Limited	7,332	11,625	–	–
The Shell Petroleum Company Limited	–	–	103	–
The Shell Transport and Trading Company Limited	1	–	–	94
Other	2	8	14	6
Total	7,335	11,633	239	920

The amount due from Shell Treasury Centre Limited (STCL) comprises call deposits and overdrafts in dollars, sterling and euros. Interest is calculated using arm's-length benchmark 3-day median quotes on dollar, sterling and euro balances. Net interest income in 2024 from STCL was $320 million (2023: $320 million). During the year, the Company was recharged costs from The Shell Petroleum Company Limited of $264 million (2023: nil) and The Shell Transport and Trading Company Limited of $37 million (2023: $304 million).

Other transactions and balances

The Company periodically enters into forward and spot foreign currency contracts with Treasury companies, which are subsidiaries. There were no open foreign currency contracts at December 31, 2024, or December 31, 2023.

The Company settles general and administrative expenses of the Trust, including the auditor's remuneration.

The Company has guaranteed contractual payments totalling $31,778 million at December 31, 2024 (December 31, 2023: $48,356 million), and related interest, in respect of listed debt issued by Shell International Finance B.V. The fair value of this guarantee was considered to be immaterial at initial recognition and since the likelihood of default is considered remote no subsequent expected credit losses have been recognised.

On January 11, 2023, the Company guaranteed contractual payments totalling $2,825 million at December 31, 2024 (December 31, 2023: $2,932 million), and related interest, in respect of listed debt issued by BG Energy Capital plc, in place of the previous guarantor, BG Energy Holdings Limited. Both entities are subsidiaries of the Company. The fair value of this guarantee was considered to be immaterial at initial recognition and since the likelihood of default is considered remote no subsequent expected credit losses have been recognised.

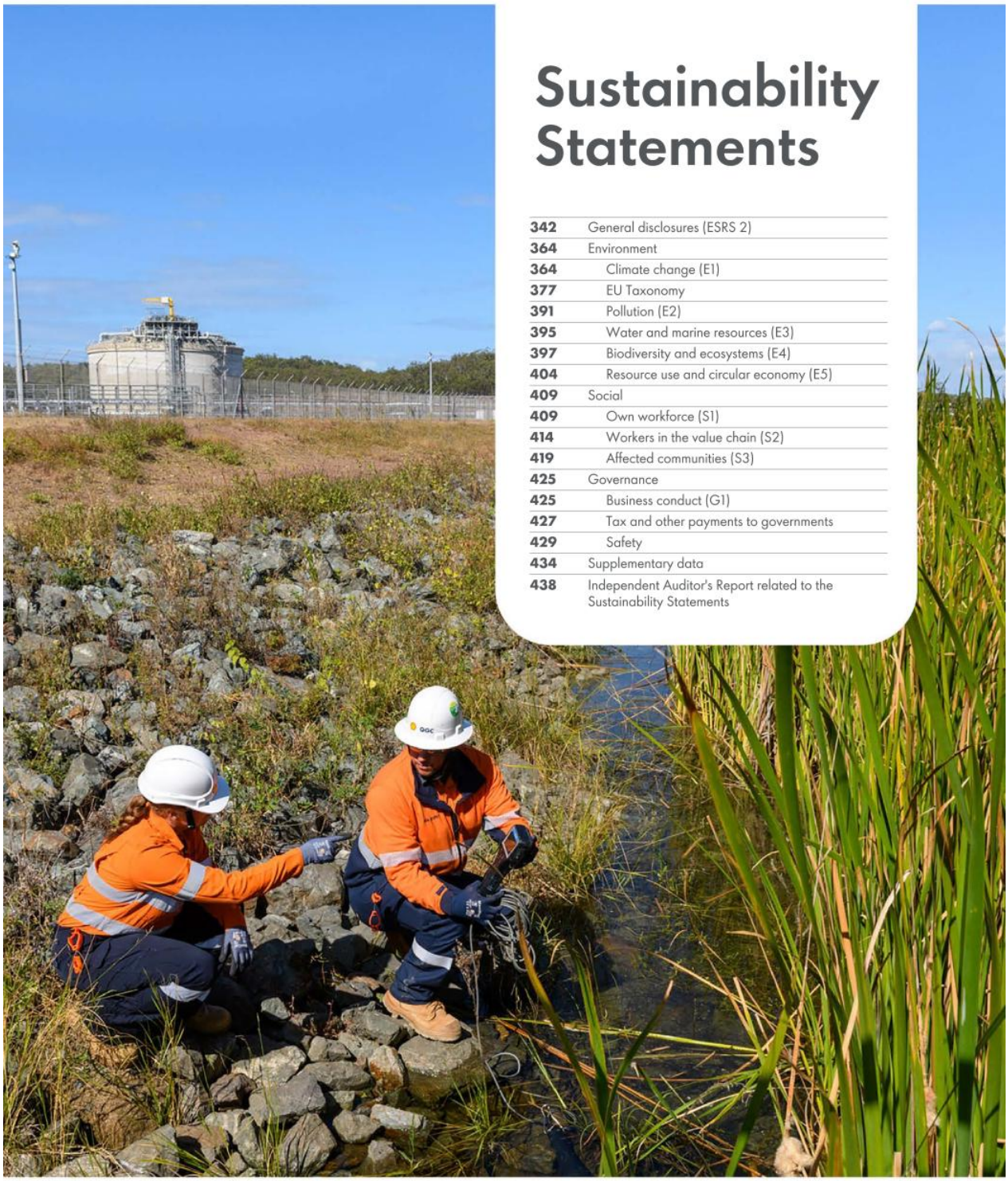
On October 4, 2024, the Company guaranteed contractual payments totalling $11,443 million at December 31, 2024, and related interest, in respect of listed debt issued by Shell Finance US Inc. This entity is a subsidiary of the Company. The fair value of this guarantee was considered to be immaterial at initial recognition and since the likelihood of default is considered remote no subsequent expected credit losses have been recognised.

16. Auditor's remuneration

See Note 35 to the Consolidated Financial Statements (see page 312).

17. Post-balance sheet events

On January 30, 2025, Shell announced the commencement of a $3,500 million share buyback programme covering an aggregate contract term of approximately three months (the "programme"). The purpose of the programme is to reduce the issued share capital of the Company. All shares repurchased as part of the programme will be cancelled. It is intended that, subject to market conditions, the programme will be completed prior to the Company's first quarter 2025 results announcement, scheduled for May 2, 2025. The Company has entered into an arrangement with a single broker consisting of two irrevocable, non-discretionary contracts, to enable the purchase of ordinary shares.



Sustainability Statements

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General disclosures (ESRS 2)

General basis for preparation of Sustainability Statements (BP-1)

In anticipation of the transposition by the Netherlands of the EU Corporate Sustainability Reporting Directive (CSRD) into national law, Shell's Sustainability Statements for the year ended December 31, 2024, are presented on a voluntary basis. The Sustainability Statements have been prepared in accordance with the requirements of the CSRD and the European Sustainability Reporting Standards (ESRS).

Owing to differences in the timing and nature of the transposition of the CSRD into national law across European Economic Area (EEA) members, there is an absence of uniform practice upon which regulators, professional bodies, preparers and auditors can draw. Differences in the timing of transposition by different jurisdictions, coupled with the lack of a standardised approach to evaluating the Sustainability Statements, may impact comparability between entities.

Section headers in the Sustainability Statements follow the structure of the ESRS. Terms and definitions used in the text are defined by Shell unless explicitly stated otherwise.

The Sustainability Statements are prepared on a consolidated basis. The scope of assets subject to consolidation is consistent with that of the "Consolidated Financial Statements" on pages 241-312. The basis of consolidation specified by the ESRS varies per topic and is not consistent with Shell's historical reporting, which is informed by industry standards and the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard.

In line with industry practice, Shell has historically reported sustainability data using the operational control boundary, whereby data are reported on a 100% basis for assets under operational control. This approach reflects the prevalence of joint operations in the oil and gas sector and the common industry practice of designating an operating partner to create and apply operating policies and standards.

For individual environmental and social topics, the ESRS specify an applicable reporting boundary. This includes reporting on a financial control basis (for water and resource use and circular economy), reporting based on relationships (for own workforce, workers in the value chain and affected communities) and reporting based on a combination of operational and financial control in a new "ESRS boundary" (for greenhouse gas emissions, pollution and biodiversity). Many of these boundaries differ from Shell's historical reporting.

The table below illustrates the key differences between reporting on an operational control or financial control basis and the "ESRS boundary" that applies to the environmental topics mentioned above.

Understanding differences in reporting boundaries [A]

Boundary	Accounting treatment	Operated venture	Non-operated venture
Operational control	Subsidiaries	100%	0%
	Joint operations	100%	0%
	JVs and associates	100%	0%
Financial control	Subsidiaries	100%	100%
	Joint operations	Shell share	Shell share
	JVs and associates	0%	0%
ESRS	Subsidiaries	100%	100%
	Joint operations	100%	Shell share
	JVs and associates	100%	0%

[A] Shell reports Scope 3 emissions using an equity boundary. Under this approach, we report the Shell share of emissions from energy products sold, including those sourced from third parties.

For the E1 Climate change standard, we report in 2024 against all required boundaries, as shown in the table "Scope of Consolidation" below. This includes the new ESRS boundary applied to greenhouse gas emissions that differs from the financial statements, industry standards and the Greenhouse Gas Protocol. For the remaining environmental standards, we report data against an operational control boundary as well as the boundaries required by the ESRS, making use of estimates where actual data from non-operated ventures is unavailable. For social and governance topics we report data in line with the ESRS. Further details are provided below.

Greenhouse gas (GHG) emissions

The GHG Protocol Corporate Accounting and Reporting Standard, published in 2004, provides global requirements and guidance on how to report emissions through standardised approaches and principles. ESRS E1 Climate change requires consideration of the GHG Protocol when preparing information for reporting GHG emissions. For Scope 1 and 2 emissions, the Greenhouse Gas Protocol recognises three reporting boundaries: operational control (reporting on a 100% basis for assets under operational control), financial control (reporting on a 100% basis for fully consolidated subsidiaries and percentage interest for joint operations) and equity share (reporting according to the ownership share).

The GHG Protocol recognises that in many industries, operational and financial control are the same with the "notable exception being the oil and gas industry". As a result, when oil and gas companies choose to report against a control boundary, the GHG Protocol requires that they make a choice between reporting on the basis of operational control or financial control. Shell has reported GHG emissions against an operational control boundary in prior periods, and again in 2024, because this best reflects our ability to directly control operations by applying our own policies and standards.

The ESRS E1 Climate change standard establishes a fourth boundary that combines the operational control and financial control boundaries. This "ESRS boundary" is intended to present a full span of control from both a financial and operational perspective. In doing so, however, it results in a divergence from the three consolidation methods provided by the GHG Protocol. The ESRS boundary also results in partial double counting of emissions across the industry, as the operator will report 100% of the emissions and partners may report their share of the same emissions.

For GHG emissions, Shell reports against an operational control, equity and ESRS boundary for operated and non-operated ventures.

Other environmental, social and governance data

To report environmental, social and governance data against either a financial control or ESRS boundary requires access to data from non-operated ventures. More than half of the ventures in which Shell is a partner are non-operated, with partners comprising both state-owned and international companies. Shell has more than 50 joint operations not under operational control that fall within the ESRS boundary, of which 85% operate outside the European Economic Area. These ventures are not subject to the CSRD, nor are they contractually obliged under the operator agreement to provide the volume and granularity of data required by the ESRS.

The feasibility of obtaining information from non-operated ventures has been additionally impacted by the short adoption period, with publication of the final ESRS occurring in the second half of 2023 for first reporting on January 1, 2024, and guidance on reporting boundaries being published several months subsequent to that date.

For environmental metrics other than greenhouse gas contained in the E2–E5 standards, Shell sample-tested data availability from non-operated ventures and observed gaps in availability, quality and completeness. We have therefore, in accordance with the ESRS, estimated the data for non-operated ventures, covering approximately 60 metrics across more than 50 non-operated ventures. See "Supplementary data for pollution, water, biodiversity and waste, including estimates for non-operated assets" on pages 434-437 for a presentation of this information along with details of the estimation methodologies, limitations and uncertainties.

Shell does not have operational control over how non-operated ventures embed sustainability in their operations. This risk of having less control while still being exposed to risks associated with these operations, including environmental risks, is described in our Risk factors. See "Portfolio risks" on pages 135-137 for more information. The risk associated with non-operated ventures is managed by appointing Shell representatives whose responsibility is to manage performance, and create and protect value for Shell. These representatives seek to influence operators and other partners to adopt appropriate practices to drive value and to mitigate risk. This includes regular assessments of how the non-operated venture's standards align with Shell's and seek to influence closure of any identified gaps.

We continue to engage with peers, joint venture partners, standard setters and others on the topic of reporting boundaries. We advocate a common approach through global and interoperable reporting standards, combined with adequate multi-year transition timelines, to access non-operated venture data through industry-wide collaboration.

Boundaries applied in 2024

For the 2024 Sustainability Statements, Shell applies the consolidation scopes set out below. Further details of how these boundaries are applied and any exceptions for individual topics or subtopics are explained in the topical ESRS.

Scope of consolidation

ESRS	Topic	ESRS boundaries	Boundary applied by Shell in 2024
E1	Scope 1 & 2 emissions	ESRS boundary	ESRS boundary [A] Equity boundary [B] Operational control [C]
E1	Scope 3 emissions	Undertaking determines	Equity boundary [B]
E2	Pollution	ESRS boundary	Operational control [C] ESRS boundary [A] [D]
E3	Water and marine resources	Financial control	Operational control [C] Financial control [D]
E4	Biodiversity and ecosystems	ESRS boundary	Operational control [C] ESRS boundary [A] [D] [E]
E5	Resource use and circular economy	Financial control	Operational control [C] Financial control [D]
S1	Own workforce	Based on contractual relationships [F]	Based on contractual relationships [F]
S2	Workers in the value chain	Based on contractual relationships [F]	Based on contractual relationships [F]
S3	Affected communities	Based on relationships	Based on relationships
G1	Business conduct	Specified per topic	Specified per topic

[A] New ESRS boundary that combines operational and financial control. Data are provided for the consolidated accounting group (the parent and subsidiaries) and jointly controlled operations, plus investees such as associates or joint ventures for which Shell has operational control.
[B] Data are provided in accordance with Shell's share of ownership in the asset or activity.
[C] Data are provided on a 100% basis for companies and joint ventures where we are the operator unless otherwise stated, in line with historical reporting and industry practice.
[D] Data for non-operated ventures in scope of this boundary are estimated.
[E] Sites impacting biodiversity sensitive areas only.
[F] Based on the contractual relationship between Shell as the reporting entity and the workers within the scope of these standards.

Assets and activities that we acquired or divested during 2024 are included only for the period in which we operated or owned them, unless otherwise stated.

Some EU member states have not yet transposed the CSRD into national law. As of December 31, 2024, none of Shell's subsidiaries included in the scope of consolidation had an individual or consolidated reporting obligation in 2024 pursuant to Articles 19a(9) or 29a(8) of the EU Accounting Directive. One Shell subsidiary in Spain, Shell España, S.A., would be exempted from the obligation to report individually in the event that Spain, which has not yet adopted the CSRD, were to do so and require retroactive application for 2024.

Value chain

For the purposes of our 2024 Sustainability Statements, a simplified version of Shell's value chain is shown below. This classification is used to guide our assessment of material topics and decisions about the content of our disclosures under the ESRS.

We follow the general classification of value chain provided in ESRS, which distinguishes between own operations, upstream value chain and downstream value chain.

Own operations and value chain

Shell's own operations comprise companies, joint operations, joint ventures and associates where we are the operator and exercise operational control and/or where the activities are reported under financial control. Our own operations span activities related to the production of hydrocarbons and power, processing, trading, sales and distribution. Our upstream value chain consists of direct and indirect suppliers of hydrocarbons, power, biomass, and other goods and services that we transform into energy and non-energy products that benefit our customers. Our downstream value chain consists of customers and their use of our sold products. References to "upstream value chain" and "downstream value chain" in the Sustainability Statements have the meaning given above and do not refer to our Upstream business segment or to our Downstream, Renewables and Energy Solutions directorate.

Actors in our value chain are individuals or entities in our upstream or downstream value chain. An actor is considered upstream from Shell when it provides goods or services used in the production of our own products or services. An actor is considered downstream from Shell when it receives products or services from us.

Actors in our upstream value chain include direct and indirect suppliers, strategic partners and non-operated ventures, among others. Actors in our downstream value chain include retail consumers, business customers, non-operated ventures and business partners who distribute or market our products.

We extend the scope of the Sustainability Statements on a topic-by-topic basis to cover material impacts in Shell's value chain where we have existing data, policies or actions.

The most significant value chain topic for Shell is Scope 3 emissions. More than 90% of the total emissions we include within our net carbon intensity (NCI) boundary are indirect emissions associated with third-party products and end-use emissions of energy products we sell.

Within the 15 categories of Scope 3 emissions, we assess four categories as significant: Category 1 Purchased goods and services, Category 3 Fuel and energy-related activities, Category 9 Downstream transport and distribution and Category 11 Emissions from the use of sold products. These categories cover value chain emission impacts for the purchase, transport and use of energy products by the customer.

Our policies often have direct or indirect application for actors in our value chain, such as suppliers and non-operated ventures. Our qualitative disclosures indicate how our policies are applied in Shell companies and operated joint ventures, as well as our expectation that non-operated ventures adopt appropriate and acceptable policies to manage their risks. Our qualitative disclosures also cover policies covering actors in our upstream value chain, such as the Shell Supplier Principles, our standards for worker welfare, and our approach to enhanced value chain due diligence.

In 2024, we made efforts to obtain additional value chain information for selected topics, such as seeking deeper insight from suppliers into potential human rights impacts in our upstream value chain. We use provisions in the ESRS to phase in certain value chain related disclosures during this transitional period. We generally use this phase-in provision when we are still assessing the nature of potential value chain impacts and the associated data needed for reporting, where regulatory requirements are uncertain, or where it is not yet possible to obtain reliable information owing to contractual restrictions or other factors. We aim to deepen our understanding and enhance our reporting on the value chain.

Use of other exemptions

We have not used the option to omit information corresponding to intellectual property, know-how or the results of innovation. We have not used the exemption from disclosure of impending developments or matters in the course of negotiation, as provided for in articles 19a(3) and 29a(3) of the EU Accounting Directive.

Disclosures in relation to specific circumstances (BP-2)

Time horizons

The time horizons prescribed by the ESRS for reporting on the short, medium and long term differ from those used in Shell for strategy, business planning and risk management purposes.

Because of the inherent uncertainty and pervasive risks across our strategy and business model, we monitor sustainability-related impacts, risks and opportunities across the following time horizons:

- Short term (up to three years): we develop detailed financial projections and use them to manage performance and expectations on a three-year cycle. These projections incorporate decarbonisation measures required to meet our short-term targets.
- Medium term (generally 3–10 years): these are embedded within our business plan, with our continued focus on the customer, the investments and portfolio shifts required in the medium term that will reshape Shell's portfolio.
- Long term (generally beyond 10 years): our portfolio and product mix is expected to evolve over time with changing customer demand.

For the purposes of our disclosures in the Sustainability Statements, we adjust the time horizons described above to follow the ESRS definition of "short term" as referring to one year from the end of the current reporting period. Owing to the long-term nature of capital investment in our industry, we use the option afforded by the ESRS to specify different periods for the medium and long term. For the purposes of our disclosures in the Sustainability Statements, we therefore define "medium term" as generally between 2 and 10 years and "long term" as generally beyond 10 years. Many of our impacts, risks and opportunities are long term in nature, and therefore we consider the differences between the time horizons for reporting under the ESRS and those used internally for strategy, business planning and risk management to be of limited practical significance.

Value chain estimation

We may use estimates based on indirect sources for reporting certain quantitative metrics. Where applicable, further information is provided in the notes accompanying the presentation of metrics.

Sources of estimation and outcome uncertainty

Certain quantitative metrics disclosed in the Sustainability Statements may be subject to measurement uncertainty. Preparation of environmental, social and governance data requires us to apply judgement or make use of estimates. We make these judgements or estimates based on industry standards, applicable regulatory requirements, established operating practices, subject matter expertise and other information believed to be reasonable under the circumstances. Consequently, there is an inherent uncertainty in our calculations.

Estimates and underlying assumptions are reviewed on an ongoing basis to improve accuracy, with any revisions potentially impacting the reported amounts. Where applicable, information about estimates, judgements and assumptions is provided in the notes accompanying the presentation of metrics.

Topics involving a level of measurement uncertainty where we apply either key estimates or judgements are indicated below, together with the level of potential impact on the reported data.

Estimates and judgements

Page(s)	Key estimates and judgements	Estimate/ judgement	Uncertainty impact
100	Scope 3, Category 1: Purchased goods and services	Estimate	● ○ ○
394	Emissions to air	Estimate	● ○ ○
394	Discharges to water	Estimate	● ○ ○
397	Water consumption	Estimate	● ○ ○
408	Waste	Estimate	● ○ ○
434-437	Pollution, water, biodiversity and waste data for non-operated ventures	Estimate	● ● ●

● ○ ○ = Low impact ● ● ○ = Medium impact ● ● ● = High impact

Shell has established a system of risk management and internal control over sustainability reporting to minimise the risk of reporting errors, including in areas requiring the application of judgement or estimates. See "Risk management and internal controls over sustainability reporting (GOV-5)" on page 347 for information.

Disclosures stemming from other legislation or generally accepted sustainability reporting pronouncements

Shell is subject to sustainability disclosure requirements in multiple jurisdictions, including the European Union and the United Kingdom. In some cases, these requirements may overlap with one another, fully or in part. To avoid unnecessary duplication, our disclosures are designed to address these requirements in an integrated manner where possible.

Our disclosures in the Sustainability Statements do not include information stemming from other legislation that is additional to the requirements prescribed by the ESRS. Our disclosures incorporate by reference information from outside the Sustainability Statements which address an ESRS requirement while also satisfying a similar requirement under the regulations of other jurisdictions.

Incorporation by reference

We have chosen to incorporate some of the disclosures required by the ESRS by reference to other parts of the Annual Report and Accounts. We generally do this to avoid duplication or when the required disclosure is best read in conjunction with these sections.

For details of information incorporated in the Sustainability Statements by reference to other parts of the Annual Report and Accounts, see "Disclosure requirements covered by the Sustainability Statements" on pages 358-364.

The role of the administrative, management and supervisory bodies (GOV-1)

Members of the administrative, management and supervisory bodies consist of the Board of Directors and the Executive Committee (EC) of Shell plc.

The Board consists of 12 members, including two executive members and 10 non-executive members. No members of the Board or EC are representatives of employees or other workers. See "The Board of Shell plc" on pages 152-156 and "Executive Committee" on pages 157-158 for information about the skills and experience of members of the Board and EC.

The Board's gender diversity, calculated as an average ratio of female to male Board members as at December 31, 2024, is 0.7. Women made up 42% of the Board as at December 31, 2024. See "Board diversity" on page 156 and "Executive Committee diversity" on page 157 for other aspects of diversity relevant to the Board and EC.

All non-executive Directors are considered by the Board to be independent in character and judgement, and the percentage of independent Board members is 83% as at December 31, 2024.

Our governance framework is designed to effectively deliver our strategy, which seeks to deliver more value with less emissions. The Board is supported by four standing committees: the Sustainability Committee (SUSCO), the Remuneration Committee (REMCO), the Audit and Risk Committee (ARC) and the Nomination and Succession Committee (NOMCO). Sustainability-related matters are considered as appropriate by the Board or the relevant committee.

Three management-level committees with representatives from across Shell also play a critical role in driving sustainability-related elements of our strategy. These include the Capital Investment Committee (CIC), the Carbon Reporting Committee (CRC) and the Sustainability Management Committee (SMC).

See "Our approach to sustainability" on page 127 for a description of governance bodies responsible for sustainability, the role of management, procedures for managing sustainability-related impacts, risks and opportunities, and reporting lines and controls.

At Group level, the potential impacts of the energy transition on our business model and strategy are discussed and assessed by the Board and the Executive Committee as part of the annual strategic and business planning cycle. This assessment allows us to challenge accepted ways of thinking, identify material risks and opportunities, and identify key tensions and trade-offs.

See "Our approach to sustainability" on pages 127-133 for information about how the Board oversees the delivery of Shell's strategy and monitors performance against longer-term targets.

The NOMCO leads the process for appointments to the Board and Senior Management positions (defined as the Executive Committee and the Company Secretary), ensures plans are in place for orderly, well-planned succession, and oversees the development of a diverse succession pipeline of candidates. Consideration of skills and experience relevant to sustainability matters is integrated into this process. Members of the Board and EC have access to internal and external expertise on environmental, social and governance matters.

Leaders at all levels play an essential role with respect to safety, ethics and compliance, making it clear through their actions and expectations that all business plans and activities must be undertaken in a responsible, safe, ethical and compliant manner.

Accountability for ethics and compliance in Shell lies with the Chief Executive Officer and the Executive Committee. The Audit and Risk Committee assists the Board in fulfilling its responsibilities in relation to risk management and internal control, including with respect to ethics and compliance-related matters.

We have a Group-wide ethics and compliance programme that focuses on embedding our core values and business principles into Shell's culture. The programme is directed by Shell's Chief Ethics and Compliance Officer (CECO). The CECO heads Shell's Ethics and Compliance Office and reports to the Legal Director. The CECO also provides regular updates to the EC and the ARC.

See "The Board of Shell plc" on pages 152-156 and "Executive Committee" on pages 157-158 for information on the expertise of management and the Board.

Information provided to and sustainability matters addressed by the undertaking's administrative, management and supervisory bodies (GOV-2)

The Board and EC are informed of and address sustainability matters throughout the year. Sustainability matters are reviewed and considered on an integrated basis alongside other business issues.

See "Board oversight of sustainability including climate-related impacts, risks and opportunities" on page 127 and "Processes by which management is informed about sustainability-related issues" on page 130 for information.

The Board has primary oversight of the delivery of Shell's strategy, including the management of sustainability-related impacts, risks and opportunities. The Board oversaw the setting of our longer-term targets announced at Capital Markets Day in June 2023 and our Energy Transition Strategy 2024.

There is no fixed number of times that the Board may meet in one year. During 2024, the Board met nine times.

The Sustainability Committee (SUSCO) met four times in 2024, with sustainability-related matters discussed at each meeting. The Remuneration Committee (REMCO) met five times during 2024, with sustainability-related matters relevant to remuneration being regularly addressed. The ARC met six times with sustainability-related matters regularly addressed. After each meeting, committee chairs provide updates to the Board.

The Board and EC consider sustainability matters on an integrated basis when overseeing strategy, decisions on major investments and risk management. Trade-offs and stakeholder interests are considered as part of this process.

See "Supporting governance committees" on page 128 and "Principal decisions and stakeholders" on pages 145-148 for examples of how sustainability matters are integrated into decision-making and risk management processes.

See "Board activities" on page 161-164 for information about the nature of the sustainability matters addressed by the Board in 2024.

As part of the annual planning cycle, the Board and EC assess how climate change and GHG emissions may affect the pace of the energy transition, business emission reduction plans and the implications for Shell's portfolio.

Integration of sustainability-related performance in incentive schemes (GOV-3)

Our remuneration schemes are designed to support Shell in achieving its corporate strategy. We have established remuneration structures to support us in reducing our operational emissions and to support customers in reducing their emissions.

The majority of employees participate in the annual bonus scheme. Executive Directors and other nominated employees receive long-term share awards, which aim to support employee retention and provide a stake in Shell's future.

See "Directors' Remuneration Report" on pages 188-190 for information about remuneration schemes linked to sustainability.

This section includes details of the schemes, including the sustainability-linked measures and targets and metrics used in the performance assessment, the proportion of variable remuneration dependent on sustainability-related performance and the role of the Remuneration Committee in approving and updating the Directors' Remuneration Policy.

See "Linking Shell's emissions targets to remuneration" on page 104 for information about how climate-related considerations are factored into remuneration for the Executive Directors.

Statement on due diligence (GOV-4)

Due diligence is the process by which companies identify, prevent, mitigate and account for how they address the actual and potential negative impacts on the environment and people connected with their business.

This process is described in the international instruments of the UN Guiding Principles on Business and Human Rights and the OECD Guidelines for Multinational Enterprises.

For a mapping of the content of the Sustainability Statements to the main aspects and steps of the due diligence process, see the table "Mapping of the main aspects and steps of the due diligence process the Sustainability Statements" below.

Mapping of main aspects and steps of the due diligence process to the Sustainability Statements

Core elements of due diligence	Pages
a) Embedding due diligence in governance, strategy and business model	346, 346, 348, 350, 369, 391, 395, 400, 405, 409, 415, 420, 425, 425, 427, 429
b) Engaging with affected stakeholders in all key steps of the due diligence	346, 350, 354, 410, 416, 421, 425
c) Identifying and assessing adverse impacts	351, 354, 367, 397, 409, 414, 419
d) Taking actions to address those adverse impacts	370, 392, 395, 402, 405, 411, 417, 422, 427, 428, 430
e) Tracking the effectiveness of these efforts and communicating	371, 393, 399, 404, 407, 412, 419, 424, 427, 428, 430

Risk management and internal controls over sustainability reporting (GOV-5)

Shell has established a system of risk management and internal control over sustainability reporting in line with the risk management processes set out in the Shell Performance Framework, which provides the overall framework we use to deliver our strategy and sets out how we manage risks in Shell. See "Risk management and risk factors" on pages 134-144 for more information.

The scope of these internal controls covers preparation of the Sustainability Statements as well as the underlying data gathering and reporting processes for our environmental, social and governance metrics.

Responsibility for these processes is distributed across several internal functions, including Finance, Human Resources, and Safety, Environment and Asset Management (SEAM).

We assess the risk of material misstatements based on factors such as the maturity and complexity of the reporting process, the potential for error, the use of judgements and estimates, and the effectiveness of existing controls. Our approach focuses on strengthening data gathering and reporting processes, implementing controls and assessing effectiveness as part of a continuous improvement cycle.

The main risks identified and their mitigation strategy and controls are shown below.

Sustainability reporting risks, mitigation strategies and controls

Risk	Mitigation strategies and controls
Inaccurate or incomplete disclosure of quantitative metrics	Further development of a risk-based reporting control framework for sustainability data. Components include governance, process documentation, risk identification, and design and embedding of controls and assurance activities in reporting processes.
Inaccurate or incomplete disclosure of qualitative information	Multi-layered review and sign-off of qualitative disclosures by subject matter experts and accountable senior managers.
Non-compliance with regulatory requirements due to lack of clarity on regulatory interpretation and/or application of accounting and reporting policies	Establishment of a cross-functional team to interpret and apply sustainability accounting and reporting policies on a consistent basis, informed by external engagement with regulators and third parties.
Inconsistency with other disclosures	Use of incorporation by reference with other sections of the Annual Report and Accounts and development of a reporting control framework for disclosures on sustainability matters that occur outside the Annual Report and Accounts.

To ensure our system of risk management and internal control is integrated into relevant internal processes, management committees have been established with representatives of our Finance function and other functional process owners to oversee implementation of the reporting control framework.

The Audit and Risk Committee (ARC) reviews and monitors the effectiveness of Shell's system of risk management and internal control. The ARC receives regular reports from management and the external auditor on sustainability reporting, accounting and reporting policies, use of judgements and estimates, and other reporting matters. Internal control practices related to sustainability reporting are being strengthened further. The "Plan-Do-Check-Adjust" approach set out in the Shell Performance Framework has been, and will continue to be, used as our reporting control framework develops.

Control incidents and audit findings, both internal and external, are subject to a monitoring and remediation process overseen by senior management and supported by functional experts as required.

The findings of sustainability reporting risk assessments and internal controls, including internal and external assurance reviews, are communicated to the ARC and members of the Executive Committee as required.

The External Reporting Control Committee assists the Executive Committee and the Audit and Risk Committee in fulfilling their responsibilities in relation to internal control over external reporting as it pertains to financial reporting and environmental, social and governance reporting in the Annual Report and Accounts and quarterly results announcements.

External assurance of sustainability information

In addition to the statutory audit of the financial statements, limited assurance is performed for the Sustainability Statements by Shell's independent auditor. See "The Independent Auditor's Report related to the Sustainability Statements" on page 438.

Our sustainability performance data are not subject to additional validation at a Group level by an external body.

Strategy, business model and value chain (SBM-1)

Shell is a global group of energy and petrochemical companies that aims to meet the world's growing need for more and sustainable energy solutions in ways that are economically, environmentally and socially responsible.

Our products and customers

Shell's product offerings comprise energy and non-energy products. Energy products include crude oil, natural gas, natural gas liquids, oil products, gas-to-liquids (GTL) products, biofuels and electricity. Non-energy products include chemicals, lubricants, bitumen, sulphur and convenience retail items. We serve more than 1 million business customers across the industrial, commercial road transport, mobility, marine, aviation and commercial sectors. We also serve around 33 million retail customers a day at more than 44,000 Shell-branded mobility sites, including service stations.

Our business

Our business directorates in 2024 comprise Integrated Gas and Upstream, and Downstream, Renewables and Energy Solutions.

Integrated Gas and Upstream

Integrated Gas includes liquefied natural gas (LNG) and the conversion of natural gas into gas-to-liquids (GTL) fuels and other products. It includes natural gas and liquids exploration and extraction, and the operation of the upstream and midstream infrastructure necessary to deliver these to market. Integrated Gas also includes the marketing, trading and optimisation of LNG.

The Upstream segment includes exploration and extraction of crude oil, natural gas and natural gas liquids. It also markets and transports oil and gas, and operates the infrastructure necessary to deliver them to the market. Shell has activities in deep water and conventional oil and gas.

Downstream, Renewables and Energy Solutions

Marketing comprises the Mobility, Lubricants, and Sectors and Decarbonisation businesses. Mobility operates Shell's retail network, including electric vehicle charging services and the wholesale commercial fuels business, which provides fuels for transport, industry and heating. The Lubricants business produces, markets and sells lubricants for road transport, and machinery used in manufacturing, mining, power generation, agriculture and construction. The Sectors and Decarbonisation business sells fuels, speciality products and services including low-carbon energy solutions to commercial customers including the aviation, marine, and agricultural sectors.

Chemicals and Products includes chemical manufacturing plants with their own marketing network, and refineries which turn crude oil and other feedstocks into a range of oil products which are moved and marketed around the world for domestic, industrial and transport use. The segment also includes the pipeline business, trading and optimisation of crude oil, oil products and petrochemicals, and the extraction of bitumen from mined oil sands and its conversion into synthetic crude oil.

Renewables and Energy Solutions (R&ES) includes activities such as renewable power generation, the marketing and trading and optimisation of power and pipeline gas, as well as carbon credits and digitally enabled customer solutions. It also includes the production and marketing of hydrogen, development of commercial carbon capture and storage hubs, investment in nature-based projects that avoid or reduce carbon emissions, and Shell Ventures, which invests in companies that work to accelerate the energy and mobility transformation.

Employees and revenues

Shell employed around 96,000 people as of December 31, 2024, including portfolio companies. We have operations in more than 70 countries. See "Our people" on page 115 for a headcount of employees by geographical area.

Shell is active in the fossil fuel sector and in chemical production. We seek to comply with applicable laws and regulations governing our products and services offered, including products and services banned in certain markets, such as end-use restrictions on chemicals.

Revenues derived from these activities are shown below.

Revenue from fossil fuels and chemicals [A]

	$ million
	2024
Revenue from fossil fuel activities	220,411
Oil-related activities [B]	170,179
Gas-related activities [C]	50,232
Taxonomy-aligned economic activities related to fossil gas [D]	–
Chemical production [E]	8,529
Other	55,372
Total revenue	284,312

[A] Revenue is calculated based on the operating revenue and represents total revenue from customer contracts and other sources.
[B] Revenue from oil-related activities comprises revenue from crude oil and oil products.
[C] Revenue from gas-related activities comprises revenue from natural gas, NGL and LNG.
[D] See "The EU Taxonomy" on pages 377-390 for information on our taxonomy-eligible and aligned activities.
[E] Revenue from chemical production comprises revenue from chemicals and plastics.

Our vision [A] is to be the world's leading integrated energy company and our strategy is to deliver more value with less emissions. We are positioning Shell to become the investment case and partner of choice through the energy transition.

[A] A vision statement defines the desired future state of a company rather than a series of firm, binding commitments.

More value

We are committed to enhancing value for our investors through disciplined investments, enhanced shareholder distributions and maintaining a strong balance sheet. Our focus remains on providing secure and reliable products, both now and throughout the energy transition, to meet the evolving needs of our customers. At Capital Markets Day 2023 (CMD23), we outlined our specific targets, and the progress we have made against these targets is presented on page 14.

Less emissions

We are committed to becoming a net-zero emissions energy business by 2050. We have set climate targets and an ambition, outlined in our Energy Transition Strategy 2024 (ETS24), to help us reach net zero. ETS24 was approved by 78% of shareholders who voted at our Annual General Meeting (AGM) in May. Progress against our climate targets and ambition is presented on page 93.

Shell aims to lead in the energy transition where we have competitive strengths, see strong customer demand, and identify clear regulatory support from governments. We will continue to provide our customers with the energy and other products they need, and we will provide this affordably and reliably, while also increasingly offering them low-carbon energy solutions to help them decarbonise their activities.

Moving forward

In 2024, we delivered our strategy against the four themes of generating shareholder value, achieving net-zero emissions, respecting nature and powering lives. These themes are presented on pages 12-13.

Like all businesses, we will continue to adapt how we implement our strategy as the world evolves. This adaptability is crucial for navigating the dynamic energy landscape enabling long-term success.

Capital Markets Day on March 25, 2025, presents an update to our financial targets for investors. See pages 16-17.

We will deliver more value with less emissions by:

- Growing our integrated gas and LNG business
- Sustaining liquids production
- Focusing Downstream, Renewables and Energy Solutions.

Growing our integrated gas and LNG business

We are investing in our gas production and growing our LNG business to deliver the secure energy the world needs. LNG is a critical fuel for the energy transition because it is a lower-carbon alternative to coal in power generation and can be easily transported to where it is needed.

Sustaining liquids production

We aim to sustain liquids production of at least 1.4 million barrels a day through to 2030 with increasingly lower carbon intensity. We are focusing our exploration activities in locations where hydrocarbons have already been discovered.

Focusing Downstream, Renewables and Energy Solutions

We are expanding our premium marketing businesses while streamlining our portfolio with a focus on value over volume. We will build on the options we have invested in for low-carbon growth through the energy transition. Our global customer reach and our supply and trading capabilities position us well to deliver the low-carbon solutions people and businesses need.

We are seeking to change the mix of energy products we sell to our customers as their needs for energy change. We believe we can make the greatest contribution to the energy transition by helping to enable our customers to switch to low-carbon energy products and services.

This is reflected in Shell's strategy to build a portfolio that seeks to:

- develop low- and zero-carbon alternatives to traditional fuel, including biofuels, and other low- and zero-carbon gases;
- provide more renewable power solutions to customers in select markets;
- work with customers across different sectors to help them decarbonise their use of energy, for example by substituting the use of coal with LNG; and
- address any remaining emissions from conventional fuels with solutions such as CCS and high-quality carbon credits.

As we implement our strategy, we will continue to focus on performance, discipline and simplification. This applies not only to our financial and operational outcomes, but also to safety and sustainability. Our Goal Zero ambition is fundamental to the success of our company.

We believe that no business can succeed without an unwavering commitment to respecting the environment and the communities within which it works. At Shell, we seek to protect the environment, increase our reuse and recycling, make a positive contribution to biodiversity and use water and other resources efficiently. We also work to make a positive impact on people around the world, and power lives through our products and activities, and by supporting an inclusive society.

See "Our strategy" on pages 10-13 for more information.

Sustainability in our strategy

We believe that no business can succeed without an unwavering commitment to respecting the environment and the communities within which it works. In addition to generating shareholder value, our strategy is built on achieving net-zero emissions, powering lives and respecting nature. For each, we discuss key challenges and how we are responding in the relevant topical ESRS.

- Achieving net-zero emissions: We have a target to become a net-zero emissions energy business by 2050 and will work with customers to help them decarbonise. See "Climate change (E1)" on page 364.
- Powering lives: We power lives through our products and activities, and by supporting an inclusive society. See "Own workforce (S1)" on page 409, "Workers in the value chain (S2)" on page 414 and "Affected communities (S3)" on page 419.
- Respecting nature: We seek to protect the environment, increase our reuse and recycling, make a positive contribution to biodiversity and use water and other resources efficiently.See "Pollution (E2)" on page 391, "Water and marine resources (E3)" on page 395, "Biodiversity and ecosystems (E4)" on page 397 and "Resource use and circular economy (E5)" on page 404.

Our strategy is underpinned by our core values of honesty, integrity and respect for people; our culture of performance, discipline and simplification; and our Goal Zero ambition to do no harm to people and to have no leaks across our operations.

See "Business conduct (G1)" on page 425 and "Safety" on page 429 for more information.

How we create value

For more than a century, Shell has connected people and energy. We provide the energy people need to fuel their homes, hospitals, schools, vehicles, machinery and factories. Our purpose is to power progress together, by working with each other, our customers and our partners. Our vision [B] is to be the world's leading integrated energy company – delivering impact at scale, connecting energy and people, matching supply to demand.

[B] A vision statement defines the desired future state of a company rather than a series of firm, binding commitments.

Our value creation process shows how we link our inputs to our strategic objectives. Our inputs include financial capital, operations, human capital, relationships, intellectual capital and natural resources. We gather, develop and secure these inputs through our business relationships with investors, strategic partners and suppliers, and governments.

Through our production, processing, trading, sales and distribution activities, we transform our inputs into energy and non-energy products that benefit our customers by offering more low-carbon solutions to meet their needs in a world on its way to net zero. These activities depend on employees, suppliers, value chain workers and communities, as well as other stakeholders.

Our outcomes are generating value for shareholders and transforming Shell into a net-zero emissions energy business by 2050, while powering lives and respecting nature.Our upstream value chain consists of direct and indirect suppliers of goods and services which

form an input to our products. Examples include suppliers of hydrocarbons, biofuels and biomass, power, non-fuel products sold in our retail sites and a wide variety of goods and services procured for use in our projects and operations, such as engineering, construction and maintenance services and materials.

Our downstream value chain consists of customers and their use of our sold products. Examples include retail customers who consume oil products, biofuels, non-fuel retail products or electric vehicle charging solutions. Other examples include business customers who consume natural gas, crude oil or oil products, as well as customers who consume non-energy products such as chemicals.

References to "upstream value chain" and "downstream value chain" in the Sustainability Statements have the meaning given above and do not refer to our Upstream business segment or to our Downstream, Renewables and Energy Solutions directorate.

See "How we create value" on pages 8-9 for information on our value creation model.

Interests and views of stakeholders (SBM-2)

Shell recognises the important role it has in many societies and is committed to public collaboration and stakeholder engagement. Working with stakeholders is crucial to drive the collaboration needed between governments, companies and consumers to advance the energy transition.

Shell's key stakeholders can be categorised into seven groups. Where appropriate, each group is considered to include both current and potential stakeholders. We seek to understand the needs and expectations of key stakeholder groups and take their views and interests into account in our decision-making.

Key stakeholder groups and how we engage with them

Stakeholder group	How we engage [A]	Why we engage	How outcomes are taken into account
Customers	◦ Direct engagement (B2B and B2C) ◦ Sustainability criteria in tenders (B2B) ◦ Customer loyalty programmes (B2C) ◦ Customer feedback procedures (B2C) ◦ Partnerships for collective action (B2B)	◦ Understand customer needs and priorities ◦ Identify new customer value propositions ◦ Maintain our competitive advantages and customer reach ◦ Help customers decarbonise and accelerate the energy transition	◦ Considered in business strategy ◦ Improving products and services
Investor community	◦ Annual General Meeting ◦ Capital markets days ◦ Investor Relations calls and questions ◦ Investor roadshows ◦ ESG ratings	◦ Understand investor views on strategy and performance, including the energy transition ◦ Generate value for shareholders and provide an attractive investment case	◦ Strategic decisions and direction-setting ◦ Considered in management decision-making
Employees, contractors and pensioners	◦ Direct engagement ◦ Representative bodies ◦ Employee forums and resource groups ◦ Shell People Survey ◦ Shell Global Helpline ◦ Grievance mechanisms	◦ Understand expectations and experiences ◦ Maintain a culture aligned to our strategy ◦ Attract and retain talent ◦ Enhance safety and productivity ◦ Receive and address concerns	◦ People and culture strategy ◦ Considered in management decision-making ◦ People development ◦ Improvement and action plans
Strategic partners and suppliers	◦ Direct engagement ◦ Contractor leadership forums ◦ Supplier due diligence processes ◦ Supplier contract management reviews ◦ Partnerships for collective action ◦ Shell Global Helpline ◦ Grievance mechanisms	◦ Build mutually beneficial relationships ◦ Develop new technologies and innovations ◦ Align with Shell Supplier Principles ◦ Promote safe and efficient operations	◦ Considered in business strategy ◦ Supplier selection ◦ Improvement and action plans
Communities	◦ Direct engagement ◦ Public meetings and consultations ◦ Community liaison teams ◦ Community forums ◦ Community feedback mechanisms ◦ Shell Global Helpline	◦ Identify and manage environmental and social impacts ◦ Minimise negative impacts and enhance benefits ◦ Address questions, concerns and feedback	◦ Considered in impact assessment, project design and operating practices ◦ Improvement and action plans
Non-governmental organisations, civil society, academia and think tanks	◦ Direct engagement ◦ Strategic partnerships ◦ Joint research projects ◦ Partnerships for collective action	◦ Understand societal expectations and strategic trends affecting Shell ◦ Promote public policies that encourage the energy transition ◦ Encourage research and innovation ◦ Learn and share best practices	◦ Considered in business strategy ◦ Considered in public policy positions ◦ Considered in advocacy approaches
Regulators and governments	◦ Direct engagement ◦ Public consultations ◦ Regulated reports and submissions ◦ Industry groups and other partnerships	◦ Understand policy needs and priorities ◦ Understand resource holder perspectives ◦ Ensure compliant operations ◦ Advocate policy positions, including with respect to the energy transition	◦ Considered in business strategy ◦ Regulatory compliance ◦ Value creation opportunities

[A] Business to business (B2B), Business to consumer (B2C).

Stakeholder engagement is governed by the Shell General Business Principles (SGBP), which set out how we recognise our responsibilities to stakeholders. They set the standard for how we engage, guided by the principles of listening, respect and honesty.

Stakeholder engagement is a continuous process of dialogue. Our business engages with key stakeholder groups on a regular basis at multiple levels. We may undertake more frequent or structured engagement during projects, activities, acquisitions, divestments and other significant decisions. Stakeholder engagement is fundamental to how we identify, assess and manage actual and potential impacts associated with our business. It is also an integral part of how we respect human rights and provide access to remedy.

Shell's strategy and business model are informed by the views, interests and rights of key stakeholder groups, including customers, investors, employees, strategic partners and suppliers, affected communities, civil society and governments. Value chain workers are a key stakeholder group for our strategic partners and suppliers. Our success in the energy transition depends on our people, our contractors and suppliers, and the communities in which we operate.

We recognise there are differing societal views about our operations and the intricacies associated with the evolving energy transition. These differences are also reflected in our key stakeholder groups. Management weighs up all relevant factors and considers which course of action best enables delivery of our strategy in the long-term interests of the Company, taking into consideration the effect on stakeholders. It is not always possible to balance the Company's interests with those of other stakeholders.

See "Principal decisions and stakeholders" on pages 145-148 for information on how the interests of stakeholders are taken into account in the Board's decision-making process. See "Our approach to sustainability" on pages 127-133, "Understanding and engaging with our stakeholders" on pages 165-166 and "Workforce engagement" on pages 167-168 for information about how the Board and EC are informed about the views and interests of affected stakeholders with regard to sustainability-related impacts.

Material impacts, risks and opportunities and their interaction with strategy and business model (SBM-3)

Shell has conducted an assessment of its material sustainability-related impacts, risks and opportunities as the basis for determining its disclosures in the Sustainability Statements in 2024.

Within the Sustainability Statements, the term "impacts" refers to actual and potential sustainability-related impacts on people and the environment connected with our business. Such impacts can be positive or negative. "Risks and opportunities" refers to sustainability-related financial risks and opportunities, including those derived from dependencies on natural, human and social resources.

When the terms impact, risk and opportunity are used within the Sustainability Statements, they generally have the meaning given to them by the ESRS unless the context indicates otherwise.

Our assessment of impacts, risks and opportunities is based on the double materiality principle. This requires us to consider sustainability matters from the perspective of Shell's actual or potential impact on the environment and society, as well as whether such matters trigger or could reasonably be expected to trigger material financial effects for Shell. These perspectives are sometimes referred to as "impact materiality" and "financial materiality". A matter is material for reporting purposes if it meets the criteria for impact materiality, financial materiality or both.

Impacts

We consider actual and potential impacts over the short, medium and long term. Impacts include those connected with our own operations, our value chain and business relationships. We have the ability to control Shell companies and Shell-operated joint ventures by applying our own policies and standards. Shell does not control non-operated joint ventures.

Our influence over value chain and business relationships is indirect, depending on factors such as our line of sight into potential impacts and the nature of our contractual rights and obligations, if any.

Risks and opportunities

We consider risks or opportunities that could have a material effect on Shell's earnings, cash flows and financial condition over the short, medium or long term.

Outcome

Our double materiality assessment has identified 23 material impacts. Sixteen were assessed as negative and seven as positive. One of the negative impacts, greenhouse gas emissions, corresponds to both a risk and an opportunity (see "Climate change and the energy transition" on page 137 and "Climate related opportunities" on page 84 respectively). The remaining impacts do not constitute a risk or opportunity in their own right, although many are considered an element of a larger principal risk factor.

Our impacts, risks and opportunities are summarised in the table "Material sustainability topics" on pages 352-353. We indicate the reasonably expected time horizon in which effects could materialise. We also indicate whether impacts, risks or opportunities concentrate in our own operations or value chain.

Information about our approach to managing individual impacts, risks and opportunities through policies, actions, metrics and targets can be found in the topical sections.

For further topic-specific information, see "Material impacts, risks and opportunities and their interaction with strategy and business model (ESRS 2 SBM-3)" on page 367 for climate change, page 409 for own workforce, page 414 for workers in the value chain and page 419 for affected communities.

The double materiality assessment process uses qualitative and/or quantitative thresholds to determine which impacts, risks and opportunities are identified and addressed by Shell as material and to determine which sustainability matters are material for reporting purposes. Therefore, the Sustainability Statements may not include every impact, risk and opportunity or additional entity-specific disclosure that each individual key stakeholder group may consider important in its own particular assessment.

Material sustainability topics

Topic	Subtopic	Impact description	Risk/ opportunity	Value chain (VC)			Timeframe			Pages	ESRS/ entity-specific
				Upstream VC	Own operations	Downstream VC	Short term	Medium term	Long term		
Climate change	Greenhouse gas emissions	Our activities result in direct and indirect emissions of greenhouse gases to the atmosphere (Scope 1 and 2). Consumption of products by our customers results in emissions of greenhouse gases to the atmosphere (Scope 3).	Risk: (2) (CR1) (CR2) (CR3) (CR4) Opportunity: (CO1)	•	•	•	•	•	•	364-376	E1
Pollution	Emissions to air	Our activities emit pollutants to air, subject to limits established by local regulations or Shell standards, whichever are most stringent. Unplanned events can result in temporary exceedance of emission limits.	Element of risk factor (6)	•	•		•	•	•	391-394	E2
	Discharges to water	Our activities discharge pollutants to water, subject to limits established by local regulations or Shell standards, whichever are most stringent. Unplanned events can result in temporary exceedance of discharge limits.	Element of risk factor (6)	•	•		•	•	•	391-394	E2
	Soil and groundwater	Our activities are designed to prevent emission of pollutants to soil and groundwater. Losses of containment resulting in adverse impacts to soil or groundwater can occur due to asset integrity failures, unplanned events or sabotage.	Element of risk factor (6)	•	•		•	•	•	391-394	E2
	Nigeria spills	Our activities in Nigeria are designed to avoid the emission of pollutants to soil and groundwater. Spills caused by operational incidents, sabotage or crude oil theft can result in adverse impacts to the environment and communities.	Element of risk factor (6)		•		•	•	•	391-394, 433	E2, Entity-specific
	Hazardous substances	Our activities and products involve substances that are hazardous to human health and the environment. We implement systems of product stewardship to manage actual and potential impacts.	Element of risk factor (6)	•	•	•	•	•	•	391-394	E2
Water	Water consumption	Our activities are designed to use water as efficiently as possible. Our use of fresh water, particularly in areas of high water stress, can result in adverse impacts on the environment and other water users, including communities.	Element of risk factor (6)	•	•		•	•	•	397-404	E3
Biodiversity	Biodiversity loss	Our activities are designed to minimise our impact on nature. Residual impacts have the potential to contribute directly or indirectly to drivers of biodiversity loss such as climate change, pollution, land use change, sea use change and fresh-water use change.	Element of risk factor (6)	•	•		•	•	•	397-404	E4
	Sensitive areas and species	Our activities are designed to minimise our impact on nature. Residual impacts have the potential to adversely impact protected areas, critical habitats and biodiversity sensitive areas.	Element of risk factor (6)	•	•		•	•	•	397-404	E4
	Ecosystem services	Our activities are designed to minimise our impact on nature. Residual impacts have the potential to contribute directly or indirectly to changes from natural to modified habitats, which can affect the quality or availability of ecosystem services used by local communities.	Element of risk factor (6)	•	•		•	•	•	397-404	E4
Circularity	Waste management	Our activities are designed to use resources as efficiently as possible. We generate hazardous and non-hazardous waste, which is disposed of in accordance with regulations and our standards. If not properly managed, waste has the potential to cause adverse impacts to people and the environment.	Element of risk factor (6)	•	•		•	•	•	404-409	E5
Own workforce	Working conditions [P]	Shell's labour practices contribute to employee engagement, attraction and retention and safe and fair working conditions.	Element of risk factor (10)	•	•		•	•	•	409-414	S1
	Equal treatment and opportunities [P]	We aim to provide equal opportunities irrespective of race, colour, religion, age, gender, sexual orientation, gender identity, marital status, disability, ethnic origin or nationality.	Element of risk factor (10)	•	•		•	•	•	409-414	S1
Workers in the value chain	Welfare of value chain workers	Our activities are designed to respect the human rights of our employees and supplier staff. If not properly managed, there is potential for these rights to be affected. Improper arrangements for access to remedy have the potential to result in people being unable to seek redress.	Element of risk factor (9)	•	•		•	•	•	414-419	S2

Topic	Subtopic	Impact description	Risk/ opportunity	Value chain (VC)			Timeframe			Pages	ESRS/ entity-specific
				Upstream VC	Own operations	Downstream VC	Short term	Medium term	Long term		
Affected communities	Social impacts	Our activities are designed to minimise negative impacts on communities. Residual impacts involving Indigenous Peoples, involuntary resettlement, cultural heritage or other social or environmental impacts have the potential to result in adverse impacts to people or affect their human rights.	Element of risk factor (6) (9)	•	•		•	•	•	419-424	S3
	Community engagement	We engage with communities impacted by our activities and provide channels for them to seek access to remedy. If stakeholder engagement is not managed properly, it has the potential to result in ineffective management of socio-economic impacts or access to remedy, affecting people and their human rights.	Element of risk factor (6) (9)	•	•		•	•	•	419-424	S3
	Security and human rights	Our activities are designed to protect people and assets from security threats and prevent impacts on human rights. Improper use of force by public or private security has the potential to result in harm to people or affect their human rights.	Element of risk factor (6) (9)	•	•		•	•	•	419-424	S3
	Social investment and benefits [P]	Our activities deliver socio-economic benefits to communities through employment, local content (including local procurement and supplier development) and social investment programmes.		•	•		•	•	•	419-424	S3
	Energy provision [P]	Our activities produce energy and non-energy products that benefit our customers and contribute to improved standards of living in the societies in which we operate.				•	•	•	•	419-424	
Governance	Tax and other payments to governments [P]	Our activities generate taxes and payments to governments that fund public services and other expenses. Our participation in relevant initiatives contributes to greater transparency.			•		•	•	•	427-428	Entity-specific
	Culture of integrity [P]	Our policies are designed to encourage people to raise concerns without fear of repercussions and to ensure appropriate action is taken. This contributes to a safe and healthy organisational culture.	Element of risk factor (8) (10)	•	•		•	•	•	425-427	G1
	Responsible sourcing [P]	Our activities are designed to ensure that procurement of goods and services complies with applicable laws while meeting social, environmental and human rights standards. This has the potential to drive higher standards in our supply chain.	Element of risk factor (3) (6) (8) (9)	•	•		•	•	•	425-427	G1
	Safety	Our activities are designed to prevent personal and process safety incidents. Should such incidents occur, they can have an adverse impact on people or the environment.	Element of risk factor (6)	•	•	•	•	•	•	429-438	S1 and entity-specific

[P] Positive impact.

Risk factors

(2) Climate change and the energy transition (see pages 137-138).
(3) Country risks (see pages 138-139).
(6) Health, safety, security and the environment (see pages 140-141).
(8) Litigation and regulatory compliance (see pages 142-143).
(9) Reputation and risks to our licence to operate (see page 143).
(10) Our people and culture (see page 144).

Climate-related risks and opportunities

(CR1) Climate-related commercial risks (see page 81).
(CR2) Climate-related regulatory risks (see page 81).
(CR3) Climate-related societal risks (including litigation) (see page 82).
(CR4) Climate-related physical risks (see page 83).
(CO1) Climate-related opportunities (see page 84).

We assessed seven of the eight topical standards of the ESRS as material for Shell in 2024, with some individual subtopics, sub-subtopics or data points assessed as non-material. The eighth standard, "S4 Consumers and end-users", was assessed as non-material. The topics of most relevance to customers, Scope 3 greenhouse gas emissions and product stewardship, are covered in "Climate change (E1)" on pages 364-376 and "Pollution (E2)" on pages 391-394, respectively.

Current and anticipated effects on business model, value chain, strategy and decision-making
The "Risk factors" section on pages 135-144 provides an overview of the principal risks Shell is exposed to in its operations, their potential effects and how they are managed.

Our double materiality assessment has identified GHG emissions as a material impact and climate change and energy transition as a sustainability-related risk. The current and anticipated effects of this risk on our business model, value chain, strategy and decision-making are described in "Our strategy" on pages 10-13, "Risk factors" on pages 135-144 and "Our journey to net zero" on pages 76-108.

The remaining impacts are not a material risk or opportunity for Shell in their own right. However, many are considered elements of one or more risk factors. The current and anticipated effects of these impacts on our business model, value chain, strategy and decision-making are described in "Our strategy" on pages 10-13, "Risk factors" on pages 135-144, and alongside the disclosures provided under the corresponding topical ESRS.

Current and anticipated financial effects
See Note 4 to the "Consolidated Financial Statements" on pages 255-265 for information about financial effects as well as other key insights, including sensitivities related to climate change and the energy transition.

Resilience of strategy and business model
See "Resilience of Shell's strategy to different climate-related scenarios" on pages 86-88 for information about the resilience of our strategy and business model in the context of climate change and the energy transition.

The resilience of our strategy and business model in the context of material impacts that are elements of one or more risk factors is described in "Our strategy" on pages 10-13, "Risk factors" on pages 135-144, and alongside the disclosures provided under the corresponding topical ESRS.

Changes compared to previous periods
The current reporting period is the first in which Shell has conducted a double materiality assessment in accordance with ESRS requirements. Accordingly, there are no changes to our material impacts, risks or opportunities compared to the previous reporting period.

Description of the process to identify and assess material impacts, risks and opportunities (IRO-1)
Shell has developed a process to identify and assess material sustainability-related impacts, risks and opportunities as the basis for determining our disclosures in the Sustainability Statements.

Our double materiality process follows five steps. We start by establishing our business context, activities, value chain and stakeholders. Next, we consider potential sustainability matters and identify actual and potential impacts, risks and opportunities. We then assess impacts for actual and potential severity, and risks and opportunities for potential financial effects. Finally, we determine material matters for reporting. Each step is discussed below.

1. Establish the business context
We begin by establishing the scope of the assessment. To provide a common framework for analysis, we review our principal activities, business relationships and key stakeholder groups. We consider Shell's dependence on key resources including financial capital, operations, human capital, relationships, intellectual capital and natural resources. We also adopt guidelines for assessing our own operations and our upstream and downstream value chain.

2. Identify impacts, risks and opportunities
Next, we review the list of sustainability-related topics, subtopics and sub-subtopics provided by the ESRS and industry-specific lists developed by Ipieca and the Global Reporting Initiative (GRI). Where relevant, we also consider Shell-specific topics.

Based on this review, internal experts prepare an inventory of impacts, risks and opportunities. When performing this exercise for our own operations, we are informed by various sources of information, such as operating data, internal and external studies, and stakeholder views. For our upstream and downstream value chain, we focus on areas where there is sufficient information to allow us to make an informed assessment. This may include our own operating data or information provided by suppliers, business partners or other third parties.

We focus our assessment on aspects of our own operations with the most potential for negative impacts on people or the environment based on industry experience. We also focus on business relationships with high potential for negative impacts, such as non-operated ventures, governments and suppliers

We consider actual and potential impacts, both positive and negative. For risks and opportunities, we consider uncertain environmental, social or governance events or conditions that, if they occurred, could have material financial effects on Shell. Impacts, risks and opportunities are considered over the short, medium and long term.

3. Assess actual and potential impacts
We adopt criteria to assess the likelihood and magnitude of impacts. These criteria are based on Shell's existing risk assessment tools for health, safety, security, environment and social performance (HSSE & SP), modified where necessary to meet the requirements of the ESRS.

Our assessment matrix is based on a five-point scale for likelihood. Magnitude is also based on a five-point scale, taking into account the scale, scope and remediability of the impact.

For actual impacts, we treat the effect as already occurring and do not assign a rating for likelihood. We assign a rating for magnitude based on actual impacts after implementation of standard control measures. We exclude from this analysis measures that compensate for residual impacts, such as the use of carbon credits or biodiversity offsets.

For potential impacts, we assign a rating for likelihood and magnitude. In line with ESRS requirements, we assess potential magnitude on a gross basis, assuming no mitigation in consequences due to control measures. For potential human rights impacts, magnitude takes precedence over likelihood.

4. Assess risks and opportunities
We adopt criteria to assess the likelihood and magnitude of potential financial effects. These are based on our existing enterprise risk management framework, modified where necessary to ensure consistency with our approach to assessing impacts. Our assessment matrix is based on a five-point scale for likelihood. Magnitude is also based on a five-point scale, taking into account the potential ways in which financial effects could materialise, including through Shell's dependence on natural, human and social resources.

To ensure connectivity with existing disclosures, we consider whether potential risks have been identified previously as a principal risk factor or as an element of a principal risk factor. Where applicable, these linkages are highlighted in our disclosure. See "Risk management and risk factors" on pages 134-144 for information about how sustainability matters are integrated with our risk factors.

5. Determine material disclosures
In the final step of the process, we apply the outcome of the double materiality assessment to determine our material disclosures for the Sustainability Statements. A consolidated list of impacts, risks and opportunities is reviewed with internal experts and managers. Reporting thresholds for actual impacts are based on magnitude. For potential impacts, reporting thresholds are based on a combination of likelihood and magnitude. For risks that are material on a stand-alone basis, reporting thresholds follow existing definitions of financial materiality. Opportunities are assessed based on qualitative thresholds. The final results of the assessment are reviewed and endorsed by an internal management committee consisting of senior business and functional managers. See "Risk management and internal controls over sustainability reporting (GOV-5)" on page 347 for information about control procedures for sustainability reporting.

We map our material impacts, risks and opportunities to ESRS disclosure requirements. Disclosure requirements with at least one corresponding impact, risk or opportunity are deemed to be material. The remainder are deemed to be non-material. We omit individual data points deemed to be non-material based on the process for determining data point materiality laid out in the ESRS. This process takes into consideration the significance of the information in relation to the matter it purports to explain or depict and the relevance of the data point to meeting the decision-making needs of users.

How our management systems inform the assessment
Sustainability is integrated into our existing risk management processes, as set out in the Shell Performance Framework. Our double materiality assessment, undertaken for the purpose of determining our disclosures in the Sustainability Statements, is informed by these processes but does not replace them.

Details of how existing risk management processes inform our assessment of specific topics are set out below. See "How we manage risks" on page 134 and "Policies and standards" on page 130 for information about how sustainability is integrated into Shell's overall approach to risk management.

HSSE & SP and Asset Management
Our standards require a systematic approach to managing health, safety, security, environment and social performance (HSSE & SP). The foundation of this approach is our management system.

Our approach to identifying and assessing impacts, risks and opportunities related to emissions, pollution, water, biodiversity, circularity and waste and affected communities is governed by our internal risk management process and our SEAM Standards. We expect non-operated joint ventures to adopt appropriate and acceptable policies to manage their risks.

We use various processes to identify, assess and manage health, safety, environmental and social impacts, risks and opportunities. Two of the most important are impact assessment and the hazards and effects management process.

Impact assessment
Our standards require projects, assets or businesses to identify the need for an impact assessment process in the early stages of a project with the potential for new or changed impacts on the environment, communities and community health. Impact assessment is a methodology to identify and assess the environmental, social and health impacts of a proposed project. It involves evaluating alternatives and identifying measures to mitigate negative impacts or enhance positive impacts, as well as management and monitoring arrangements. Our standards require the impact assessment to be performed in alignment with international standards, which are generally defined as local legal requirements in high-income OECD countries at a minimum and the IFC Performance Standards elsewhere.

Hazards and effects management
Our standards require assets, projects and activities to establish and maintain systematic risk identification and management processes such as the hazards and effects management process (HEMP). This approach starts by identifying potential hazards and evaluating their likelihood and potential impact. We then implement controls to reduce the risks to as low as reasonably practicable (ALARP), which is the point at which the cost in time, money and effort of further risk reduction is grossly disproportionate to the reduction achieved. In doing so, we apply a hierarchy of controls, which prioritises the elimination, substitution and isolation of hazards, before implementing engineered safeguards or other solutions. We monitor the effectiveness of these controls via regular assurance activities.

Community engagement
We engage with affected communities on a range of topics related to our operations, including issues related to pollution, water, biodiversity and waste. In some locations, permitting processes may also require statutory public consultations or hearings. See "Affected Communities (S3)" on page 419 and "Interests and views of stakeholders (SBM-2)" on page 350 for information.

How our approach to individual topics inform the assessment
The application of our management systems with respect to individual environmental, social and governance topics is explained below.

Climate change
Our approach to identifying and assessing climate-related impacts, risks and opportunities is integrated into the risk management, performance management, learning and improvement cycle that sits at the heart of the Shell Performance Framework.

Climate-related matters are considered from a strategic, operational, conduct and culture perspective to help us maintain a comprehensive view of our impacts, risks and opportunities and the time horizons in which they could materialise.

GHG emissions
We identify, assess and manage actual and potential GHG emissions from activities under our operational control as part of our SEAM Standards. We expect non-operated joint ventures to adopt appropriate and acceptable policies to manage their risks.

We identify sources of Scope 1, 2 and 3 GHG emissions based on operating data, design and engineering practices, and analysis of products manufactured and sold. We assess the actual and potential GHG emissions inventory from these sources in line with internationally recognised standards and industry-specific guidelines [A].

[A] Assessments of GHG emissions associated with our business activities are prepared in accordance with ISO 14064-1:2018 Specification with Guidance at the Organization Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals and the GHG Protocol Corporate Accounting and Reporting Standard (2004). Industry-specific guidance is also applied, including the API Compendium of Greenhouse Gas Emissions Methodologies for the Natural Gas and Oil Industry (November 2021), Ipieca Sustainability Reporting Guidance for the Oil and Gas Industry (4th edition, 2020) and other standards and guidance.

Our standards require assets and projects to forecast their future emission levels and to prepare an annual plan which demonstrates planned delivery of their allotment of business-level carbon targets. The aim of this requirement is to ensure that assets or projects with material GHG emissions have plans to contribute emission reductions in line with Shell's GHG reduction targets and ambition.

Each business and function regularly reviews its risk profile, risk responses and assurance activities throughout the year to ensure climate-related risks are managed effectively. These insights are used to provide management with updates on the operational management of greenhouse gas emissions and climate-related risks and opportunities.

During these updates, management reviews whether our risk responses are effective in addressing the components of climate-related risks and opportunities. These reviews help us to update Shell's plans and guide our day-to-day operational decisions such as maintenance schedules and our risk response plans. See "Material impacts, risks and opportunities and their interaction with strategy and business model (ESRS 2 SBM-3)" on page 351.

The management teams are supported by a combination of carbon-management-related standards and frameworks, forums at various levels of the organisation, and capability development programmes. We use risk management processes to identify and respond to emerging risks to the safe, compliant and efficient operation of our assets, including climate-related risk.

Our risk management processes are carried out at the Group, business, function and asset level, which includes projects.

Climate-related physical risks
See "Physical risks" on page 83 for information on Shell's approach to identifying and assessing climate-related physical hazards in our operations and value chain, our use of high-emission climate scenarios, and our exposure to climate-related physical risk.

Climate-related transition risks and opportunities
We monitor climate-related transition risks across four components: commercial, regulatory, societal (including litigation) and physical, as well as monitoring climate-related opportunities. We are continually enhancing our approach to identifying, assessing and managing risks and opportunities resulting from climate change. This includes considering different time horizons in which risks and opportunities could materialise and their relevance for business planning.

Shell has identified climate change and the energy transition as a material risk. The risk could potentially result in changes to the demand for our products, supply chains and markets; further changes to the regulatory environment in which we operate; and increased litigation. See Note 32 to the Consolidated Financial Statements "Legal proceedings and other contingencies" on page 308.

In assessing this risk, we have considered a range of climate scenarios including those in which the rise in global average temperature this century is limited to 1.5°C above pre-industrial levels.

We actively monitor societal developments such as regulation-driven carbon pricing and customer-driven product preferences. Where relevant, we incorporate these developments into potential scenarios which provide insights into how the energy transition may unfold in the medium and long term. These insights, along with those provided by external scenarios such as those prepared for the IPCC's Sixth Assessment Report, guide how we set our strategic direction, capital allocation and climate-related targets and ambition.

The transformation of the energy system to net-zero emissions will require simultaneous action in three areas: an unprecedented improvement in the efficiency with which energy is used; a sharp reduction in the carbon intensity of the energy mix; and the mitigation of residual emissions through the use of technology and natural sinks. While it is difficult to predict the exact combination of actions that will deliver the net-zero goal, scenarios help us to consider the variables and the potential direction and pace of the transition needed. Scenarios are not intended to be predictions of likely future events or outcomes and, therefore, are not the basis for Shell's operating plans, outlook and financial statements.

Key aspects of Shell's financial resilience in the context of climate-related impacts are assessed and described in more detail in Note 4 to the "Consolidated Financial Statements" on pages 255-265. This describes how Shell has considered climate-related impacts in key areas of the financial statements and how this translates into the valuation of assets and measurement of liabilities. Shell's financial statements are based on reasonable and supportable assumptions that represent management's best estimate of the range of economic conditions that may exist in the foreseeable future.

As there is no single scenario that underpins our plans, sensitivity analysis has been conducted using a range of key assumptions to test the resilience of our asset base.

Oil and gas prices are one of the key assumptions that underpin Shell's financial statements, with the mid-price outlook informed by Shell's scenario planning representing management's best estimate. Price outlooks reflect a broad range of factors, including, but not limited to, future supply and demand, and the pace of growth of low-carbon solutions. The scenarios have been selected to illustrate the resilience of the asset base under a range of possible outcomes, including the price implications arising from the ambitious International Energy Agency's Net Zero Emissions by 2050 Scenario (NZE50) which provides a potential path for the global energy system to net-zero emissions by 2050. Sensitivities of asset-carrying amounts to prices are under the assumption that all other factors in the models used to calculate impacts remain unchanged.

Sensitivity analysis has been performed using price outlooks from:
1. Average prices from three 1.5–2°C external climate change scenarios.
2. Hybrid Shell Plan and IEA NZE50: for this, Shell's mid-price outlook is applied for the next 10 years. Because of greater uncertainty, the IEA normative Net Zero Emissions scenario is applied for the period after 10 years. This gives less weight to the price–risk uncertainty in the first 10 years reflected in the business plan period and applies more risk to the more uncertain subsequent periods.
3. A 1.5°C scenario, derived from IEA NZE50: this applies the IEA normative Net Zero Emissions scenario over the whole period under review and reflects the sensitivity to a pure net-zero emissions scenario from the IEA.

Pollution
We maintain an overview of sites and activities under our operational control for pollution-related impacts, risks and opportunities. Our assessment is based on operating data, technical studies, expert analysis and internal risk management processes. We are limited in our ability to analyse pollution-related impacts in our upstream and downstream value chain owing to limited availability of data.

Water and marine resources
We maintain an overview of sites and activities under our operational control for water-related impacts, risks and opportunities. Our assessment is based on operating data, technical studies, expert analysis and internal risk management processes. We also use tools such as the World Resources Institute's Aqueduct Water Risk Atlas. We are limited in our ability to analyse water-related impacts in our upstream and downstream value chain owing to the limited availability of data.

Biodiversity and ecosystems
In addition to our requirements for impact assessment, where the significance of potential impacts is assessed using criteria tailored to local environmental and socio-economic circumstances, our standards also require us to avoid adverse impacts on biodiversity and ecosystem services and, where avoidance cannot be achieved, to mitigate adverse impacts via the mitigation hierarchy.

We use a variety of internationally recognised assessment tools, such as the Integrated Biodiversity Assessment Tool (IBAT), to guide our approach to identifying impacts, risks and opportunities, in combination with analysis of site-level data.

Where we have sites located in or near biodiversity sensitive areas, we implement measures to avoid, minimise, restore or, if necessary, compensate for negative impacts on natural habitats or the habitats of species for which a protected area has been designated. If a site is located in critical habitat, our standards require us to implement the mitigation hierarchy and achieve net positive impact on biodiversity. We follow national or international standards to assess biodiversity impacts and define mitigation measures.

We consult with local communities and other affected stakeholders throughout the project life cycle on potential impacts of our activities on the biological resources, ecosystems and ecosystem services used by them and ways to avoid or minimise such impacts.

We have further work to do to identify and assess dependencies at site locations and in the upstream and downstream value chain. We also have further work to do to identify and assess transition and physical risks and systemic risks. We aim to undertake further work to mature our understanding of these topics.

We are limited in our ability to analyse biodiversity-related impacts in our upstream and downstream value chain owing to the limited availability of data at Group level.

Resource use and circular economy
We maintain an overview of sites and activities under our operational control for circularity-related impacts, risks and opportunities. Our assessment is based on operating data, technical studies, expert analysis and internal risk management processes. We are limited in our ability to analyse circularity-related impacts in our upstream and downstream value chain owing to the limited availability of data.

Own workforce
We identify actual or potential impacts on our workforce through a variety of means. These include feedback from human resources and line managers, feedback from engagement and the Shell People Survey, learning from Shell Global Helpline cases and other mechanisms. We identify, assess and manage safety-related risks for activities under our operational control as part of our SEAM Standards.

Workers in the value chain
We identify, assess and manage worker welfare-related impacts for activities under our operational control as part of our SEAM Standards. We identify, assess and manage impacts for people who work in our supply chain for non-hydrocarbon goods and services as part of our enhanced value chain due diligence process.

Affected communities
We identify, assess and manage community-related impacts for activities under our operational control as part of our SEAM Standards. In addition, we conduct a risk-based annual review of select assets and projects to evaluate the effectiveness of local management of social performance, with participation from in-country teams and central experts.

Ethics and compliance
Shell's Ethics and Compliance Office (SECO) establishes requirements for Shell's businesses and functions, and supports them to identify and assess ethics and compliance risks. SECO designs, supports and monitors Shell's ethics and compliance programmes. These are supported by legal counsel who monitor external legal and regulatory developments. Shell's businesses and functions are responsible for implementing the necessary policies, standards and procedures. Ethics and compliance representatives provide advice and monitor the effectiveness of the programme.

Our ethics and compliance policies require Shell's businesses and functions to review the risks associated with anti-bribery and corruption, anti-money laundering, facilitation of tax evasion, data privacy and trade compliance, periodically and when there is a significant change in business conditions. Many factors influence our exposure to business conduct risks. Shell reviews the exposure of its businesses and functions based on a variety of factors including the location, the nature of the activity and the degree of involvement with government officials.

Other methodological notes
We engage with stakeholders on a regular basis concerning our potential business impacts. We have not engaged with stakeholders directly on the double materiality assessment, but use feedback from existing communication channels to inform our assessment. We reviewed the double materiality assessment with relationship owners for key stakeholder groups to ensure external views are reflected.

Shell's Sustainability Report 2023 was informed by the double materiality principle as set out in the GRI standard and guided by topics set out in the GRI and Ipieca standards. This is the first year in which we have applied the process prescribed by the ESRS. We expect to review our double materiality assessment on an annual basis.

Disclosure requirements in ESRS covered by the undertaking's sustainability statement (IRO-2)
The following table lists the disclosure requirements covered by the Sustainability Statements and the page numbers where the related disclosures can be found. This table excludes disclosure requirements and data points that have been assessed as non-material or that are not required for reporting in 2024 under the phase-in provisions of the ESRS.

For data points incorporated by reference, we provide the paragraph in the relevant ESRS standard that identifies the data point, a brief description of the data point, and the page number where the information can be found in this Report.

Disclosure requirements covered by the Sustainability Statements

ESRS standard	Disclosure requirement	Title	Page	Disclosure requirements or data points incorporated by reference
General disclosures (ESRS 2)	BP-1	General basis for preparation of sustainability statements	342	
	BP-2	Disclosures in relation to specific circumstances	344	
	GOV-1	The role of the administrative, management and supervisory bodies	345	§21(c): Experience of Board (page 152) and Executive Committee (page 157). §21(d): Aspects of diversity relevant to the Board (page 152) and EC (page 157). §22(a)-(b): Description of governance bodies responsible for sustainability and how these are reflected in terms of reference, mandates and other policies (pages 127-128). §22(c): Management's role in governance processes, controls and procedures (pages 127-128). §22(d): How the Board and EC oversee the setting of targets related to sustainability and monitor progress (page 127).
	GOV-2	Information provided to and sustainability matters addressed by the undertaking's administrative, management and supervisory bodies	346	§26(a): How management is informed about sustainability (page 127). §26(b): How the Board and EC consider impacts, risks and opportunities when overseeing strategy, decisions on major transactions and risk management (pages 128 and 145-148). §26(c): Impacts, risks and opportunities addressed by the Board in 2024 (pages 161-164.
	GOV-3	Integration of sustainability-related performance in incentive schemes	346	§29(a)-(e): Incentive schemes and remuneration policies linked to sustainability (pages 188-190).
	GOV-4	Statement on due diligence	346	
	GOV-5	Risk management and internal controls over sustainability reporting	347	
	SBM-1	Strategy, business model and value chain	348	§40(a)(iii): Headcount of employees by geographical area (page 115).
	SBM-2	Interests and views of stakeholders	350	§45(c):How the interests of stakeholders are taken into account in the Board's decision-making process (pages 145-148145-148). §45(d): How the Board and EC are informed about the views and interests of affected stakeholders with regard to sustainability-related impacts (pages 127-133, 165-166 and 167-168).
	SBM-3	Material impacts, risks and opportunities and their interaction with strategy and business model	351	§48(b):Current and anticipated effects of impacts, risks and opportunities on business model, value chain, strategy and decision-making (pages 10-13, 76-108 and 135-144). §48(d): Current financial effects of risks and opportunities (pages 255-265). §48(e): Anticipated financial effects of risks and opportunities (pages 255-265). §48(f): Resilience of strategy and business model (pages 10-13, 86-88 and 135-144).
	IRO-1	Description of the process to identify and assess material impacts, risks and opportunities	354	§53(c)(iii): How sustainability-related risks are prioritised relative to other risks (pages 135-144). §53(e)-(f):Extent to which the process to identify and manage impacts, risks and opportunities is integrated into risk management and overall management processes (pages 134 and 130).
	IRO-2	Disclosure requirements in the ESRS covered by the undertaking's sustainability statement	357	
Climate change (E1)	ESRS 2 GOV-3	Integration of sustainability-related performance in incentive schemes	346	§13: How climate-related considerations are factored into remuneration (page 102).
	E1-1	Transition plan for climate change mitigation	364	§16(a): Targets in support of the Paris Agreement (pages 77, 94 and 102). §16(b): Climate change mitigation actions and decarbonisation levers (pages 102-103). §16(c): Investments and funding to support the transition plan (pages 86-90). §16(f): Capex related to coal, oil and gas (pages 86-90). §16(h): Transition planning, business strategy and financial planning (pages 10-13, 86-90). §16(i): Progress in implementing the transition plan (page 94).

ESRS standard	Disclosure requirement	Title	Page	Disclosure requirements or data points incorporated by reference
Climate change (E1), continued.	ESRS 2 SBM-3	Material impacts, risks and opportunities and their interaction with strategy and business model	351	§18: Climate-related impacts and risks and climate-related opportunities (pages 80-84 and 93-106). §19 (a)-(c): Resilience of Shell's strategy and business model to different climate-related scenarios (pages 86-90).
	ESRS 2 IRO-1	Description of the processes to identify and assess material climate-related impacts, risks and opportunities	354	§19 (a)-(c): Climate-related risks and opportunities identified by Shell over the short, medium and long term (pages 80-84) and Impact of climate-related risks and opportunities on Shell's businesses, strategy and financial planning (pages 85-86). §20(a)-(c),§21: Climate-related risks and opportunities identified by Shell over the short, medium and long term (pages 80-84).
	E1-2	Policies related to climate change mitigation and adaptation	367	§24-25: Additional information on policies related to climate change mitigation and adaptation (pages 85 and 130).
	E1-3	Actions and resources in relation to climate change policies	369	§29(a)-(b): Actions and resources in relation to climate change policies (pages 92, 94, 96 and 102-103). §29(c): Current and future financial and other resources allocated to the action plan (pages 86-90)
	E1-4	Targets related to climate change mitigation and adaptation	371	§34(a)-(e): Climate-related targets (pages 80 and 93-106). §34(f): Decarbonisation levers (pages 102 and 103).
	E1-5	Energy consumption and mix	372	§37-39: Energy consumption and mix (page 107). §40-43: Energy intensity based on net revenue (see "Consolidated Statement of Income" on page 241).
	E1-6	Gross Scopes 1, 2, 3 and Total GHG emissions	373	§51: Basis of preparation – Scope 3 emissions (page 100).
	E1-7	GHG removals and GHG mitigation projects financed through carbon credits	375	
	E1-8	Internal carbon pricing		§63(a)-(d): Internal carbon pricing (pages 89 and 255-265).
	E1-9	Anticipated financial effects from material physical and transition risks and potential climate-related opportunities	376	§64(a)-(c): Anticipated financial effects from material climate-related physical and transition risks and potential opportunities (pages 255-265).
Pollution (E2)	ESRS 2 IRO-1	Description of the processes to identify and assess material pollution-related impacts, risks and opportunities	354	
	E2-1	Policies related to pollution	391	
	E2-2	Actions and resources related to pollution	392	
	E2-3	Targets related to pollution	393	
	E2-4	Pollution of air, water and soil	393	
Water and marine resources (E3)	ESRS 2 IRO-1	Description of the processes to identify and assess material water and marine resources-related impacts, risks and opportunities	354	
	E3-1	Policies related to water and marine resources	395	
	E3-2	Actions and resources related to water and marine resources	395	
	E3-3	Targets related to water and marine resources	399	
	E3-4	Water consumption	396	

ESRS standard	Disclosure requirement	Title	Page	Disclosure requirements or data points incorporated by reference
Biodiversity and ecosystems (E4)	E4-1	Transition plan and consideration of biodiversity and ecosystems in strategy and business model	397	
	ESRS 2 SBM-3	Material impacts, risks and opportunities and their interaction with strategy and business model	351	
	ESRS 2 IRO-1	Description of processes to identify and assess material biodiversity and ecosystem-related impacts, risks, dependencies and opportunities	354	
	E4-2	Policies related to biodiversity and ecosystems	400	
	E4-3	Actions and resources related to biodiversity and ecosystems	402	
	E4-4	Targets related to biodiversity and ecosystems	404	
	E4-5	Impact metrics related to biodiversity and ecosystems change	404	
Resource use and circular economy (E5)	ESRS 2 IRO-1	Description of the processes to identify and assess material resource use and circular economy-related impacts, risks and opportunities	354	
	E5-1	Policies related to resource use and circular economy	405	
	E5-2	Actions and resources related to resource use and circular economy	405	
	E5-3	Targets related to resource use and circular economy	407	
	E5-5	Resource outflows	407	
Own workforce (S1)	ESRS 2 SBM-2	Interests and views of stakeholders	350	
	ESRS 2 SBM-3	Material impacts, risks and opportunities and their interaction with strategy and business model	409	
	S1-1	Policies related to own workforce	409	
	S1-2	Processes for engaging with own workforce and workers' representatives about impacts	410	
	S1-3	Processes to remediate negative impacts and channels for own workforce to raise concerns	411	
Own workforce (S1)	S1-4	Taking action on material impacts on own workforce, and approaches to managing material risks and pursuing material opportunities related to own workforce, and effectiveness of those actions	411	
	S1-5	Targets related to managing material negative impacts, advancing positive impacts, and managing material risks and opportunities	412	
	S1-6	Characteristics of the undertaking's employees	412	§50(b): Employees by contract type and gender (page 116). §50(e): Contextual information on changes in headcount (page 115).
	S1-8	Collective bargaining coverage and social dialogue	413	
	S1-9	Diversity metrics	413	§66(b): Distribution of employees by age group (page 116).
	S1-10	Adequate wages	413	
	S1-14	Health and safety metrics	413	
	S1-16	Remuneration metrics (pay gap and total remuneration)	413	
	S1-17	Incidents, complaints and severe human rights impacts	414	

ESRS standard	Disclosure requirement	Title	Page	Disclosure requirements or data points incorporated by reference
Workers in the value chain (S2)	ESRS 2 SBM-2	Interests and views of stakeholders	350	
	ESRS 2 SBM-3	Material impacts, risks and opportunities and their interaction with strategy and business model	414	
	S2-1	Policies related to value chain workers	415	
	S2-2	Processes for engaging with value chain workers about impacts	416	
	S2-3	Processes to remediate negative impacts and channels for value chain workers to raise concerns	417	
Workers in the value chain (S2)	S2-4	Taking action on material impacts on value chain workers, and approaches to managing material risks and pursuing material opportunities related to value chain workers, and effectiveness of those actions	417	
	S2-5	Targets related to managing material negative impacts, advancing positive impacts, and managing material risks and opportunities	419	
Affected communities (S3)	ESRS 2 SBM-2	Interests and views of stakeholders	350	
	ESRS 2 SBM-3	Material impacts, risks and opportunities and their interaction with strategy and business model	414	
	S3-1	Policies related to affected communities	420	
	S3-2	Processes for engaging with affected communities about impacts	421	
	S3-3	Processes to remediate negative impacts and channels for affected communities to raise concerns	422	
	S3-4	Taking action on material impacts on affected communities, and approaches to managing material risks and pursuing material opportunities related to affected communities, and effectiveness of those actions	422	
	S3-5	Targets related to managing material negative impacts, advancing positive impacts, and managing material risks and opportunities	424	
Business conduct (G1)	ESRS 2 GOV-1	The role of the administrative, supervisory and management bodies	345	§5(a)-(b): Role and expertise of the Board (page 152) and EC (page 157) with respect to conduct and culture.
	ESRS 2 IRO-1	Description of the processes to identify and assess material impacts, risks and opportunities	354	
	G1-1	Business conduct policies and corporate culture	425	§9: How Shell seeks to establish, develop, promote and evaluate its corporate culture (pages 135-144).
	G1-2	Management of relationships with suppliers	425	
	G1-3	Prevention and detection of corruption and bribery	426	
	G1-4	Incidents of corruption or bribery	427	
	Entity-specific	Tax and other payments to governments	427	
	Entity-specific	Safety	429	

The table below shows data points that derive from other EU legislation as listed in ESRS 2, Appendix B, indicating where the information can be found in our report and which are assessed as not material or applicable.

Data points that derive from other EU legislation

Disclosure requirement	Related data point	Title	Page
ESRS 2 GOV-1	21 (d)	Board's gender diversity ratio	345
ESRS 2 GOV-1	21 (e)	Percentage of independent board members	345
ESRS 2 GOV-4	30	Statement on due diligence	346
ESRS 2 SBM-1	40 (d) (i)	Involvement in activities related to fossil fuels	348
ESRS 2 SBM-1	40 (d) (ii)	Involvement in activities related to chemical production	348
ESRS 2 SBM-1	40 (d) (iii)	Involvement in activities related to controversial weapons	Not material
ESRS 2 SBM-1	40 (d) (iv)	Involvement in activities related to cultivation and production of tobacco	Not material
E1-1	14	Transition plan to reach climate neutrality by 2050	364
E1-1	16 (g)	Undertakings excluded from Paris-aligned benchmarks	364
E1-4	34	GHG emission reduction targets	365
E1-5	38	Energy consumption from fossil sources disaggregated by sources (only high climate impact sectors)	372
E1-5	37	Energy consumption and mix	373
E1-5	40-43	Energy intensity associated with activities in high climate impact sectors	373
E1-6	44	Gross Scope 1, 2, 3 and total GHG emissions	373
E1-6	53-55	Gross GHG emissions intensity	373
E1-7	56	GHG removals and carbon credits	375
E1-9	66	Exposure of the benchmark portfolio to climate-related physical risks	376
E1-9	66 (a)	Disaggregation of monetary amounts by acute and chronic physical risk	376
E1-9	66 (c)	Location of significant assets at material physical risk	376
E1-9	67 (c)	Breakdown of the carrying value of its real estate assets by energy-efficiency classes	Not material
E1-9	69	Degree of exposure of the portfolio to climate-related opportunities	376
E2-4	28	Amount of each pollutant listed in Annex II of the E-PRTR Regulation emitted to air, water and soil	394
E3-1	9	Policies related to water and marine resources	395
E3-1	13	Sites in areas of high water stress not covered by a policy	395
E3-1	14	Policies related to sustainable oceans and seas	395
E3-4	28 (c)	Total water recycled and reused	397
E3-4	29	Total water consumption in cubic metres per net revenue on own operations	Not material
E4 SBM-3	16 (a) (i)	Activities negatively affecting sites in own operations located in or near biodiversity-sensitive areas	397
E4 SBM-3	16 (b)	Sites in own operations where land degradation, desertification or soil sealing are identified	Not material
E4 SBM-3	16 (c)	Sites in own operations that affect threatened species	397
E4-2	24 (b)	Policies or practices related to sustainable land and/or agriculture	400
E4-2	24 (c)	Policies or practices related to sustainable oceans and/or seas	400
E4-2	24 (d)	Policies to address deforestation	400
E5-5	37 (d)	Non-recycled waste	408
E5-5	39	Hazardous waste and radioactive waste	408
S1 SBM-3	14 (f)	Risk of incidents of forced labour	409
S1 SBM-3	14 (g)	Risk of incidents of child labour	409
S1-1	20	Human rights policy commitments relevant to own workforce	410
S1-1	21	Due diligence policies on issues addressed by the fundamental International Labor Organization Conventions 1 to 8	410
S1-1	22	Processes and measures for preventing trafficking in human beings	410
S1-1	23	Workplace accident prevention policy or management system	410
S1-3	32 (c)	Grievance/complaints handling mechanism	411
S1-14	88 (b)	Number of fatalities	413
S1-14	88 (c)	Number and rate of recordable work-related accidents	413
S1-14	88 (e)	Number of days lost to injuries, accidents, fatalities or illness	413
S1-16	97 (a)	Unadjusted gender pay gap	413
S1-16	97 (b)	Annual total remuneration ratio	413

Disclosure requirement	Related data point	Title	Page
S1-17	103 (a)	Incidents of discrimination	414
S1-17	104 (a)	Cases of non-respect of UN Guiding Principles on Business and Human Rights, ILO Declaration or OECD Guidelines	414
S2 SBM-3	11 (b)	Significant risk of child labour or forced labour in the value chain	419
S2-1	17	Human rights policy commitments relevant to value chain workers	419
S2-1	18	Policies related to value chain workers	419
S2-1	19	Cases of non-respect of UN Guiding Principles on Business and Human Rights, ILO Declaration or OECD Guidelines	419
S2-1	19	Due diligence policies on issues addressed by the fundamental International Labor Organization Conventions 1 to 8	419
S2-4	36	Human rights issues and incidents connected to upstream and downstream value chain	421
S3-1	16	Human rights policy commitments relevant to affected communities	420
S3-1	17	Cases of non-respect of UN Guiding Principles on Business and Human Rights, ILO Declaration or OECD Guidelines	420
S3-4	36	Human rights issues and incidents connected to affected communities	422
S4-1	16	Policies related to consumers and end users	Not material
S4-1	17	Cases of non-respect of UN Guiding Principles on Business and Human Rights, ILO Declaration or OECD Guidelines	Not material
S4-4	35	Human rights issues and incidents connected to consumers and end users	Not material
G1-1	10 (b)	Policies on anti-bribery and anti-corruption consistent with the United Nations Convention against Corruption	425
G1-1	10 (d)	Policies on the protection of whistle blowers	425
G1-4	24 (a)	Fines for violation of anti-corruption and anti-bribery laws	427
G1-4	24 (b)	Actions to address breaches in procedures and standards for anti-corruption and anti-bribery	427

For information about how we have determined the information to be disclosed in relation to material impacts, risks and opportunities, see "Description of the process to identify and assess material impacts, risks and opportunities (IRO-1)" on page 354.

Environment | Climate change (E1)

We aim to become a net-zero emissions energy business by 2050 and work with our customers across sectors to help accelerate the energy transition.

Our double materiality assessment has identified GHG emissions as a material topic. See "Material impacts, risks and opportunities and their interaction with strategy and business model (SBM-3)" on page 351 and "Description of the process to identify and assess material impacts, risks and opportunities (IRO-1)" on page 354 for more information.

Why it matters

The world needs a balanced energy transition, one that maintains secure energy supplies, while accelerating the transition to affordable low-carbon solutions. We believe our strategy supports a balanced transition by providing the oil and gas people need today, while helping to build the energy system of the future.

Transition plan for climate change mitigation (E1-1)

Shell's climate change transition plans are delivered through our strategy. This is supported by a suite of processes and greenhouse gas emission reduction targets and by an ambition, which cover all of our businesses.

Our strategy incorporates climate change mitigation actions and decarbonisation levers with the aim of generating more value with less emissions for the benefit of our shareholders, customers and wider society as we work to become a net-zero emissions energy business by 2050.

Targets in support of the Paris Agreement [A]

Shell supports the more ambitious goal of the Paris Agreement, which is to limit the rise in global average temperature this century to 1.5 °C above pre-industrial levels. We aim to become a net-zero emissions energy business by 2050 and have set targets to reduce our Scope 1 and 2 emissions and our net carbon intensity (NCI) [B], as well as an ambition to reduce customer emissions from the use of our oil products (Scope 3, Category 11).

Most of Shell's GHG emissions reduction targets predate the CSRD and differ from the ESRS boundary and definitions (see "Targets related to climate change mitigation and adaptation (E1-4)" on page 371 for more information). They all support the objective of becoming a net-zero emissions energy business by 2050 and are an integral part of our transition plans.

Our oil products ambition to reduce customer emissions from the use of our oil products by 15–20% by 2030, Scope 3 Category 11 (2021 baseline) [C], is set on a gross basis. For the different levers of our Scope 1 and 2 GHG emissions reduction target, see "Climate change mitigation actions and decarbonisation levers" on page 365, "Drivers of absolute Scope 1 and 2 emissions change" on page 94 and "Progress towards our Scope 1 and 2 target" on page 102.

In 2024, our combined Scope 1 and 2 emissions reflected a 2% increase compared to 2023, and a 30% reduction compared to the 2016 baseline, without the use of voluntary carbon credits, GHG removals or avoided emissions.

[A] Acknowledging uncertainty in the pace of change in the energy transition, we have chosen to set interim targets only to 2030.
[B] Shell's NCI is the average intensity, weighted by sales volume, of the energy products sold by Shell.
[C] In March 2024, we set an ambition to reduce absolute emissions related to the use of our oil products by 15–20% by 2030, compared with 2021 (Scope 3 Category 11). Customer emissions from the use of our oil products (Scope 3, Category 11) were 517 million tonnes carbon dioxide equivalent (CO_2e) in 2023 and 569 million tonnes CO_2e in 2021.

Shell's climate-related targets and ambition are set out in the table "Climate-related targets and ambition" on page 365. Our targets and ambition are forward-looking based on management's current expectations and certain material assumptions and, accordingly, involve risks and uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied herein.

We believe our NCI targets are aligned with the more ambitious goal of the Paris Agreement, which is to limit the rise in global average temperature this century to 1.5 °C above pre-industrial levels.

As there is no established standard for aligning an energy supplier's decarbonisation targets within the 1.5 °C temperature goal of the Paris Agreement, we have derived our NCI targets from scenarios developed for the Sixth Assessment Report of the Intergovernmental Panel on Climate Change.

We start with the complete set of 1.5 °C scenarios and then exclude scenarios which are too reliant on carbon removals or use of bioenergy before removing outliers. We then calculate an emissions intensity for each scenario which is comparable to our own NCI. Finally, we produce a 1.5 °C pathway based on the reductions in emissions intensity over time. We have chosen to use a range instead of any individual scenario to better reflect the uncertainty of the energy transition. We believe that using this pathway to set our targets demonstrates that they are aligned with the more ambitious 1.5 °C goal of the Paris Agreement.

For our oil products ambition to reduce customer emissions from the use of our oil products by 15–20% by 2030 compared with 2021 (Scope 3 Category 11), using the same set of 1.5 °C scenarios developed for the Sixth Assessment Report, we determined the changes in oil volumes in the energy system. Our reduction percentage is more ambitious than the median value of this range and among the more ambitious scenarios. We therefore believe it is compatible with limiting global warming to 1.5 C in line with the Paris Agreement.

We have set absolute and intensity reduction targets and an ambition for the GHG emissions from our own operations and from the products we sell over the short, medium and long term to track our performance.

The NCI metric tracks progress in reducing the overall carbon intensity of the energy products sold by Shell. The NCI measures emissions associated with each unit of energy we sell, compared to a 2016 baseline. It reflects changes in sales of oil and gas products, and changes in sales of low- and zero-carbon products – such as biofuels and renewable electricity.

Unlike Scope 1 and 2 emissions, reducing the NCI of the products we sell requires action by both Shell and our customers, with the support of governments and policymakers, to create the right conditions for change.

Our performance against our disclosed targets and ambition is set out in "Metrics used by Shell to assess climate-related risks and opportunities in line with our strategy and risk management process" on page 94. It includes information on how the targets and ambition are monitored and reviewed, the metrics used, whether our progress is in line with what we initially planned and an analysis of trends or significant changes in our progress towards achieving the targets and ambition.

Climate-related targets and ambition

Strategic target/ ambition	Metric	Baseline value (baseline year)	2024 Actual	2024	2025	2030	2050
Emissions from our own operations (Scope 1 and 2, operational control)							
Target **Halve Scope 1 and 2 emissions, on a net basis**	% reduction	83 million tonnes CO_2e (2016)	**-30%**			-50%	**Net- zero emissions by 2050 (Scope 1, 2 and 3)**
Target **Eliminate routine flaring from upstream operations [A]**	absolute volume of routinely flared gas (million tonnes)	n/a	**0.1**		eliminated		
Target **Maintain methane emissions intensity below 0.2% and achieve near-zero methane emissions by 2030 [B]**	methane intensity (%)	n/a	**0.04% [1] 0.001% [2]**	<0.2%	<0.2%	near-zero	
Emissions from the products we sell (Scope 3, equity boundary)							
Target **Reduce net carbon intensity (NCI) [C]**	% reduction	78 gCO_2e/MJ (2016)	**-9.0%**	-9-12%	-9-13%	-15-20%	
Ambition **Reduce customer emissions from the use of our oil products (Scope 3, Category 11) [D]**	% reduction	569 million tonnes CO_2e (2021)	**-13.7%**			-15-20%	

[A] This target was subject to the completion of the sale of The Shell Petroleum Development Company of Nigeria Limited (SPDC). With effect from January 1, 2025, SPDC ceased routine flaring. Our target is therefore met. As detailed elsewhere in this report, on March 13, 2025, Shell completed the sale of SPDC to Renaissance.

[B] On an intensity basis. Methane intensity is measured separately for oil and gas assets with marketed gas [1] (gas, LNG and GTL available for sale) and assets without marketed gas [2] (oil and gas assets where gas is reinjected).

[C] Average intensity, weighted by sales volume, of the energy products we sell, on an equity boundary, net of carbon credits. Estimated total GHG emissions included in NCI reflect well-to-wheel emissions associated with energy products sold by Shell. This includes the well-to-tank emissions associated with the manufacturing of energy products by others that are sold by Shell.

[D] In March 2024, we set an ambition to reduce absolute emissions related to the use of our oil products by 15–20% by 2030, compared with 2021 (Scope 3 Category 11). Customer emissions from the use of our oil products (Scope 3, Category 11) were 517 million tonnes carbon dioxide equivalent (CO_2e) in 2023 and 569 million tonnes CO_2e in 2021.

Climate change mitigation actions and decarbonisation levers

Shell's climate mitigation actions and identified decarbonisation levers are embedded in our energy transition plans to support the delivery of the absolute and intensity reduction targets and ambition that we have set for GHG emissions from our own operations (Scope 1 and 2) and from the products we sell (Scope 3). This covers all our businesses with the aim of reducing emissions from our operations and helping our customers transition to cost-competitive and cleaner energy. The actions we are taking include:

- reducing the GHG emissions from our operations (Scope 1 and 2) by improving our energy efficiency, deploying renewable electricity, and reducing methane emissions in our assets and projects;
- growing our LNG business while decarbonising our LNG portfolio in two main ways: by growing our portfolio with a lower carbon intensity, and continuing to invest in emissions abatement projects to reduce both CO_2 and methane emissions;
- managing our Integrated Gas and Upstream portfolio to support a balanced energy transition by cutting emissions from oil and gas production. Oil production is increasingly from our deep-water business which, through innovation, produces higher-margin and lower-carbon barrels; and
- focusing our businesses in Downstream and Renewables and Energy Solutions to offer more low-carbon energy solutions, while reducing sales of oil products.

The climate-change mitigation actions we will take and decarbonisation levers we will implement to achieve our targets and ambition will depend on the evolution of our asset portfolio and the continued development of technologies which reduce carbon emissions.

We expect that, on a net portfolio basis, reductions, predominantly from abatement projects including carbon capture and storage and electrification, are expected to outweigh increases in our Scope 1 and 2 emissions from new investments between 2024 and 2030. Our investments in producing low-carbon energy such as biofuels will increase our Scope 1 and 2 emissions, while reducing the NCI of the products we sell. Subsequent reductions in our emissions are reflected in the decarbonisation levers set out below and reflect an expected path to meeting our target by 2030.

The decarbonisation levers and actions planned to achieve our Scope 1 and 2 GHG emissions reduction target include:

- making portfolio changes such as acquisitions and investments in low carbon intensity projects, decommissioning facilities, divesting assets while sustaining our oil production with increasingly lower carbon intensity;
- progressing the repurposing of our energy and chemicals parks;
- improving the energy efficiency of our operations;
- using more renewable electricity to power our operations; and
- developing carbon capture and storage (CCS) for some of our facilities.

If required, we may choose to use high-quality carbon credits to offset any remaining emissions from our operations, in line with the carbon mitigation hierarchy of avoid, reduce and compensate.

The decarbonisation levers and actions planned to achieve our net carbon intensity target include:

- growing our power sales, including those of renewable power;
- reducing sales of oil products;
- increasing the proportion of gas and LNG in our hydrocarbon sales;
- increasing sales of low-carbon fuels, such as biofuels;

- developing and deploying more CCS; and
- using high-quality carbon credits, such as nature-based solutions, to offset remaining carbon emissions.

In addition we plan to reduce the sales of oil products in line with our Scope 3, Category 11 ambition.

We will continue to reassess our decarbonisation levers over time as part of our Operating Plan process to support the achievement of our targets and ambition. For details of the climate mitigation actions taken and decarbonisation levers delivered in 2024 see "Actions and resources in relation to climate change policies (E1-3)" on page 370, "Progress towards our Scope 1 and 2 target" on pages 102 and "GHG removals and GHG mitigation projects financed through carbon credits (E1-7)" on page 375.

Investments and funding to support the transition plan
Shell's capital investment and business plans, covering a 10-year cycle, include funding to deliver our 2030 targets and ambition which are integral to our strategy to achieve net zero by 2050. See "Actions and resources in relation to climate change policies (E1-3)" on page 370 for more information on our investments and funding which support our energy transition plans. In addition, see "Capex Plan assessment" on page 380 for an explanation of the key performance indicators of EU taxonomy-aligned capital expenditure (capex) and capex plans, and "Investing in the energy transition" on pages 86-90 for details of our short-term capex plans in support of our energy transition plan.

Shell allocates capital through an integrated process that considers our aspired portfolio and product mix, hurdle rate (minimum acceptable rate of return), emissions impact and other factors, with the aim of taking decisions that balance short-, medium- and long-term business objectives.

Energy transition plan operating expenditure (opex) and capex is reported by the main investment categories, such as non-energy products and low-carbon energy solutions, as well as by segment. Shell monitors and continues to evolve cash capital and operational expenditure by segment and by product group to achieve its targets and ambition.

Potential locked-in GHG emissions
Shell has not identified potential locked-in GHG emissions to be a significant transition risk. We believe our decarbonisation plans will deliver our GHG emissions reduction targets by 2030.

Shell's business plans, including the impact of our identified decarbonisation levers, cover a 10-year forward-looking period. Decarbonisation targets are key to our business planning process.

Shell's Operating Plan process identifies opportunities for Scope 1 and 2 GHG emission reductions from assets and activities under our operational control over the short and medium term which support our target to reduce Scope 1 and 2 absolute emissions by 50% by 2030 compared with the 2016 baseline, on a net basis.

Additionally, Shell has identified Scope 3, Category 11 "Use of sold products" to be a significant category of Scope 3 emissions, along with categories 1, 3 and 9. See "Targets related to climate change mitigation and adaptation (E1-4)" on page 371 for details of Shell's climate-related targets and ambition up to 2030.

Alignment with the EU Taxonomy
Shell prepares its business and financial plans, including its energy transition plans, using a broader scope than the EU Taxonomy requires. See "The EU Taxonomy" on pages 377-390 for information about Shell's taxonomy-eligible and taxonomy-aligned activities.

Shell's reporting on capital expenditure aligns with its business segments, which do not correspond to the industry codes contained in the Statistical Classification of Economic Activities in the European Community (NACE). Under the European Commission's Delegated Regulation (EU) 2021/2178, oil and gas production are non-eligible activities. Electricity generation from fossil gaseous fuels is an eligible economic activity.

Capex related to coal, oil and gas
Shell is active in the fossil fuel sector and makes significant capital expenditures on oil- and gas-related activities.

Shell has assessed its cash capex measure to be the most relevant representation of its investment in the oil and gas sector.

See "Investing in the energy transition" on pages 86-90 for details of our investments in the oil and gas sector in 2024.

EU Paris-aligned benchmarks
As Shell derives more than 10% of its total revenues from the exploration, extraction, distribution and refining of oil fuels, we are excluded from the EU Paris-aligned benchmarks, in line with the European Commission's Delegated Regulation (EU) 2020/1818 (Climate Benchmark Regulation), Article 12.1(e).

Transition planning, business strategy and financial planning
Shell's energy transition plans are embedded in and aligned with our strategy and are supported by our financial planning processes.

At Group level, the potential impacts of the energy transition on our business model and strategy are discussed and assessed by the Board and the Executive Committee as part of the annual strategic and business planning cycle. This assessment allows us to challenge accepted ways of thinking, identify material risks and opportunities, and identify key tensions and trade-offs.

Management consideration of different climate change outcomes informs a range of areas, including but not limited to the setting of the long-term strategy, business planning, and investment and divestment decisions. The outcomes considered by management vary in relation to the extent and pace of the energy transition.

We regularly update our business plans, commodity and carbon price outlooks, and assumptions as we move towards net-zero emissions by 2050 [A].

[A] We believe our total net absolute emissions peaked in 2018 at 1.7 gigatonnes of carbon dioxide equivalent ($GtCO_2$).

Our strategy reflects our responses to the climate-related risks and opportunities identified and energy transition plans developed. Our responses can be summarised as:
- delivery through our integrated business model;
- decarbonisation of our operations and energy value chains; and
- a focus on demand-driven decarbonisation – recognising that we need to work with our customers to identify low-carbon energy solutions for their energy demands in the sectors where we have competitive advantages.

See "Our strategy" on pages 10-13 and "Shell's energy transition plans" on pages 77-93 for more information. See "Targets related to climate change mitigation and adaptation (E1-4)" on page 371.

Approval of the transition plan

The Board of Directors has primary oversight of the approval and delivery of Shell's strategy, including its energy transition plans.

The Board is supported by the Sustainability Committee (SUSCO), the Remuneration Committee (REMCO), the Audit and Risk Committee (ARC) and the Nomination and Succession Committee (NOMCO). The importance of sustainability means that these committees are informed about sustainability, including climate-related matters, as appropriate throughout the year.

The Chief Executive Officer (CEO) has the delegated authority from the Board to manage Shell's actions in relation to the Company's strategy. The CEO is assisted on climate-related matters by members of the Executive Committee to review and implement Shell's energy transition plans and ensure that such matters are monitored appropriately.

See "Climate-related risks and opportunities identified by Shell over the short, medium and long term" on pages 80-84 and "Board oversight of sustainability including climate-related impacts, risks and opportunities" on pages 127-128.

Progress in implementing the transition plan

Shell's performance and progress in the energy transition is measured with respect to our climate-related targets and ambition, including those reflected in the remuneration of senior management and employees.

See "Integration of sustainability-related performance in incentive schemes (GOV-3)" on page 346 and "Metrics used by Shell to assess climate-related risks and opportunities in line with our strategy and risk management process" on page 94 for more details.

The targets we have set are used to manage climate-related risks and opportunities as well as our performance and are focused primarily on reducing our absolute GHG emissions and our NCI. See "Our climate-related metrics and targets" on page 93 for details of Shell's progress in 2024.

Material impacts, risks and opportunities and their interaction with strategy and business model (ESRS 2 SBM-3)

Shell has identified and assessed the GHG emissions associated with our activities to be material, and climate change and the energy transition to be a material risk factor. See "Material impacts, risks and opportunities and their interaction with strategy and business model (SBM-3)" on page 351 for more details.

We set out in "Description of the process to identify and assess material impacts, risks and opportunities (IRO-1)" on page 354 our process to identify and assess material sustainability-related impacts, risks and opportunities. We have identified climate-related risks across four components: commercial, regulatory and societal (including litigation) transition risks, and physical risks. We have also identified climate-related opportunities as part of our risk assessment.

Climate-related impacts and risks

Type	Description	Time horizon
Impacts	◦ Scope 1 – direct GHG emissions from sources under Shell's operational control. ◦ Scope 2 – indirect GHG emissions from the generation of purchased energy (electricity, steam, heating or cooling) consumed by assets under Shell's operational control. ◦ Scope 3 – all other indirect GHG emissions occurring in Shell's upstream and downstream value chains, including emissions associated with the use of the energy products we sell.	Short, medium, long
Transition risks		
Commercial (CR1)	◦ The transition to a low-carbon economy may lead to lower sales volumes and/or margins due to a general reduction or elimination of demand for oil and gas products, possibly resulting in underutilised or stranded oil and gas assets, and a failure to secure new opportunities. ◦ Changing preferences of investors and financial institutions could reduce access to and increase the cost of capital.	Medium, long
Regulatory (CR2)	◦ The transition to a low-carbon economy will likely increase the cost of compliance for our assets and/or products, and may include restrictions on the use of hydrocarbons. The lack of net-zero-aligned global and national policies and frameworks increases the uncertainty around this risk.	Short, medium, long
Societal (including litigation) (CR3)	◦ As societal expectations develop around climate change, there is a potential impact on Shell's licence to operate, reputation, brand and competitive position. This is likely to include litigation.	Short, medium, long
Physical risks		
Physical risks (CR4)	◦ The potential physical effects of changing climatic conditions could adversely affect our assets, operations, supply chains, employees and markets.	Short, medium, long

Climate-related opportunities

Type	Description	Time horizon
Opportunities		
Opportunities (CO1)	◦ The transition to a low-carbon economy also brings significant opportunities for us to benefit from changing customer demands, given our position as a leading global energy provider.	Short, medium, long

See "Description of the process to identify and assess material impacts, risks and opportunities (IRO-1)" on page 354, "Climate-related risks and opportunities identified by Shell over the short, medium and long term" on pages 80-84 and "Metrics used by Shell to assess climate-related impacts, risks and opportunities in line with its strategy and risk management process" on pages 93-106.

Current and anticipated effects on business model, value chain, strategy and decision-making

In considering climate change, energy transition variables and the potential direction and pace of transition, we develop internal climate-related scenarios and evaluate them together with external scenarios. Consideration of different climate-change scenarios informs management in a range of areas, including identifying and assessing material impacts, risks and opportunities; setting the long-term strategy; performing financial and business planning; and taking investment and divestment decisions.

See "Climate-related risks and opportunities identified by Shell over the short, medium and long term" on pages 80-84 and "Impact of climate-related risks and opportunities on Shell's businesses, strategy and financial planning" on pages 85-86 for more information on how Shell evaluates the impact of material impacts, risks and opportunities on our business model, value chain, strategy and decision-making.

Current and potential financial effects

A range of current and potential financial effects of climate change and the energy transition on Shell's financial statements are outlined in Note 4 to the "Consolidated Financial Statements" on pages 255-265.

Note 4 includes sensitivity analysis using various climate-related scenarios for oil and gas prices, chemical and refining margins, discount rates and carbon prices. Other financial impacts described in Note 4 include portfolio changes and asset useful life, product demand, decommissioning and restoration, deferred tax assets, onerous contracts, dividend resilience and physical risks.

Note 4 describes how Shell has considered climate change in key areas of the financial statements and how this translates into the valuation of assets and measurement of liabilities. Shell's financial statements are based on reasonable and supportable assumptions that represent management's best estimate of the range of economic conditions that may exist in the foreseeable future.

The current financial effects on Shell's financial position, performance and cash flows of the material climate-related risks and opportunities identified include the likelihood of litigation and increased compliance costs. Shell does not consider the identified effects to pose a significant risk of material adjustment to the carrying value of assets and liabilities within the next annual reporting period.

Carbon costs in Shell's business plan

Shell's business plan includes capital expenditure and operating costs to support the achievement of our Scope 1 and 2 emission reduction targets (on a net basis). These include asset-level abatement project costs that drive efficiencies and reduce emissions, the expected costs of complying with evolving carbon regulations based on a forecast of Shell's equity share of emissions and the cost of offsets for any residual amounts. Methods for estimating costs vary, depending on the nature of the cost.

The total capital expenditure for abatement projects which includes energy efficiency improvements, progressing the repurposing of our energy and chemicals parks, CCS facilities and electrification of our facilities included in the 10-year business plan is in excess of $6 billion.

Total yearly costs in respect of carbon emissions in Shell's business plan gradually increase from $1 billion in 2025 to $5 billion in 2034, using our mid-price scenario for carbon costs. Costs for complying with evolving carbon regulations are based on a forecast of Shell's equity share of emissions and are included in the business plan at Shell's mid-price outlook on a country-by-country basis and represent management's best estimate.

There is significant uncertainty as to how carbon regulations and costs will develop over the next decades. These will depend on policies set by countries and the pace of the energy transition. In accordance with the International Financial Reporting Standards, Shell's financial statements are based on reasonable and supportable assumptions that represent management's current best estimate of the economic conditions that may arise in the foreseeable future, which is policy-based up to 2030 and then based on the mid-price outlook beyond 2030.

See "Carbon price sensitivities" in Note 4 on page 260 for more information.

Anticipated financial effects from transition risks and potential climate-related opportunities

Shell's financial statements are based on reasonable and supportable assumptions that represent management's best estimate of the range of economic conditions that may exist in the foreseeable future.

Overall, we mitigate climate-related risks through our strategy to deliver more value with less emissions. With our focus on performance, discipline and simplification, we believe that we are positioning ourselves to achieve our financial targets and climate-related targets and ambition. Shell will, through its business and financial planning processes, continue to refresh its assessment of the anticipated financial impact from the identified material transition and physical risks and potential climate-related opportunities.

However, a number of anticipated and potential effects are set out in Note 4 to the "Consolidated Financial Statements" on page 255. This note includes an overview of key assumptions used for financial planning related to climate change and the energy transition in addition to details of the sensitivity of carrying values to commodity prices, carbon emission costs, chemical and refining margins, discount rates and demand, if different assumptions were applied.

Resilience of our strategy and business model

See "Resilience of Shell's strategy to different climate-related scenarios" on pages 86-90 for information on the resilience of our strategy and business model to climate change-related impacts, risks and opportunities. See Note 4 to the "Consolidated Financial Statements" on pages 255-265 for information about Shell's financial resilience.

Shell's financial strength and access to capital give us the ability to effectively manage climate-related impacts and risks, capture opportunities and reshape our portfolio as the energy system transforms. They also allow us to withstand volatility in oil and gas markets.

As we work towards net-zero emissions, we continue to optimise our capital allocation between our business segments. We regularly assess the sensitivity of our asset carrying values to carbon pricing, discount rates and commodity price assumptions as part of our efforts to track the resilience of Shell's strategy to climate-related risks and opportunities.

As there is no single scenario that underpins our plans, sensitivity analysis has been conducted using a range of key assumptions to test the resilience of our asset base.

The key areas of climate change-related risks that have been subject to sensitivity analysis include:

- For Integrated Gas and Upstream, sensitivity to commodity prices and carbon prices has been tested covering the carrying value of goodwill, other intangible assets, property, plant and equipment, and joint ventures and associates.
- For Chemicals and Products, sensitivity to chemical margins, refining margins and carbon prices has been tested.
- Marketing and Renewables and Energy Solutions (R&ES) are expected to be resilient through the energy transition with limited exposure of stranded assets.
- Sensitivity to changes in the discount rate applied in impairment testing has also been tested.

See Note 4 to the "Consolidated Financial Statements" on pages 255-265.

We believe the areas of uncertainty in our resilience analysis are appropriately managed through our energy transition strategy and Operating Plan cycle, with relevant mitigating actions considered and portfolio changes enacted. In turn, we demonstrate the resilience of our business model and strategy as we adapt to changes in technology, policy, workforce reskilling requirements and customer preferences. The scope of our resilience analysis covers all business areas.

Mitigation of physical risks, whether or not related to climate change, is considered and embedded in the design, construction and operation of our projects and/or operation of our assets. In the long term, the level of unpredictability is such that the need for investment in climate adaptation measures is not immediate. Our forward planning means we are in a position to monitor our assets and determine whether there is any need for adaptation action.

Some investors and financial institutions have been aligning their portfolios to a low-carbon and net-zero world, driven by both regulatory and broader stakeholder pressures. A failure to decarbonise in line with investor and lender expectations could have a material adverse effect on our ability to access financing for certain types of projects. This could also adversely affect our partners' ability to finance their portion of costs, either through equity or debt. Shell has looked, and continues to look, at sustainable financing options while focusing on delivering the Group's energy transition strategy as a whole.

We consider the Group's financial framework to be an appropriate one for an oil and gas company navigating the energy transition. We believe our approach is increasingly recognised and understood by investors and financial institutions.

In preparing our sensitivity analysis, we have used research from our technology programmes, along with work carried out by the International Energy Agency, the Intergovernmental Panel on Climate Change and several other external bodies. We have also drawn from the expertise in our own energy security scenarios which were published in 2023. Our scenarios are quantified by our World Energy Models, which are supplemented with climate analysis done in conjunction with the Massachusetts Institute of Technology.

Scenarios are not intended to be predictions of likely future events or outcomes and, therefore, are not the basis for Shell's operating plans and financial statements.

See "Resilience of Shell's strategy to different climate-related scenarios" on pages 86-90 and Note 4 to the "Consolidated Financial Statements" on pages 255-265.

Policies related to climate change mitigation and adaptation (E1-2)

Policies in place to manage material impacts, risks and opportunities related to climate change mitigation and adaptation

Shell's policies for managing climate-related matters are based on the Shell Performance Framework (SPF). These policies include Shell's Safety, Environment and Asset Management (SEAM) Standards; our Carbon Management Framework; carbon pricing; our Greenhouse Gas and Energy Management process, policies and controls; and our Opportunity Realisation Standard.

We identify, assess and manage climate-related impacts for activities under our operational control as part of our SEAM Standards. We expect non-operated joint ventures to adopt appropriate and acceptable policies to manage their risks. See "SEAM Standards" on page 130 and "Carbon Management Framework" on page 85 for information.

Policies on climate change mitigation

Business-level carbon plans

Our policies require our businesses to develop plans that demonstrate a decarbonisation trajectory aligned with carbon budgets allocated under the Carbon Management Framework. This includes delivery of applicable targets related to routine flaring and methane. These requirements are designed to ensure that our commitments are translated into tangible targets and plans.

Our policies require our businesses to determine the targets for carbon-significant and carbon-critical projects, assets and shipping fleets based on future CO_2 costs, anticipated GHG emissions including those across value chains, and in a manner that cumulatively delivers GHG performance consistent with our climate-related targets and ambition and future aspired portfolio.

Our policies require businesses to integrate their targets and decarbonisation plans into their annual business plans.

Greenhouse Gas and Energy Management Plan

Our policies require assets and shipping fleets with total annual GHG emissions of more than 50,000 tonnes to annually update and assure a Greenhouse Gas and Energy Management Plan (GHG EMP) which demonstrates planned delivery of their allotment of the business-level carbon target. The GHG EMP includes a marginal GHG reduction cost curve, economically assessed using applicable CO_2 project screening values; a minimum 10-year forecast, or forecast to the end of field life for upstream assets, of anticipated future emission levels; plans demonstrating a trajectory to deliver targets related to flaring and methane emissions, where applicable; and a description of risks and opportunities in managing and delivering the forecast emissions, including energy efficiency levers and deployment of renewable energy. See "Internal carbon pricing (E1-8)" on page 376 for more details of project screening values.

Our policies require the outputs of the GHG EMP to be integrated in the annual business plan, operating plans and strategic asset management plans, as appropriate.

Our policies require the Global Process Council for Greenhouse Gas and Energy Management, led by the global process owner for GHG and including business and functional experts, to meet regularly to evaluate opportunities for the improvement of the processes, tools, communications and capabilities needed by the businesses to achieve our climate-related targets and ambition.

Tracking of delivery plans
Our policies require our shipping fleets and assets with total annual GHG emissions of more than 50,000 tonnes to track delivery of planned GHG reductions and to communicate any delay, alteration or termination of activities in delivering these reductions to the senior executive with single-point accountability for the business concerned.

Integration of GHGs in project evaluation
Our standards require projects to consider GHG emissions in their evaluation by including a forecast of annual Scope 1, 2 and 3 GHG emissions over the life of the project and by applying CO_2 project screening values in the base economics and net-zero emission abatement curve. The aim of this requirement is to ensure that projects provide a reasonably accurate outlook of their GHG implications to inform robust investment decisions in light of Shell's emission reduction commitments.

Carbon Critical and Carbon Significant Projects
Carbon Critical Projects are opportunities (projects and deals) which are expected to result in an increase or decrease of 200,000 tonnes or more of Scope 1 and 2 CO_2 equivalent emissions in their peak emissions year, or more than 10 terawatt-hours of power delivered in their peak generation year. These thresholds apply on a 100% basis for Shell-operated ventures or on an equity share basis for non-operated ventures. Our standards require Carbon Critical Projects to meet the GHG-related requirements of Shell's Opportunity Realisation Standard. The aim is to facilitate informed decision-making by identifying potential carbon-value trade-offs and carbon-value synergies and contextualising these projects in terms of those with the greatest potential to impact our ability to meet our GHG reduction commitments.

Carbon Significant Projects refers to projects, assets or modifications of existing assets which are expected to result in more than 50,000 tonnes of CO_2e total Scope 1 and 2 emissions in their peak emissions year or more than 1 terawatt-hour of power delivered in their peak generation year. These thresholds apply on a 100% basis for Shell-operated ventures or on an equity share basis for non-operated ventures.

Our standards require Carbon Critical and Carbon Significant Projects to maintain a Greenhouse Gas and Energy Management Plan with GHG intensity targets or energy performance targets, or both. The aim is to ensure that projects with significant GHG emissions have targets benchmarked beyond the minimum requirements in our performance standards and plans to bring down GHG emissions over time in line with business-level reduction targets.

For Carbon Critical and Carbon Significant Projects, our standards require the Greenhouse Gas and Energy Management Plan to be updated at each stage gate of the opportunity realisation process.

Our standards require the plan to include an abatement curve demonstrating the project's approach to achieving net-zero GHG emissions; the project's value chain GHG emissions intensity; and a description of how carbon competitiveness has been implemented in project development through an evaluation of the greenhouse gas performance of the concept(s) considered. The aim is to ensure that project teams consider carbon as early as possible and to ensure it is appropriately considered at each stage gate.

Our standards also require Carbon Critical and Carbon Significant Projects to meet the applicable performance standard(s) and implement all value-adding abatement options. The aim is to ensure that projects that significantly impact Shell's GHG commitments meet a minimum standard of GHG performance, and implement plans to further reduce their emissions by leveraging economically feasible GHG reduction opportunities.

Our standards require Carbon Critical Projects to receive documented endorsement from the senior executive with single-point accountability for the relevant business and the technical function head for Safety, Environment and Asset Management for the project's greenhouse gas and energy management performance target(s) and the project's value chain intensity. Our standards require this endorsement at each decision gate within the opportunity realisation process and for the project mandate proposal to commit to a project and final investment proposal.

Policies relevant to climate change adaptation
Mitigation of physical risks, whether or not related to climate change, is considered and embedded in the design and construction of our projects and the operation of our assets to help minimise the risk of adverse incidents to our employees and contractors, the environment and communities where we operate, and our equipment. Acute and chronic physical risks, regardless of cause, are a key consideration in our design and engineering practices and standards.

Resourcing our actions
The Executive Vice President for Safety, Environment and Asset Management is the most senior executive in Shell with accountability for the development, governance and oversight of the SEAM Standards. Leaders of assets, performance units, businesses or functions are accountable for assessing which SEAM Standards are relevant, based on their objectives, risk profile and activities, and for implementing those standards as appropriate.

Implementation of SEAM Standards relevant to climate change mitigation and adaptation is supported by members of Shell's Safety, Environment and Asset Management function, which includes subject matter experts across a broad range of greenhouse gas and carbon technical specialisms and other disciplines. The requirements of our standards are communicated to people involved with implementation through various mechanisms, including internal communication channels, management systems and training, as appropriate.

Actions and resources in relation to climate change policies (E1-3)

The scope of the actions described in this section covers Shell companies and joint ventures in which Shell is the operator, unless otherwise stated. Many of our actions are of an ongoing nature. Horizons for the completion of time-bound actions are indicated where applicable.

Our actions are intended to help us achieve the desired outcome of our policies and standards by providing resources and expertise that support our businesses to implement them in fit-for-purpose ways.

The key actions we have taken in 2024 have been designed to deliver our decarbonisation levers in support of our transition plans.

We are cutting GHG emissions in our operations to meet our targets, by:
- lowering the GHG intensity of our operations through improved energy efficiency and reduced combustion, flaring and emissions venting;
- improving our monitoring of assets to reduce fugitive methane emission sources in our operations and by action such as signing the Oil and Gas Methane Partnership 2.0 reporting framework;
- reducing and, in our upstream operations, ultimately eliminating routine flaring;
- using more renewable electricity to power our operations;
- developing and deploying carbon capture and storage solutions; and
- growing our LNG business with lower carbon intensity.

Our Downstream and Renewables and Energy Solutions businesses are aimed at offering more low-carbon solutions by progressing the repurposing of our refineries into energy and chemicals parks. As part of our approach to the energy transition, we are continuing to develop integrated energy hubs to reduce our own emissions and those of the products we sell. This includes:
- developing biofuels such as sustainable aviation fuel, renewable diesel and renewable natural gas to help our customers decarbonise without having to change their cars, trucks, aeroplanes or ships;
- becoming a leader in public electric vehicle charging to meet growing demand;
- making selective investments in renewable power generation, batteries and other grid-flexible technologies to decarbonise our own operations and provide low-carbon solutions to our commercial and industrial customers in our power business;
- continuing to invest in the production of hydrogen as a feedstock for synthetic fuels and as an energy carrier for transport and industry to expand the technology and reduce costs so that it becomes an available and affordable low-carbon option in the future; and
- working with governments, customers and partners to unlock the potential of carbon capture and storage and carbon removal to reduce emissions where there are few low-carbon alternatives.

Across our businesses, high-quality carbon credits have been and may continue to be used by Shell and its customers to compensate for emissions in line with the carbon mitigation hierarchy of avoid, reduce and compensate.

We continue to invest in the research and development, demonstration and commercial deployment of new technologies and products that contribute to decarbonisation. We invest in the latest energy technologies through partnerships with start-ups, larger companies and leading academic institutions seeking to electrify energy systems, decarbonise transport, gain data-based insights and provide innovative customer solutions.

See "Drivers of absolute Scope 1 and 2 emissions change" on page 94 and "NCI performance" on page 96 for details of the drivers of change in 2024 and "Energy transition in action – selection of portfolio changes and actions in 2024" on page 92 for details of actions taken in 2024. See also "Climate change mitigation actions and decarbonisation levers" on page 365 for more information about the decarbonisation levers we have identified to achieve our Scope 1 and 2 GHG emissions reduction target, our NCI target and Scope 3 Category 11 GHG emissions ambition; and "Progress towards our Scope 1 and 2 target" on pages 102-103 and "Progress towards our NCI target" on page 103 for details of how we expect our decarbonisation levers to progress towards our 2030 targets and ambition.

Engagement and advocacy, directly with governments and indirectly through industry associations and coalitions, is part of our strategy.

Shell engages with governments, regulators and policymakers in different ways to advocate robust policy, legislation and regulation in areas where we can best reduce our own emissions and support the decarbonisation of our customers.

We have developed and are advocating positions across the transport and industrial sectors, as well as carbon abatement and removal, along four key themes:
- achieving net-zero emissions – cross-sector policies that support the achievement of national net-zero commitments through comprehensive policy frameworks and carbon pricing;
- supplying the secure energy the world needs – policies that support energy security, such as predictable regulatory frameworks that enable the production of hydrocarbons with lower emissions;
- driving changes in demand – policies that support changes in customer demand in transport and industry, such as vehicle standards, mandates for sustainable aviation fuel and a transition to low-carbon products; and
- growing low-carbon solutions – policies that encourage the development of low-carbon solutions, including incentives for biofuels, flexibility in feedstock choices, and effective regulatory frameworks for hydrogen and CCS.

Current and future financial and other resources allocated to the action plan

As we work towards net-zero emissions, we continue to optimise our capital allocation and operational expenditure, balancing energy security and demand and energy transition opportunities. We recognise that to achieve our strategic targets and ambition of generating more value with less GHG emissions, and to effectively manage our risk profile including climate-related risks and opportunities, will require significant operational and capital expenditure allocated in our annual budgets and future business plans.

Shell's capital investment and business plans include funding in support of our short- and medium-term energy transition plans as we work to achieve net zero by 2050. See "Investing in the energy transition" on pages 86-90 for more information about Shell's investments and funding supporting the implementation of our energy transition plans.

Some financial institutions have been aligning their portfolios to a low-carbon and net-zero world, driven by both regulatory and broader stakeholder pressures. Shell's financial strength and access to capital give us the ability to implement our climate change mitigation actions and adaptations.

See "Climate-related commercial risk" on page 81 for more information. Shell's capital investment and business plans, covering a 10-year cycle, include funding to deliver our 2030 targets and ambition. See "Resilience of Shell's strategy to different climate-related scenarios" on pages 86-90 for more information on our investments and expenditure which support our energy transition plans.

See "The EU Taxonomy" on page 378 for information about Shell's taxonomy-eligible and taxonomy-aligned activities.

Targets related to climate change mitigation and adaptation (E1-4)

Information in this section reflects Shell's choice of boundary for its targets and ambition related to climate change mitigation and adaptation. See "General basis for preparation of sustainability statements (BP-1)" on page 342 for more information.

Climate-related targets

As part of its energy transition plans, Shell has set several climate-related targets and an ambition, most of which predate the CSRD.

For detailed information on Shell's climate-related targets and ambition, see "Transition plan for climate change mitigation (E1-1)" on page 364 and "Our climate-related metrics and targets" on pages 93-106.

Shell has the following greenhouse gas emission reduction targets and ambition for Scope 1, 2 and 3:

- In March 2024, Shell set an oil products ambition to reduce customer emissions from the use of our oil products by 15–20% by 2030, Scope 3 Category 11 (with 2021 the reference year), in accordance with the CSRD and the ESRS definition of greenhouse gas emission reduction target. [A]
- In 2021, Shell set a target to halve the emissions from its operations (Scope 1) plus the energy it buys to run them (Scope 2) by 2030 compared to 2016 levels on a net basis. This target predates the CSRD and differs from the ESRS boundary and definitions. It is a net target and has been set on an operational control boundary in line with the Greenhouse Gas Protocol boundaries, and standard practice in the industry standards. The ESRS reporting boundary prescribed for Scope 1 and 2 deviates from the GHG Protocol (see "General basis for preparation of sustainability statements (BP-1)" on pages 342-344 for more information). In 2024, our combined Scope 1 and 2 emissions reflected a 2% increase compared to 2023, and a 30% reduction compared to the 2016 baseline, without the use of voluntary carbon credits, GHG removals or avoided emissions.
- In 2021, Shell also set targets to reduce the net carbon intensity (NCI) of the products it sells (see "Targets used by Shell to manage climate-related risks and opportunities and performance against targets" on page 101 for more information). These targets also predate the CSRD and differ from the ESRS boundary and definitions. These net intensity targets are based on an equity boundary, which deviates from the ESRS boundary and definitions for total GHG emissions.

[A] Customer emissions from the use of our oil products (Scope 3, Category 11) were 517 million tonnes carbon dioxide equivalent (CO_2e) in 2023 and 569 million tonnes CO_2e in 2021.

Furthermore, in 2021, Shell set a target to become a net-zero energy business by 2050 and is measuring progress towards this target using the other targets and ambition referenced in this section. For more information see "Transition plan for climate change mitigation (E1-1)" on page 364 and "Targets used by Shell to manage climate-related risks and opportunities and performance against targets" on page 101.

Shell's target covers the full Scope 1 and 2 emissions and Scope 3 emissions from the energy products we sell. This target also predates the CSRD and differs from the CSRD definition of net-zero target. The pace of change in the energy transition is uncertain and there are currently no justified sectoral variations in line with recognised external sectoral pathways available.

Shell's Operating Plan, outlook and business plans cover a 10-year forecast period and are updated every year. The business plan reflects our Scope 1, Scope 2 and NCI targets over the next 10 years. However, Shell's business plans cannot reflect our 2050 net-zero emissions target, as this target is currently outside our planning period. Shell's business plan reflects Shell's strategy. We will continue to update our business plan, price outlooks and assumptions as we move towards net-zero emissions by 2050.

In addition to the above, Shell also set two additional climate-related targets that predate the CSRD: eliminate routine flaring from upstream operations by 2025 [B], and maintain methane emissions intensity below 0.2% and achieve near-zero methane emissions by 2030 [C].

[B] This target was subject to the completion of the sale of The Shell Petroleum Development Company of Nigeria Limited (SPDC). With effect from January 1, 2025, SPDC ceased routine flaring. As detailed elsewhere in this report, on March 13, 2025, Shell completed the sale of SPDC to Renaissance.

[C] On an intensity basis.

The targets are forward-looking based on management's current expectations and certain material assumptions and, accordingly, involve risks and uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied in this report.

More detail on Shell's climate-related targets and ambition can be found in "Transition plan for climate change mitigation (E1-1)" on page 364. The framework and methodology used to determine our targets and ambition are set out in "Targets used by Shell to manage climate-related risks and opportunities and performance against targets" on page 101, recognising that most of Shell's climate-related targets predate the CSRD and differ from the ESRS boundary and definitions.

See "Climate-related risks and opportunities identified by Shell over the short, medium and long term" on page 80 for details of the climate-related risks our targets and ambition are designed to manage.

Decarbonisation levers

We set out our decarbonisation levers to achieve the absolute and intensity reduction targets and ambition we have set for GHG emissions from our own operations (Scope 1 and 2) together with the decarbonisation levers planned to achieve our net carbon intensity target and our Scope 3, Category 11 ambition in "Climate change mitigation actions and decarbonisation levers" on page 365.

See "Progress towards our Scope 1 and 2 target" on page 102 for a summary of the quantitative contributions of our decarbonisation levers to achieving our Scope 1 and 2 GHG emissions reduction target and "Progress towards our NCI target" on page 103 for a summary of the quantitative contributions of our decarbonisation levers to achieving our NCI reduction target.

Energy consumption and mix (E1-5)

Information in this section reflects the reporting boundary specified by the ESRS except where explicitly stated. See "General basis for preparation of sustainability statements (BP-1)" on pages 342-344 for more information.

Energy consumption data in this section refer to primary (thermal) energy, such as the energy content of fuels used to generate electricity, steam, heat and mechanical energy. This includes energy from renewable and non-renewable sources.

The energy consumption data below reflect the energy generated and purchased by facilities within the scope of the ESRS reporting boundary. This boundary differs from the operational control boundary used by Shell to monitor and report energy consumption as reported in "GHG emissions and energy consumption data – information provided in accordance with UK regulations" on page 107.

Energy consumed by facilities under our operational control is calculated as follows:

- Energy generated from fuel and consumed is calculated by multiplying the volume of fuels consumed for energy purposes by their respective lower heating values.
- For purchased and consumed electricity from renewable sources, the energy is calculated using 100% generation efficiency.
- For purchased and consumed electricity from non-renewable sources, the energy is calculated using actual electricity purchased, multiplied by country-specific electricity generation efficiency factors from International Energy Agency statistics to determine the associated thermal energy expended at the source.
- Energy for purchased and consumed steam and heat is calculated from actual steam and heat purchased, multiplied by a supplier-specific conversion efficiency or by a generic efficiency factor where supplier-specific data are not available.

The detailed energy consumption data available from assets not operated by Shell vary. When available, the data are used. When not available, the data for material assets are estimated based on energy consumption to greenhouse gas ratios for similar types of operated assets.

Energy consumption and mix

	million MWh
	2024
Energy consumption from facilities under Shell operational control	212
Energy consumption from fossil sources [B]	209
Coal and coal products	–
Crude oil and petroleum products	44
Natural gas	120
Other fossil sources	15
Purchased or acquired electricity, heat, steam and cooling from fossil sources	30
Energy consumption from nuclear sources	–
Energy consumption from renewable sources [B]	2.7
Fuels from renewable sources (biomass, biofuels, biogas, hydrogen from renewable sources)	0.2
Purchased or acquired electricity, heat, steam and cooling from renewable sources	2.5
Self-generated non-fuel renewable energy	–
Energy consumption from facilities not operated by Shell	77
Total energy consumption [A]	289

[A] ESRS reporting boundary.
[B] Of total energy consumption under operational control in 2024, 99% came from fossil sources and 1% from renewable sources.

Energy generated by facilities under Shell's operational control and exported to third parties, including to the power grid, is presented below.

Renewable and non-renewable energy production [A]

	million MWh
	2024
Renewable energy production	5.1
Non-renewable energy production	5.4
Total	10.5

[A] Operational control boundary. Renewable and non-renewable energy production available for sale (energy produced net of energy consumed through own use).

Energy intensity based on net revenue

Total energy consumption, used as the numerator, is prepared using the ESRS reporting boundary. This includes a reasonable estimate of consumption for consolidated assets not under Shell's operational control where the information was not available.

Net revenue, used as the denominator, corresponds to Revenue as presented in Shell's Consolidated Statement of Income and is prepared using the financial control boundary (in line with the International Financial Reporting Standards), where 100% revenue is reported for fully consolidated subsidiaries plus the Shell share of revenue recognised from joint operations, irrespective of operational control considerations. The numerator therefore differs from the denominator due to the inclusion of Shell-operated equity-accounted assets in the ESRS reporting boundary.

For 2024, the resulting metric is set out in the table below, recognising the misalignment of boundaries across total energy consumption and net revenue. As revenue is expected to fluctuate with oil and gas prices and other factors which are not correlated with energy consumption, in our view, the information so calculated does not provide a reliable measure of energy intensity, nor does it permit a realistic comparison between reporting entities and over time.

Energy intensity based on net revenue

	unit	2024
Total energy consumption [A]	million MWh	289
Net revenue [B]	$ million	284,312
Energy intensity per net revenue	MWh/$	0.001

[A] ESRS reporting boundary.
[B] See "Consolidated Statement of Income" on page 241.

Gross Scopes 1, 2, 3 and total GHG emissions (E1-6)

We follow the GHG Protocol's Corporate Accounting and Reporting Standard, which defines three scopes of GHG emissions:

- Scope 1: direct GHG emissions from sources under Shell's operational control;
- Scope 2: indirect GHG emissions from the generation of purchased energy consumed by Shell assets under operational control; and
- Scope 3: other indirect GHG emissions, including emissions associated with the use of energy products sold by Shell.

Gross Scope 1, 2, 3 and total GHG emissions [E]

	million tonnes CO_2e
	2024
Scope 1 GHG emissions [A]	
Gross Scope 1 GHG emissions [B]	73
Consolidated accounting group	65.3
Operated non-consolidated entities	8.1
Scope 2 GHG emissions [A]	
Gross location-based Scope 2 GHG emissions	9
Consolidated accounting group	7.5
Operated non-consolidated entities	1.6
Gross market-based Scope 2 GHG emissions	9
Consolidated accounting group	7.4
Operated non-consolidated entities	1.2
Significant Scope 3 GHG emissions [C] [D]	
Total gross Scope 3 GHG emissions	1,084
Category 1: purchased goods and services	119
Category 3: fuel and energy-related activities	117
Category 9: downstream transport and distribution	3
Category 11: use of sold products	845
Total GHG emissions	
Total GHG emissions (location-based)	1,166
Total GHG emissions (market-based)	1,166

[A] ESRS reporting boundary.
[B] The percentage of Scope 1 GHG emissions from assets under Shell's operational control falling under regulated emission trading schemes was 43% in 2024.
[C] Equity reporting boundary.
[D] Categories 1, 3 and 11 are calculated using primary data, representing 99.7% of total significant Scope 3 emissions.
[E] Figures disclosed are rounded. Rounding differences can occur between the total combined Scope 1, 2 and 3 absolute GHG emissions disclosed in this Report and the sum of components individually rounded to the nearest million tonnes.

GHG emissions comprise CO_2, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulphur hexafluoride and nitrogen trifluoride, with CO_2 and methane being the most significant contributors.

Basis of preparation – Scope 1 and 2 emissions

In this section, Scope 1 and 2 emissions are presented in accordance with the ESRS boundary. See "General basis for preparation of sustainability statements (BP-1)" on pages 342-344 for more information.

Our Scope 1 and 2 GHG emissions inventory was prepared in line with the requirements outlined in ISO 14064-1:2018 Specification with Guidance at the Organization Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals and the GHG Protocol's Corporate Accounting and Reporting Standard.

In line with external standards, we aggregate our GHG emissions into tonnes of CO_2 equivalent by applying global warming potential (GWP) factors to non-CO_2 GHGs. Factors applied in 2024 were taken from the IPCC's Fifth Assessment Report (AR5) over a 100-year time period, as stipulated by the UK Government GHG Conversion Factors for Company Reporting [A].

[A] We use GWP factors from AR5 to calculate our emissions, as stipulated by UK regulations which Shell is also subject to. Updates to GWP factors published in AR6, which ESRS requires us to use, are immaterial to Shell's GHG inventory.

Scope 1 emissions

All significant sources were included in our Scope 1 inventory. Sources included comprise:

- combustion of carbon-containing fuels in stationary equipment (e.g. boilers, gas turbines) for energy generation;
- combustion of carbon-containing fuels in mobile equipment (e.g. trucks, vessels, mobile rigs);
- flares;
- venting and emissions from industrial processes (e.g. hydrogen plants, catalytic cracking units); and
- fugitive emissions, including piping and equipment leaks and non-routine events.

Our Scope 1 emissions follow the GHG Protocol guidance. As a result, the following are not included in our reported Scope 1 emissions:

- CO_2 emissions from biogenic sources such as biofuels or biomass;
- captured CO_2 that was subsequently sold or otherwise transferred to third parties;
- CO_2 captured and sequestered using CCS technologies; and
- carbon credits.

Scope 2 emissions

All significant sources were included in our Scope 2 inventory. Sources included comprise indirect emissions from purchased and consumed electricity, steam and heat. We did not identify any assets with imported cooling or compressed air used for energy purposes.

Scope 2 emissions are calculated using the market- and location-based methods separately as defined by the GHG Protocol Scope 2 Guidance. Scope 2 emissions are presented on a gross basis.

Basis of preparation – Scope 3 emissions

See "Basis of preparation – Scope 3 emissions" on page 100 for the basis of preparation of the Scope 3 emissions we report on an equity basis.

Contractual instruments used in relation to Scope 2 GHG emissions

We consider energy to be derived from renewable sources if the origin of the purchased energy is clearly defined in supplier contracts including renewable power purchasing agreements and market instruments such as Guarantee of Origin from renewable sources in Europe or Renewable Energy Certificates in the USA and Canada.

The contractual instruments we have used in relation to the purchase of energy, both bundled with energy generation attributes and unbundled with energy attribute claims (i.e. rights to claim renewable energy attributes separate from the power purchased), by assets under our operational control, are as follows. Information from assets not operated by Shell could not reasonably be estimated in 2024.

Scope 2 GHG emissions: share and types of contractual instruments [A] [B]

	%
	2024
Contractual instruments used for the purchase of energy bundled with attributes about energy generation	10%
Contractual instruments used for the purchase of unbundled energy attribute claims	90%

[A] Operational control boundary.
[B] Share of Scope 2 emissions using a market-based approach.

Biogenic emissions

CO_2 emissions from biogenic feedstocks are set out in the table below. These are not included in the GHG emissions inventory in line with the GHG Protocol and ISO 14064-1:2018 requirements. The biogenic emissions not included in Scope 1 and 2 emissions presented below are related to facilities under our operational control.

Biogenic emissions of CO_2 [A]

	unit	2024
Direct biogenic emissions of CO_2 not included in Scope 1 emissions [B]	thousand tonnes CO_2	35.0
Indirect biogenic emissions of CO_2 not included in Scope 2 emissions [B]	thousand tonnes CO_2	45.5
Indirect biogenic emissions of CO_2 not included in Scope 3 emissions [C]	million tonnes CO_2	29

[A] The mass of CO_2 emissions from the burning of biologically sequestered carbon (e.g. CO_2 from burning biomass or biofuels) as well as other processes (e.g. aerobic or anaerobic decomposition of biomass and soil organic matter).
[B] Operational control boundary.
[C] Equity boundary. Represents estimated emissions not included in Scope 3 Category 11 emissions. It is assumed that the presence of biogenic emissions associated with other Scope 3 categories is negligible at present.

GHG intensity based on net revenue

Total GHG emissions, used as the numerator, is prepared as required by the ESRS and reported in the table "Gross Scopes 1, 2, 3 and total GHG emissions" on page 373.

Net revenue, used as the denominator, corresponds to Revenue as presented in Shell's Consolidated Statement of Income and is prepared using the financial control boundary (in line with the International Financial Reporting Standards), where 100% revenue is reported for fully consolidated subsidiaries plus the Shell share of revenue recognised from joint operations, irrespective of operational control considerations.

The numerator therefore differs from the denominator due to the inclusion of Shell-operated equity-accounted assets in the ESRS reporting boundary. Additionally, revenue is expected to fluctuate with oil and gas prices and other factors which are not correlated with GHG emissions. As such, in our view, the information so calculated does not provide a reliable measure of energy intensity, nor does it permit a realistic comparison between reporting entities and over time. Nonetheless, we have prepared the GHG intensity per net revenue metric, recognising the misalignment of boundaries across total GHG emissions and revenue.

For 2024, the resulting metric is set out in the table below on both a market-based and location-based basis.

GHG intensity based per net revenue

	unit	2024
Total GHG emissions (market-based)	million tonnes CO_2e	1,166
Total GHG emissions (location-based)	million tonnes CO_2e	1,166
Net revenue	$ million	284,312
Total GHG emissions per net revenue (market-based)	tonnes CO_2e/$	0.004
Total GHG emissions per net revenue (location-based)	tonnes CO_2e/$	0.004

GHG removals and GHG mitigation projects financed through carbon credits (E1-7)

Removal of greenhouse gases refers to the withdrawal of greenhouse gases from the atmosphere as a result of deliberate human activities. There are two main types of removal mechanism: enhancement of natural processes that remove carbon from the atmosphere, for example through natural carbon sinks, or technical or chemical processes that capture CO_2 and sequester it underground. Carbon capture and storage is considered a removal mechanism only when it results in "negative emissions", for example when paired with technologies like direct air capture.

In 2024, Shell has not used removal mechanisms in its own operations or its upstream and downstream value chain.

GHG removals and storage

	million tonnes CO_2e
	2024
Total GHG removals from own operations	–
Total GHG removals from upstream and downstream value chain	–
Total GHG removals and storage from own operations and value chain	–
Reversals	–

Shell's Nature Based Solutions business invests in entities and projects, and develops projects that conserve, enhance and restore ecosystems – such as forests, grasslands and wetlands – to prevent GHG emissions or reduce atmospheric CO_2 levels. When these entities and projects begin to issue carbon credits, Shell may choose to participate in the offtake of these credits as part of its offsetting activities.

Carbon credits may contribute to our aim to become a net-zero emissions energy business by 2050. They may be used by Shell and its customers to compensate emissions in line with the carbon mitigation hierarchy of avoid, reduce and compensate.

We believe that the carbon credits need to have a robust carbon benefit and deliver a positive impact on ecosystems and communities. We work closely with local partners to ensure that the carbon credit projects we invest in are of high quality, and are developed and certified under credible and independent carbon credit standards. These include the Verra Verified Carbon Standard (VCS) Program, Gold Standard carbon offset certification and the ACR carbon crediting programme (formerly American Carbon Registry).

We do this to ensure that the carbon credits are real and verifiable, and that issues such as permanence, additionality and leakage have been adequately considered. We also buy credits from nature- and technology-based projects developed by others. We carefully source and screen the credits we purchase and retire from the market.

Voluntary carbon credits retired [A]

	unit	2024
Total amount of carbon credits outside the value chain that are verified against recognised quality standards and retired	million carbon credits	17.3
Verra	%	74%
ACR	%	10%
Gold Standard	%	15%
Australian Carbon Credit Units	%	1%
Share from removal projects	%	3%
Share from reduction projects	%	97%
Share from projects within the EU	%	–%
Share of carbon credits that qualify as corresponding adjustments	%	–%

[A] One carbon credit represents the avoidance or removal of one metric tonne of CO_2 equivalent.

In 2024, Shell accounted for the retirement of 17.3 million carbon credits, of which 16.4 million were related to our NCI (including 2.4 million linked to the sale of energy products).

We also buy carbon credits generated by other nature-based projects and by technologies. We carefully source and screen the credits we purchase and retire from the market. The use of high-quality carbon credits, if required, is one of the decarbonisation levers available to Shell. We may choose to use high-quality carbon credits to offset any remaining emissions from our operations, in line with the carbon mitigation hierarchy of avoid, reduce and compensate.

Shell's business plan includes the option to retire a range of high-quality carbon credits in the future, as set out in the table below:

Range of voluntary carbon credits planned to be retired in the future

	unit	2025 to 2030 inclusive
Range of voluntary carbon credits outside the value chain planned to be retired in the future	million carbon credits	48-64

We will review and update the planned range of voluntary carbon credits to be retired in the future as part of the annual operating plan process. We anticipate that the planned range will fluctuate over time, reflecting the uncertainty of the energy transition.

In relation to our 2050 net-zero emissions target, we have no quantitative plans for the use of carbon credits due to the uncertainties regarding the pace of the energy transition, customer demand and the related development of our business models in the decades leading up to 2050.

Internal carbon pricing (E1-8)

Shell uses shadow prices, called CO_2 project screening values (PSVs), to assess the CO_2 resilience of all its business activities to potential future carbon costs, such as those arising from mandatory emission trading schemes or carbon taxes. PSVs do not consider costs that may be applicable to Scope 3 emissions.

We consider the potential costs associated with operational GHG emissions when preparing Greenhouse Gas and Energy Management Plans for projects and assets, and when evaluating capital projects before a final investment decision. For each region, we have developed short-, medium- and long-term estimates of the future costs of carbon. These are reviewed and updated annually. See Note 4 to the "Consolidated Financial Statements" on page 255 for further details on our regional cost of carbon estimates and "Policies related to climate change mitigation and adaptation (E1-2)" on page 369 for further details of our policies in respect of operational GHG emissions.

Up to 2030, our cost of carbon emission estimates are largely policy-driven through emission trading schemes or taxation levied by governments, which vary significantly from country to country. Beyond 2030, when policy predictions are more challenging, our estimates are based on the expected cost of the abatement technologies required to meet our 2050 target.

The estimated cost is trending towards $50 or $230 per tonne (RT24), depending on the country, in 2050. See Note 4 to the "Consolidated Financial Statements" on page 261 for further details on our regional cost of carbon estimates. See "Carbon pricing" on page 89.

Shell's cost of compliance with the emissions trading and related schemes was around $381 million in 2024, as stated in Shell's Consolidated Statement of Income for 2024. In 2024, 43% of our Scope 1 emissions under operational control were reported by assets covered by regulated emission trading schemes [A].

[A] In 2024, Scope 1 emissions covered by regulated emissions trading schemes for facilities not operated by Shell could not be estimated.

Anticipated financial effects from material physical and transition risks and potential climate-related opportunities (E1-9)

Under the provisions of "Appendix C: List of phased-in Disclosure Requirements" to the ESRS, Shell has elected to use the phase-in provisions governing "Anticipated financial effects from material physical and transition risks and potential climate-related opportunities (E1-9)" for the first year of preparation of its Sustainability Statements.

However, a number of anticipated and potential effects are set out in Note 4 to the "Consolidated Financial Statements" on page 255. This note includes an overview of key assumptions used for financial planning related to climate change and the energy transition in addition to details of the sensitivity of carrying values to commodity prices, carbon emission costs, chemical and refining margins, discount rates and demand, if different assumptions were applied.

The EU Taxonomy

Introduction

Regulation EU 2020/852 (the "Taxonomy Regulation" or the "Taxonomy") is a classification system for determining when an economic activity can be considered environmentally sustainable according to European Union (EU) standards. It aims to encourage investment in a low-carbon economy by creating common definitions of sustainability and mandatory disclosures to help investors make informed decisions.

Non-financial companies screen their eligible activities against the taxonomy's technical criteria for environmental sustainability and minimum safeguards. This allows them to calculate the share of revenue (turnover), capital expenditure (capex) and operating expenditure (opex) that can be classified as aligned.

Shell supports the EU's ambition to achieve net-zero emissions, which aligns with our own target to become a net-zero emissions energy business by 2050. We have reported against the taxonomy voluntarily since 2021 because we recognise the importance of increasing transparency about how companies are progressing in the energy transition.

In anticipation of the transposition by the Netherlands of the EU Corporate Sustainability Reporting Directive (CSRD) into national law, a key development for Shell in 2024 has been the voluntary implementation of the CSRD and the accompanying European Sustainability Reporting Standards (ESRS). This means Shell plc will come fully into scope of the EU Taxonomy Regulation upon the transposition of the CSRD by the Netherlands into law. The CSRD extends the EU Taxonomy Regulation's reporting obligation to third-country issuers that are listed on European exchanges.

Reporting scope

The taxonomy's reporting scope covers Shell's global business, based on the financial consolidation boundary. Shell's eligible activities include elements of our chemicals, power generation and storage, hydrogen, biogas and biofuels, electric vehicle charging, carbon capture and storage (CCS) and nature-based solutions (NBS) businesses. Our remaining businesses are non-eligible.

The taxonomy's reporting basis differs from that used in our financial statements, which are based on International Financial Reporting Standards (IFRS).

For example, the taxonomy does not recognise our interests in equity-accounted joint ventures and associates, goodwill, feasibility expenses or integrated value chains. These and other differences result in lower reported turnover, capex and opex under the taxonomy compared with our other disclosures.

Technical criteria

The taxonomy's technical criteria recognise stringent levels of environmental performance rather than transitional steps or alternative pathways. The complexity of the criteria and their reliance on EU standards can make the criteria difficult to interpret and apply, especially for activities outside the EU.

Eligible and aligned share of Shell's business

In 2024, Shell's eligible turnover was $9,353 million or 3.3% (2023: $8,445 million or 2.7%), capex was $3,270 million or 10.6% (2023: $6,032 million or 19.2%) and opex was $1,181 million or 24.7% (2023: $1,382 million or 25.9%).

In 2024, our aligned turnover was $698 million or 0.2% (2023: $542 million or 0.2%), capex was $1,849 million or 6.0% (2023: $4,173 million or 13.3%) and opex was $114 million or 2.4% (2023: $30 million or 0.6%). Our taxonomy-aligned activities include elements of our hydrogen, wind, solar, battery storage, biogas and biofuels, and EV charging businesses, excluding individual assets that are not currently aligned with the technical screening criteria.

The taxonomy does not provide a complete picture of our low-carbon business. Nevertheless, we support efforts to improve the framework and advance climate-related disclosure more broadly. For more information, see "Our journey to net zero" on pages 76-108.

Scope of taxonomy-eligible activities

1.4	Conservation forestry	Equity-accounted JVAs	Feasibility	Eligible projects	Non-eligible projects	Trading
3.14 3.17	Manufacture of chemicals Manufacture of plastics	Equity-accounted JVAs	Feasibility	Manufacturing	Non-eligible products	Trading
3.10 4.13	Manufacture of hydrogen Manufacture of biogas and biofuels	Equity-accounted JVAs	Feasibility	Manufacturing	Trading	Feedstock (biofuels only)
4.1 4.3	Electricity from solar Electricity from wind	Equity-accounted JVAs	Feasibility	Power generation	Trading and B2B/B2C sales	Decarbonisation of non-eligible activities
4.10	Storage of electricity	Equity-accounted JVAs	Feasibility	Power storage	Trading and B2B/B2C sales	
4.29	Electricity from fossil gas	Equity-accounted JVAs	Feasibility	Power generation	Trading and B2B/B2C sales	Upstream, midstream, LNG, GTL
5.11 5.12	Transport of CO_2 Storage of CO_2	Equity-accounted JVAs	Feasibility	Transport & storage	Carbon capture	
6.15	Infrastructure enabling low-carbon road transport	Equity-accounted JVAs	Feasibility	Infrastructure	Retail power and hydrogen sales	B2B/B2C solutions
7.6	Installation of renewable energy technologies	Equity-accounted JVAs	Feasibility	B2C solutions		

Taxonomy-eligible

Taxonomy non-eligible

B2B Business-to-Business **B2C** Business-to-Consumer **JVA** Joint Ventures & Associates **LNG** Liquefied Natural Gas **GTL** Gas-to-Liquids

The taxonomy framework

The taxonomy establishes technical criteria for environmental sustainability across more than 150 economic activities and six environmental objectives.

An activity is taxonomy-eligible if it is described in a delegated act adopted under the EU Taxonomy Regulation. Such an activity is eligible regardless of whether it complies with the technical screening criteria.

An activity is taxonomy-aligned if it contributes substantially to one or more environmental objectives, does no significant harm to any of the other objectives, is carried out in compliance with minimum human and labour rights safeguards, and complies with the relevant technical screening criteria.

The EU has stated that the taxonomy will develop over time. It notes that the fact that an activity does not contribute substantially to one of the EU's environmental objectives does not necessarily mean it is not sustainable. Not all activities with the potential to make a substantial contribution to the environmental objectives are yet included in the framework.

Our eligibility and alignment

Our eligible and aligned turnover, capex and opex are presented in the table below.

Eligible turnover increased by $908 million, mainly due to revenues generated from the manufacture of chemicals and plastics. Eligible capex decreased by $2,762 million compared to 2023 due to fewer acquisitions of eligible activities in 2024. Eligible opex decreased by $201 million, and mainly consisted of operational costs in chemicals and plastics business.

Five economic activities were assessed as taxonomy-aligned, including the manufacture of hydrogen, electricity from wind, electricity from solar, storage of electricity and infrastructure enabling low-carbon road transport. For a sixth activity, the manufacture of biogas and biofuels, we assessed some elements of our activities as taxonomy-aligned and some as non-aligned.

Aligned turnover increased by $156 million, mainly due to revenues generated by renewable energy and low-carbon road transport businesses. Aligned capex decreased by $2,324 million compared to capex reported in 2023 due to fewer acquisitions of eligible activities in 2024. Aligned opex increased by $84 million, mainly due to CrossWind Hollandse Kust (noord) offshore wind farm reaching commercial operations.

Basis of preparation

Shell seeks to prepare its disclosure in accordance with Delegated Regulation EU 2021/2178 (the "Disclosures Delegated Act") as well as several Commission Notices containing answers to frequently asked questions about taxonomy reporting issued between 2021 and 2024.

Shell has adopted a three-step process to prepare its taxonomy disclosure:

- we identify our eligible activities and map these to our assets and projects;
- we screen those activities for alignment with the technical criteria and the minimum safeguards; and
- we calculate the metrics for eligibility and alignment, based on the screening results.

Each step is discussed below.

Identification of eligible activities

Shell has assessed its business against the economic activities qualifying for the taxonomy's six environmental objectives. These include the activities listed in Delegated Regulation EU 2021/2139 (the "Climate Delegated Act", as amended), the gas-related activities listed in Delegated Regulation EU 2022/1214 (the "Complementary Climate Delegated Act") and the activities listed in Delegated Regulation EU 2023/2486 (the "Environmental Delegated Act").

EU taxonomy eligibility and alignment 2024

$ million, except where indicated

	2024			2023		
	Turnover	Capex	Opex	Turnover	Capex	Opex
Aligned	698	1,849	114	542	4,173	30
Eligible	9,353	3,270	1,181	8,445	6,032	1,382
Non-eligible	274,959	27,632	3,603	308,175	25,440	3,951
Total	284,312	30,902	4,784	316,620	31,472	5,333
Aligned % of total	0.2%	6.0%	2.4%	0.2%	13.3%	0.6%
Eligible % of total	3.3%	10.6%	24.7%	2.7%	19.2%	25.9%
Non-eligible % of total	96.7%	89.4%	75.3%	97.3%	80.8%	74.1%

The taxonomy does not provide criteria for determining when an economic activity is in scope for reporting. According to EU guidance, an economic activity takes place when resources – such as capital, goods, labour, manufacturing techniques or intermediary products – are combined to produce specific goods or services. Based on this definition, Shell treats economic activities as in scope for reporting if they correspond to final goods or services offered for sale to customers, or if they are intended to be offered for sale in the future, based on current business plans. We do not report on factors of production or overheads, such as real estate or IT, since these do not represent a final good or service. We also do not report on activities which are immaterial to our results and are not intended to operate as stand-alone businesses, such as sales of waste heat or electricity from refineries and chemical plants.

For 2024, we identified a total of 13 economic activities as eligible for reporting. Although we screen our activities against all applicable environmental objectives, the discussion of our performance against the technical screening criteria focuses on the climate mitigation objective.

Alignment screening

Shell has developed an internal process to assess its eligible activities for alignment with the technical screening criteria and minimum safeguards. This is based on our understanding of the requirements of the Disclosures Delegated Act.

For each eligible activity, we begin by identifying the assets in scope for reporting. An asset is typically a discrete element of physical plant or equipment that contributes to an economic activity, such as a chemical plant or a wind farm, or a project in development that is intended to become an asset in the future.

Once the assets for each activity have been defined, we review the Substantial Contribution and Do No Significant Harm criteria and proceed to screen the assets. Screening is carried out by subject matter experts and subject to cross-checking at various levels.

The technical criteria are highly detailed, with extensive references to European standards and regulations, which are not widely used outside the region. Applying them poses several challenges including:

- where it is difficult to translate EU standards or regulations to a non-EU context;
- where Shell is materially aligned with a complex technical standard but varies in certain details;
- where the criteria are expressed in qualitative terms that are open to interpretation; or
- where the criteria are designed for a different range of applications than the one implied by the activity description.

These situations require us to apply judgement in determining whether the criteria are met.

Sometimes it is not possible to associate eligible turnover, capex or opex with a specific asset. For example, this can happen when we incur research and development expenses for an activity but the expenditure cannot be tied to a specific project for screening purposes. If alignment cannot be reasonably established according to our alignment screening process, the relevant amounts are classified as eligible but non-aligned.

Situations can arise where we may not be able to screen all assets in scope of an activity. This can occur when an activity contains a large number of early-stage projects and it is more efficient to focus on the most material projects and treat the remaining ones as eligible but non-aligned. This situation can also arise when assets are acquired late in the reporting cycle and there is insufficient time to conduct a technical screening, or when it has not been possible to obtain information about a non-operated asset from joint-venture partners. Such assets are treated as eligible but non-aligned by default.

Assets that do not have eligible turnover, capex or opex to report are non-eligible and are not subject to technical screening. In practice, many early-stage projects are non-eligible because they have no turnover or capex to report, while feasibility expenditures incurred prior to a final investment decision (FID) are considered non-eligible under the taxonomy's definition of opex. Technical screening outcomes described in this disclosure apply only to eligible assets that have been screened in 2024.

Where some assets or products in scope of an economic activity are assessed as fully aligned with the technical screening criteria while others are not, an allocation method is applied so that only the aligned portion is included. For example, this can occur when some biofuels or biogas production is assessed as taxonomy-aligned and some is assessed as non-aligned.

Where there is uncertainty with regard to how to interpret or apply any of the technical screening criteria in our alignment screening process, the relevant assets are assessed as non-aligned. In such cases, we intend to monitor future developments and update our approach as appropriate.

Substantial Contribution

The taxonomy's Substantial Contribution criteria are designed to ensure that an economic activity either has a substantial positive impact on one of the environmental objectives or substantially reduces negative impacts on the environment. The criteria vary from activity to activity.

Shell screened its eligible economic activities against all relevant environmental objectives. For five activities, assets in scope for screening were assessed as aligned with the Substantial Contribution criteria for climate mitigation, including solar, wind, hydrogen manufacturing, storage of electricity and infrastructure enabling low-carbon road transport. For a sixth activity, manufacture of biogas and biofuels, some elements were assessed as aligned and some as non-aligned, based on the proportion of feedstock meeting the Substantial Contribution criteria.

Assets in scope for our remaining activities were assessed as non-aligned. For two activities, alignment could not be established due to uncertainty about how to interpret and apply the technical screening criteria. This was the case for carbon transport and storage, where there are questions as to whether local standards are equivalent to the international and EU standards referenced by the criteria, and for conservation forestry, where the technical criteria differ from internationally recognised carbon credit standards.

Do No Significant Harm

The taxonomy's Do No Significant Harm (DNSH) criteria are designed to ensure that an economic activity does not impede other environmental objectives being reached. The combination of the Substantial Contribution and Do No Significant Harm criteria is intended to ensure coherence between the taxonomy's objectives and to avoid progress towards one objective being made at the expense of another.

The DNSH criteria for activities contributing to climate change mitigation include detailed requirements for climate change adaptation, water, circular economy, pollution prevention and biodiversity. The criteria vary for each environmental objective and activity.

Shell screened its eligible economic activities against all relevant environmental objectives. For five activities, assets in scope for screening were assessed as aligned with the DNSH criteria for climate

mitigation, including solar, wind, hydrogen manufacturing, storage of electricity and infrastructure enabling low-carbon road transport. Some elements of our manufacture of biogas and biofuels activities were assessed as aligned and some as non-aligned.

In 2024, we continued to review physical climate risks for our eligible activities in line with the requirements of the Generic criteria for Do No Significant Harm to Climate Change Adaptation (Appendix A). The review of the eligible activities followed the approach set out in "Climate-related physical risks" on page 138.

In assessing alignment with the DNSH criteria, we were required to apply judgement to our electric vehicle charging activities. Electric vehicle charging is referenced by multiple economic activities in the taxonomy, each of which has a different set of technical screening criteria. There is a lack of consensus in the market about which one to apply to different electrical vehicle charging business models. Shell categorised all its electric vehicle charging businesses under the activity with the most stringent criteria, "6.15 Infrastructure Enabling Low-Carbon Road Transport and Public Transport".

For this activity, we assessed the DNSH criteria for waste management to be more applicable to medium- or large-scale infrastructure projects than to distributed, small-scale electric vehicle charging infrastructure with a small construction footprint. Our operating standards for electric vehicle charging include measures to limit waste generation and encourage re-use and recycling, which we assess as materially equivalent.

Our remaining eligible activities were assessed as non-aligned with one or more of the DNSH criteria. In several cases, we assessed ourselves as non-aligned due to uncertainty about how to interpret various aspects of the technical screening criteria.

Minimum safeguards

The taxonomy defines the minimum safeguards as procedures implemented by a company to ensure alignment with the OECD Guidelines for Multinational Enterprises and the UN Guiding Principles on Business and Human Rights, including the eight fundamental conventions identified in the Declaration of the International Labour Organisation on Fundamental Principles and Rights at Work and the International Bill of Human Rights.

Respect for human rights is embedded in the Shell General Business Principles and our Code of Conduct. We have an integrated approach to human rights that is embedded into our policies and processes, which are applicable to all employees and contractors. This approach is informed by the UN Guiding Principles on Business and Human Rights.

We assessed our taxonomy-eligible activities as compliant with the minimum safeguards [A]. See "Human Rights" on page 121 for more information.

Capex Plan assessment

As specified in the Disclosures Delegated Act, capex and opex can be treated as aligned when such expenditures form part of a Capex Plan aimed at expanding an aligned activity or upgrading an eligible activity to enable it to become aligned.

To qualify, a Capex Plan must be approved by management and disclosed at the economic activity aggregated level. The expansion or upgrade must take place within five years unless a longer period is justified by the specific features of the activity and the upgrade concerned. This can be up to a maximum of 10 years. The justification for a longer transition period must feature in the Capex Plan and be included in the disclosure. If the Capex Plan fails to meet the conditions within the specified timeframe, previously published KPIs must be restated.

A lack of consensus exists in the market about how to interpret various aspects of the technical screening criteria. There is also uncertainty about how the criteria might apply to future performance conditions. Shell has therefore decided not to recognise any capex or opex as aligned under the Capex Plan provision in 2024.

Enabling and transitional activities

The taxonomy designates a subset of aligned activities as "enabling" or "transitional".

Transitional activities are those for which low-carbon alternatives are not yet available and which:
- have greenhouse gas emission levels that correspond to the best performance in the sector or industry;
- do not hamper the development and deployment of low-carbon alternatives; and
- do not lead to a lock-in of carbon-intensive assets, considering the economic lifetime of those assets.

Enabling activities are those which directly enable others to make a substantial contribution to an environmental objective, provided they:
- do not lead to a lock-in of assets that undermine long-term environmental goals, considering the economic lifetime of those assets; and
- have a substantial positive impact on the basis of life-cycle considerations.

An economic activity is only transitional or enabling if it complies with the technical screening criteria. In 2024, two of Shell's activities, storage of electricity and infrastructure enabling low-carbon road transport, qualified as enabling.

Calculating the key performance indicators

The taxonomy KPIs consist of separate measures for eligible and aligned turnover, capex and opex. Each measure is calculated as the amount associated with eligible or aligned economic activities (numerator) divided by the total (denominator). In 2024, there was no change in the approach to calculating the KPIs.

Turnover

The turnover KPI comprises the Revenue line from the Consolidated Statement of Income. This measure is reconciled as follows.

EU Taxonomy turnover 2024

$ million

	2024	2023
Revenue from contracts with customers	274,347	301,013
Revenue from other sources	9,965	15,607
Total EUT Turnover	284,312	316,620

Shell's reporting of revenue in the Consolidated Statement of Income follows the IFRS definition, under which realised and unrealised gains and losses from hedging are recognised in revenue. We follow the same principles when calculating the numerator and denominator for the turnover KPI. In 2024, excluding hedging effects would have an immaterial impact on the numerator and denominator.

[A] In 2021, a notification to the Netherlands National Contact Point (NCP) was raised concerning the activities of SPDC as operator of the SPDC JV in Nigeria, in which SPDC holds a 30% interest. In 2024, the NCP, in its final statement, highlighted recommendations in relation to SPDC's community feedback mechanism (CFM). SPDC continues to implement improvements to further align this mechanism with the UNGP effectiveness criteria for operational grievance mechanisms. All our reported eligible economic activities fall outside of Nigeria. As detailed elsewhere in this report, on March 13, 2025, Shell completed the sale of SPDC to Renaissance.

Capex

The capex KPI comprises the Additions line from the "Consolidated Financial Statements" Note 11 – Goodwill and other intangible assets; and the Additions line from the "Consolidated Financial Statements" Note 12 – Property, plant and equipment. Goodwill is excluded from the measure.

When business combinations involving an eligible activity occur in a prior reporting period but purchase price allocation takes place within the current period, we recognise the resulting movements to property, plant and equipment and intangible assets as an addition. These amounts are contained within Note 11 – Goodwill and other intangible assets and Note 12 – Property, plant and equipment in the Sales, retirements and other movements line and are added to the numerator and denominator.

This measure is reconciled as follows.

EU Taxonomy capex 2024

		$ million
	2024	2023
Additions to property, plant and equipment	26,446	25,831
Additions to goodwill and other intangible assets	4,611	6,994
Less: Goodwill	155	1,436
Add: Other movements	–	83
Total EUT Capex	30,902	31,472

The numerator for aligned capex comprises the part of eligible capex that is (a) associated with taxonomy-aligned economic activities; (b) part of a Capex Plan to expand an aligned activity or to enable a non-aligned activity to become aligned; and (c) related to the purchase of output from taxonomy-eligible activities. Due to limited guidance about how (c) should be calculated, our reporting focuses on (a) and (b) only.

The capex KPI as defined by the EU Taxonomy Regulation differs from Shell's cash capital expenditure measure. The latter monitors investing activities on a cash basis, excluding items such as lease additions, which do not necessarily result in cash outflows in the period. This measure comprises the following lines from the Consolidated Statement of Cash Flows: Capital expenditure, investments in joint ventures and associates and investments in equity securities. The cash capital expenditure is presented on page 272.

Opex

The taxonomy defines the opex KPI as costs associated with maintenance and repair, research and development and short-term leases. This is narrower than Shell's definition of operating expenses and does not capture all of our expenditure on otherwise eligible activities. This measure is reconciled as follows:

* Non-GAAP measure (see page 445).

EU Taxonomy opex 2024

		$ million
	2024	2023
Production and manufacturing expenses	23,379	25,240
Selling, distribution and administrative expenses	12,439	13,433
Research and development	1,099	1,287
Total operating expenses*	36,917	39,960
Less: Non-maintenance expenses	20,054	21,689
Less: Selling, distribution and administrative expenses	12,439	13,433
Add: Expenses relating to short-term leases	360	495
Total EUT Opex	4,784	5,333

The numerator for aligned opex comprises the part of eligible opex that is (a) associated with taxonomy-aligned economic activities; (b) part of a Capex Plan to expand an aligned activity or to enable a non-aligned activity to become aligned; and (c) related to the purchase of output from taxonomy-eligible activities. Due to limited guidance about how (c) should be calculated, our reporting focuses on (a) and (b) only.

Other accounting policies

Eligibility and alignment are calculated separately for each economic activity.

The reporting boundary for each economic activity is determined by the scope of the activity description contained in the relevant delegated act. This boundary frequently differs from our integrated value chains and segmental reporting. As a result, various adjustments are needed to calculate the required figures. For example, we exclude sales of third-party products as well as trading and retailing from the calculation of the KPIs. These are significant for Shell's integrated business model but are not eligible for the taxonomy. Although intra-group sales are non-eligible, sales to our trading business are used in certain circumstances to calculate the turnover attributable to eligible parts of the value chain.

When a reporting entity is engaged in multiple economic activities, an allocation method is applied so that only the appropriate part is included. Reconciliation is made to total turnover, capex and opex to avoid double counting.

In some cases, a subsidiary or other related undertaking may have interests in more than one economic activity but insufficient data are available to disaggregate turnover, capex and opex. In these cases, we allocate the KPIs to the activity that best describes the primary business of the entity.

Shell's eligible and aligned turnover, capex and opex are presented on pages 384-386 in accordance with templates specified in Annex II of the Disclosures Delegated Act as amended. Disclosures concerning our gas-related activities are presented on pages 387-390 in accordance with the requirements of the Disclosures Delegated Act, Articles 8(6) and (7), including the templates specified in Annex XII.

Contextual information on the KPIs

This section provides additional contextual information to accompany the presentation of the turnover, capex and opex KPIs on pages 384-386.

Turnover

In 2024, Shell's taxonomy-eligible turnover was $9,353 million or 3.3% of the total, which was an increase in absolute terms of $908 million compared with 2023. The economic activities that made the biggest contribution to eligible turnover were the manufacture of chemicals and plastics, renewable energy (including wind, solar and installation of renewable energy technologies), and the manufacture of biogas and biofuels.

Eligible turnover for the manufacture of chemicals and plastics increased to $8,032 million in 2024 from $7,082 million in 2023 as a result of higher production volume and better asset performance. Additional eligible revenues of $742 million were generated by renewable energy, driven by the wind business. Revenue of $258 million was generated by the manufacture of biogas and biofuels.

Aligned turnover of $698 million was an increase in absolute terms of $156 million compared with 2023, mainly due to revenues generated by renewable energy from wind and solar.

Capex

In 2024, Shell's taxonomy-eligible capex was $3,270 million or 10.6% of the total, which was a decrease of $2,762 million compared with 2023. The economic activities that made the biggest contribution to eligible capex included renewable energy from solar and wind, the manufacture of chemicals and plastics, and the manufacture of biogas and biofuels.

Eligible capex for solar and wind was a combined $1,026 million in 2024 compared with $1,596 million in 2023 due to further capital re-allocation in the renewable energy business. Eligible capex for chemicals and plastics was a combined $898 million in 2024 compared with $999 million in 2023, reflecting the completion of construction activities after a fire incident in one of our plants. Eligible capex for biogas and biofuels was $532 million in 2024 compared with $2,078 million in 2023, which was driven by a material business acquisition in 2023. Eligible capex for low-carbon transport, which includes electric vehicle charging and hydrogen mobility, was $336 million in 2024 compared with $991 million in 2023, driven by fewer acquisitions in the business. Eligible capex for hydrogen was $295 million in 2024 compared with $199 million in 2023.

Aligned capex of $1,849 million was a decrease in absolute terms of $2,324 million compared with 2023, mainly driven by fewer acquisitions and further capital reallocation in the renewable energy business.

Capex additions related to acquisitions through business combinations are aggregated with other capex additions.

Opex

In 2024, Shell's taxonomy-eligible opex was $1,181 million or 24.7% of the total, which was a decrease of $201 million compared with 2023. The economic activities that made the biggest contribution to eligible opex included manufacture of chemicals and plastics, renewable energy from wind, and manufacture of biogas and biofuels. Our chemicals business is relatively mature compared with our other eligible activities and therefore accounts for the largest share of opex.

Eligible opex for chemicals and plastics was a combined $971 million in 2024 compared with opex of $1,133 million in 2023, mainly due to global costs reduction. Lower opex for biogas and biofuels and hydrogen were mainly driven by lower research and development expenditure.

Aligned opex of $114 million was higher compared with $30 million reported in 2023, and mainly related to operational costs in the wind business.

Scope of taxonomy-eligible activities

No	Economic activity	Scope	Notes
1.4	Conservation forestry	Nature-based solutions projects that meet the EU taxonomy activity description for conservation forestry and generate capital assets.	[A], [B], [C]
3.10	Manufacture of hydrogen	Development and operation of hydrogen manufacturing assets.	[A], [B], [C], [D], [E]
3.14	Manufacture of organic basic chemicals	Manufacture of taxonomy-eligible chemical products.	[A], [B], [C], [D], [F]
3.17	Manufacture of plastics in primary form	Manufacture of polyethylene.	[A], [B], [C], [D]
4.1	Electricity generation using solar photovoltaic technology	Development and operation of solar photovoltaic power assets.	[A], [B], [C], [D], [G], [H]
4.3	Electricity generation from wind power	Development and operation of wind power assets.	[A], [B], [C], [D], [G], [H]
4.10	Storage of electricity	Development and operation of utility-scale facilities that store electricity.	[A], [B], [C], [G]
4.13	Manufacture of biogas and biofuels for use in transport and of bioliquids	Development and operation of assets for the manufacture of biogas and biofuels for use in transport.	[A], [B], [C], [D], [I]
4.29	Electricity generation from fossil gaseous fuels	Development and operation of gas-fired power assets.	[A], [B], [C], [D], [J], [K]
5.11	Transport of CO_2	Development and operation of CO_2 transport assets.	[A], [B], [L], [M]
5.12	Underground permanent geological storage of CO_2	Development and operation of CO_2 storage assets.	[A], [B], [L], [M]
6.15	Infrastructure enabling low-carbon road transport and public transport	Development and operation of electric vehicle charging points and hydrogen infrastructure for road transport.	[A], [B], [G]
7.6	Installation, maintenance and repair of renewable energy technologies	Installation, maintenance and repair of renewable energy technologies, on site.	[A], [B], [H]

[A] Excludes interests in equity-accounted joint ventures and associates.
[B] Excludes feasibility expenses incurred prior to final investment decision.
[C] Excludes trading activity.
[D] Excludes sales of third-party products.
[E] Excludes integrated hydrogen units whose outputs are primarily intended for internal consumption, such as desulphurisation in refineries.
[F] Excludes taxonomy non-eligible chemical products.
[G] Excludes B2B/B2C retail sales of electricity.
[H] Excludes expenditure on renewable power projects to reduce Scope 1 and 2 emissions for taxonomy non-eligible target activities.
[I] Excludes ventures engaged in the development of feedstocks for biofuels manufacturing.
[J] Does not include integrated generation or cogeneration units whose outputs are primarily intended for internal consumption.
[K] Does not include upstream exploration and production, midstream, LNG or GTL.
[L] Excludes carbon capture, subject to the remarks in Note [M].
[M] For integrated CCS projects where it is not practically possible to distinguish carbon capture, transport and/or storage, the "Storage of CO_2" activity is used.

Turnover KPI

Proportion of turnover from products or services associated with taxonomy-aligned economic activities - 2024 [A]

Financial year	2024			Substantial contribution criteria						DNSH criteria ('Do No Significant Harm')									
Economic activities (1)	Code (2)	Turnover (3)	Proportion of turnover year 2024 (4)	Climate change mitigation (5)	Climate change adaptation (6)	Water (7)	Pollution (8)	Circular economy (9)	Biodiversity (10)	Climate change mitigation (11)	Climate change adaptation (12)	Water (13)	Pollution (14)	Circular economy (15)	Biodiversity (16)	Minimum safeguards (17)	Proportion of taxonomy-aligned (A.1.) or eligible (A.2.) turnover, year 2023 (18)	Category enabling activity (19)	Category transitional activity (20)
		$ million	%	Y; N; N/EL						Y/N							%	E	T
A. TAXONOMY-ELIGIBLE ACTIVITIES																			
A.1 Environmentally sustainable activities (taxonomy-aligned)																			
Manufacture of hydrogen	CCM 3.10	–	–	Y							Y	Y	Y		Y	Y	–		
Electricity generation using solar photovoltaic technology	CCM 4.1	139	–	Y							Y			Y	Y	Y	–		
Electricity generation from wind power	CCM 4.3	361	0.1%	Y							Y			Y	Y	Y	0.1%		
Storage of electricity	CCM 4.10	1	–	Y							Y	Y		Y	Y	Y	–	E	
Manufacture of biogas and biofuels for use in transport and of bioliquids	CCM 4.13	22	–	Y							Y	Y	Y		Y	Y	–		
Infrastructure enabling low-carbon road transport and public transport	CCM 6.15	175	0.1%	Y							Y	Y	Y	Y	Y	Y	–	E	
Turnover of environmentally sustainable activities (taxonomy-aligned) (A.1)		698	0.2%	100%	–	–	–	–	–								0.2%		
Of which Enabling		176	0.1%	–	–	–	–	–	–								–	E	
Of which Transitional		–	–	–	–	–	–	–	–								–		T
A.2 Taxonomy-eligible but not environmentally sustainable activities (not taxonomy-aligned)																			
				EL; N/EL															
Conservation forestry	CCM 1.4	1	–	EL													–		
Manufacture of hydrogen	CCM 3.10	–	–	EL													–		
Manufacture of organic basic chemicals	CCM 3.14	7,076	2.5%	EL													2.1%		
Manufacture of plastics in primary form	CCM 3.17	956	0.3%	EL													0.1%		
Electricity generation using solar photovoltaic technology	CCM 4.1	–	–	EL													–		
Electricity generation from wind power	CCM 4.3	–	–	EL													–		
Storage of electricity	CCM 4.10	–	–	EL													–		
Manufacture of biogas and biofuels for use in transport and of bioliquids	CCM 4.13	236	0.1%	EL													–		
Electricity generation from fossil gaseous fuels	CCM 4.29	141	–	EL													–		
Transport of CO_2	CCM 5.11	–	–	EL													–		
Underground permanent geological storage of CO_2	CCM 5.12	3	–	EL													–		
Infrastructure enabling low-carbon road transport and public transport	CCM 6.15	–	–	EL													–		
Installation, maintenance and repair of renewable energy technologies	CCM 7.6	242	0.1%	EL													0.2%		
Turnover of taxonomy-eligible but not environmentally sustainable activities (not taxonomy-aligned) (A.2)		8,655	3.0%														2.5%		
A.Turnover of taxonomy-eligible activities (A1 + A2)		9,353	3.3%														2.7%		
B. TAXONOMY NON-ELIGIBLE ACTIVITIES																			
Turnover of taxonomy non-eligible activities		274,959	96.7%														97.3%		
TOTAL		284,312	100%														100%		

[A] The taxonomy's reporting basis differs from that used in Shell's financial statements, which are based on International Financial Reporting Standards. For example, the taxonomy does not recognise our interests in equity-accounted joint ventures and associates; goodwill; feasibility expenses; or the non-eligible parts of integrated value chains. These differences, and others, result in lower reported turnover, capex and opex under the taxonomy compared with our other disclosures.

Capex KPI

Proportion of capex from products or services associated with taxonomy-aligned economic activities - 2024 [A]

Financial year	2024			Substantial contribution criteria						DNSH criteria ('Do No Significant Harm')									
Economic activities (1)	Code (2)	Capex (3)	Proportion of capex year 2024 (4)	Climate change mitigation (5)	Climate change adaptation (6)	Water (7)	Pollution (8)	Circular economy (9)	Biodiversity (10)	Climate change mitigation (11)	Climate change adaptation (12)	Water (13)	Pollution (14)	Circular economy (15)	Biodiversity (16)	Minimum safeguards (17)	Proportion of taxonomy-aligned (A.1.) or eligible (A.2.) capex, year 2023 (18)	Category enabling activity (19)	Category transitional activity (20)
		$ million	%	Y; N; N/EL						Y/N							%	E	T
A. TAXONOMY-ELIGIBLE ACTIVITIES																			
A.1 Environmentally sustainable activities (taxonomy-aligned)																			
Manufacture of hydrogen	CCM3.10	235	0.8%	Y							Y	Y	Y		Y	Y	0.6%		
Electricity generation using solar photovoltaic technology	CCM 4.1	699	2.3%	Y							Y			Y	Y	Y	2.3%		
Electricity generation from wind power	CCM 4.3	316	1.0%	Y							Y			Y	Y	Y	2.2%		
Storage of electricity	CCM 4.10	18	0.1%	Y							Y	Y		Y	Y	Y	0.3%	E	
Manufacture of biogas and biofuels for use in transport and of bioliquids	CCM 4.13	254	0.8%	Y							Y	Y	Y		Y	Y	4.7%		
Infrastructure enabling low-carbon road transport and public transport	CCM6.15	327	1.1%	Y							Y	Y	Y	Y	Y	Y	3.1%	E	
Capex of environmentally sustainable activities (taxonomy-aligned) (A.1)		1,849	6.0%	100%	–	–	–	–	–								13.3%		
Of which Enabling		345	1.1%	–	–	–	–	–	–								3.3%	E	
Of which Transitional		–	–	–	–	–	–	–	–								–		T
A.2 Taxonomy-eligible but not environmentally sustainable activities (not taxonomy-aligned)																			
				EL; N/EL															
Conservation forestry	CCM 1.4	72	0.2%	EL													–		
Manufacture of hydrogen	CCM 3.10	60	0.2%	EL													–		
Manufacture of organic basic chemicals	CCM 3.14	734	2.4%	EL													2.8%		
Manufacture of plastics in primary form	CCM 3.17	164	0.5%	EL													0.4%		
Electricity generation using solar photovoltaic technology	CCM 4.1	9	–	EL													0.4%		
Electricity generation from wind power	CCM 4.3	2	–	EL													0.1%		
Storage of electricity	CCM 4.10	–	–	EL													–		
Manufacture of biogas and biofuels for use in transport and of bioliquids	CCM 4.13	278	0.9%	EL													1.9%		
Electricity generation from fossil gaseous fuels	CCM 4.29	12	–	EL													–		
Transport of CO_2	CCM 5.11	–	–	EL													–		
Underground permanent geological storage of CO_2	CCM 5.12	74	0.2%	EL													0.1%		
Infrastructure enabling low-carbon road transport and public transport	CCM 6.15	9	–	EL													0.1%		
Installation, maintenance and repair of renewable energy technologies	CCM 7.6	7	–	EL													0.1%		
Capex of taxonomy-eligible but not environmentally sustainable activities (not taxonomy-aligned) (A.2)		1,421	4.6%														5.9%		
A.Capex of taxonomy-eligible activities (A1+A2)		3,270	10.6%														19.2%		
B. TAXONOMY NON-ELIGIBLE ACTIVITIES																			
Capex of taxonomy non-eligible activities		27,632	89.4%														80.8%		
TOTAL		30,902	100%														100%		

[A] The taxonomy's reporting basis differs from that used in Shell's financial statements, which are based on International Financial Reporting Standards. For example, the taxonomy does not recognise our interests in equity-accounted joint ventures and associates; goodwill; feasibility expenses; or the non-eligible parts of integrated value chains. These differences, and others, result in lower reported turnover, capex and opex under the taxonomy compared with our other disclosures.

Opex KPI

Proportion of opex from products or services associated with taxonomy-aligned economic activities - 2024 [A]

Financial year	2024			Substantial contribution criteria						DNSH criteria ('Do No Significant Harm')									
Economic activities (1)	Code (2)	Opex (3)	Proportion of opex year 2024 (4)	Climate change mitigation (5)	Climate change adaptation (6)	Water (7)	Pollution (8)	Circular economy (9)	Biodiversity (10)	Climate change mitigation (11)	Climate change adaptation (12)	Water (13)	Pollution (14)	Circular economy (15)	Biodiversity (16)	Minimum safeguards (17)	Proportion of taxonomy-aligned (A.1.) or eligible (A.2.) opex, year 2023 (18)	Category enabling activity (19)	Category transitional activity (20)
		$ million	%	Y; N; N/EL						Y/N							%	E	T
A. TAXONOMY-ELIGIBLE ACTIVITIES																			
A.1 Environmentally sustainable activities (taxonomy-aligned)																			
Manufacture of hydrogen	CCM 3.10	–	–	Y							Y	Y	Y		Y	Y	–		
Electricity generation using solar photovoltaic technology	CCM 4.1	3	0.1%	Y							Y			Y	Y	Y	–		
Electricity generation from wind power	CCM 4.3	106	2.2%	Y							Y			Y	Y	Y	0.5%		
Storage of electricity	CCM 4.10	–	–	Y							Y	Y		Y	Y	Y	–	E	
Manufacture of biogas and biofuels for use in transport and of bioliquids	CCM 4.13	5	0.1%	Y							Y	Y	Y		Y	Y	–		
Infrastructure enabling low-carbon road transport and public transport	CCM6.15	–	–	Y							Y	Y	Y	Y	Y	Y	0.1%	E	
Opex of environmentally sustainable activities (taxonomy-aligned) (A.1)		114	2.4%	100%	–	–	–	–	–								0.6%		
Of which Enabling		–	–	–	–	–	–	–	–								0.1%	E	
Of which Transitional		–	–	–	–	–	–	–	–								–		T
A.2 Taxonomy-eligible but not environmentally sustainable activities (not taxonomy-aligned)																			
				EL; N/EL															
Conservation forestry	CCM 1.4	–	–	EL													–		
Manufacture of hydrogen	CCM 3.10	9	0.2%	EL													1.1%		
Manufacture of organic basic chemicals	CCM 3.14	683	14.3%	EL													14.6%		
Manufacture of plastics in primary form	CCM 3.17	288	6.0%	EL													6.7%		
Electricity generation using solar photovoltaic technology	CCM 4.1	–	–	EL													–		
Electricity generation from wind power	CCM 4.3	15	0.3%	EL													0.3%		
Storage of electricity	CCM 4.10	–	–	EL													0.1%		
Manufacture of biogas and biofuels for use in transport and of bioliquids	CCM 4.13	62	1.3%	EL													2.4%		
Electricity generation from fossil gaseous fuels	CCM 4.29	1	–	EL													–		
Transport of CO_2	CCM 5.11	–	–	EL													–		
Underground permanent geological storage of CO_2	CCM 5.12	4	0.1%	EL													0.1%		
Infrastructure enabling low-carbon road transport and public transport	CCM 6.15	5	0.1%	EL													–		
Installation, maintenance and repair of renewable energy technologies	CCM 7.6	–	–	EL													–		
Opex of taxonomy-eligible but not environmentally sustainable activities (not taxonomy-aligned) (A.2)		1,067	22.3%														25.4%		
A.Opex of taxonomy-eligible activities (A1+A2)		1,181	24.7%														25.9%		
B. TAXONOMY NON-ELIGIBLE ACTIVITIES																			
Opex of taxonomy non-eligible activities		3,603	75.3%														74.1%		
TOTAL		4,784	100%														100%		

[A] The taxonomy's reporting basis differs from that used in Shell's financial statements, which are based on International Financial Reporting Standards. For example, the taxonomy does not recognise our interests in equity-accounted joint ventures and associates; goodwill; feasibility expenses; or the non-eligible parts of integrated value chains. These differences, and others, result in lower reported turnover, capex and opex under the taxonomy compared with our other disclosures.

Disclosures for nuclear and fossil gas activities

Template 1: Nuclear and fossil gas related activities

Row		2024
Nuclear energy related activities		
1	The undertaking carries out, funds or has exposures to research, development, demonstration and deployment of innovative electricity generation facilities that produce energy from nuclear processes with minimal waste from the fuel cycle.	No
2	The undertaking carries out, funds or has exposures to construction and safe operation of new nuclear installations to produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production, as well as their safety upgrades, using best available technologies.	No
3	The undertaking carries out, funds or has exposures to safe operation of existing nuclear installations that produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production from nuclear energy, as well as their safety upgrades.	No
Fossil gas related activities		
4	The undertaking carries out, funds or has exposures to construction or operation of electricity generation facilities that produce electricity using fossil gaseous fuels.	Yes
5	The undertaking carries out, funds or has exposures to construction, refurbishment, and operation of combined heat/cool and power generation facilities using fossil gaseous fuels.	No [A]
6	The undertaking carries out, funds or has exposures to construction, refurbishment and operation of heat generation facilities that produce heat/cool using fossil gaseous fuels.	No [A]

[A] Shell's facilities include integrated gas-fired heating, cooling and power generation units which support one or more primary activities. Such units do not operate on a stand-alone basis and are not treated as a separate economic activity for reporting purposes.

Template 2: Taxonomy-aligned economic activities (denominator), 2024

$ million, except where indicated

		Turnover						Capex						Opex					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
Row	Economic activities	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
1	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
3	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
4	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0%	0	0%	–	–	0	0%	0	0%	–	–	0	0%	0	0%	–	–
5	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
6	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
7	**Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI**	698	0.2%	698	0.2%	–	–	1,849	6.0%	1,849	6.0%	–	–	114	2.4%	114	2.4%	–	–
8	**Total applicable KPI**	284,312	100%	284,312	100%	–	–	30,902	100%	30,902	100%	–	–	4,784	100%	4,784	100%	–	–

Template 3: Taxonomy-aligned economic activities (numerator), 2024

$ million, except where indicated

		Turnover						Capex						Opex					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
Row	Economic activities	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
1	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
3	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
4	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0%	0	0%	–	–	0	0%	0	0%	–	–	0	0%	0	0%	–	–
5	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
6	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
7	**Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the numerator of the applicable KPI**	698	0.2%	698	0.2%	–	–	1,849	6.0%	1,849	6.0%	–	–	114	2.4%	114	2.4%	–	–
8	**Total amount and proportion of taxonomy-aligned economic activities in the numerator of the applicable KPI**	698	0.2%	698	0.2%	–	–	1,849	6.0%	1,849	6.0%	–	–	114	2.4%	114	2.4%	–	–

Template 4: Taxonomy-eligible but not taxonomy-aligned economic activities, 2024

$ million, except where indicated

		Turnover						Capex						Opex					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
Row	Economic activities	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
1	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
3	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
4	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	141	0.0%	141	0.0%	–	–	12	0.0%	12	0.0%	–	–	1	0.1%	1	0.1%	–	–
5	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
6	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
7	**Amount and proportion of other taxonomy-eligible but not taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI**	8,514	3.0%	8,514	3.0%	–	–	1,409	4.6%	1,409	4.6%	–	–	1,066	22.3%	1,066	22.3%	–	–
8	**Total amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activities in the denominator of the applicable KPI**	8,655	3.0%	8,655	3.0%	–	–	1,421	4.6%	1,421	4.6%	–	–	1,067	22.3%	1,067	22.3%	–	–

Template 5: Taxonomy non-eligible economic activities, 2024

$ million, except where indicated

		Turnover		Capex		Opex	
Row	Economic activities	Amount	%	Amount	%	Amount	%
1	Amount and proportion of economic activity referred to in row 1 of Template 1 that is taxonomy non-eligible in accordance with Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–
2	Amount and proportion of economic activity referred to in row 2 of Template 1 that is taxonomy non-eligible in accordance with Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–
3	Amount and proportion of economic activity referred to in row 3 of Template 1 that is taxonomy non-eligible in accordance with Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–
4	Amount and proportion of economic activity referred to in row 4 of Template 1 that is taxonomy non-eligible in accordance with Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI [A]	0	0%	0	0%	0	0%
5	Amount and proportion of economic activity referred to in row 5 of Template 1 that is taxonomy non-eligible in accordance with Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–
6	Amount and proportion of economic activity referred to in row 6 of Template 1 that is taxonomy non-eligible in accordance with Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	–	–	–	–	–	–
7	**Amount and proportion of other taxonomy non-eligible economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI**	274,959	96.7%	27,632	89.4%	3,603	75.3%
8	**Total amount and proportion of taxonomy non-eligible economic activities in the denominator of the applicable KPI**	274,959	96.7%	27,632	89.4%	3,603	75.3%

[A] The scope of this requirement cannot be determined based on current EU guidance. Shell intends to monitor future developments and update our approach as appropriate.

Pollution (E2)

We seek to manage the impact of our operations on air quality, water quality and soil and groundwater resources, while complying with applicable regulations.

Our double materiality assessment has identified emissions to air, discharges to water, soil and groundwater, oil spills in Nigeria and hazardous substances as material topics. See "Material impacts, risks and opportunities and their interaction with strategy and business model (SBM-3)" on page 351 and "Description of the process to identify and assess material impacts, risks and opportunities (IRO-1)" on page 354 for more information.

Why it matters

Our businesses emit pollutants to air and water, subject to limits established by Shell or local standards, whichever are most stringent. Managing these emissions is part of our commitment to pursue the goal of no harm to people and to respect nature by protecting the environment. We design, operate and maintain our facilities with the intention of minimising discharges to air and water.

We design, operate and maintain our facilities with the intention of avoiding discharges to soil or groundwater. However, there is potential for unintentional contamination to occur for reasons such as operational failure, accidents, unusual corrosion or third-party interference including theft or sabotage. We prepare and practise our emergency response to incidents and proactively manage soil and groundwater impacts and risks.

Our products and operations involve the use of hazardous substances with the potential to harm people and the environment. We work to ensure our many products – such as fuels, lubricants and chemicals – are safe throughout their life cycle.

This section explains how Shell manages air quality, water quality, soil and groundwater, and hazardous substances. See "Water (E3)" on page 395 for information about our approach to water stewardship, and "Safety" on pages 429-438 for information about our approach to process safety, emergency response and oil spills.

Policies related to pollution (E2-1)

Our approach to pollution control is governed by our Safety, Environment and Asset Management (SEAM) Standards. These contain standards related to air quality, water quality, product stewardship, soil and groundwater, as well as related standards such as process safety and emergency response. See "SEAM Standards" on page 130 for more information.

The standards described in this section apply to Shell companies and joint ventures in which Shell is the operator, except where otherwise stated. We expect non-operated joint ventures to adopt appropriate and acceptable policies to manage their risks.

Air quality

We design, operate and maintain our facilities to minimise emissions of pollutants to air. Under normal operating conditions, we emit pollutants to air subject to limits established by local regulators or our own standards, whichever are more stringent.

Volatile organic compounds (VOC)

Our standards require emission sources with VOC emissions exceeding 100 tonnes per year to establish, implement and maintain a risk-based programme of monitoring to detect leaks and implement repairs.

Our standards require controls to be implemented to reduce emissions from such sources to as low as reasonably practicable (excluding combustion sources and process streams where VOC content is less than 10% by weight).

Nitrogen oxides (NO_X) and sulphur oxides (SO_X)

Our standards for emissions of NO_X and SO_X distinguish between facilities located in member countries of the Organisation for Economic Co-operation and Development (OECD), whose regulatory frameworks are generally mature, and those located in countries outside the OECD, where they may be less so. For existing refineries or chemical plants in non-OECD countries, our standards set minimum performance levels for emissions of NO_X and SO_X. For other types of facilities located outside the OECD, those facilities are required to select an OECD country and apply the limits of the country selected.

We require new facilities, and modifications to existing facilities, after July 1, 2024, to meet the International Finance Corporation's emission guidelines for NO_X and SO_X. Where this cannot be achieved, our standards require emissions to be reduced to as low as reasonably practicable. We also require new facilities, and modifications to existing facilities, after July 1, 2024, to assess the effect of future emissions on air quality in the surrounding area (airshed) and to meet airshed ambient air quality specifications. Where this is not achievable, emissions are to be reduced to as low as reasonably practicable.

Water quality

Our standards require disposal of waste water from our assets, projects or businesses to be managed in line with water stewardship principles. Our discharges to water are also subject to limits established by local regulators.

We design, operate and maintain our onshore and offshore facilities to minimise discharges to water according to local regulatory requirements and our own standards. Our standards require new onshore assets and modifications of existing onshore assets after July 1, 2024, to meet the more stringent of our own or local regulatory limits for discharges of certain pollutants and increases in water temperature. Our standards are derived from the International Finance Corporation's environmental, health and safety discharge criteria.

Our standards require new assets and existing assets modified after July 1, 2024, to use best available techniques (BAT) and meet best environmental practice (BEP) assessment criteria for water treatment. These are designed to ensure that an asset meets the most stringent of either local requirements or our own standards.

For offshore operations, our standards prohibit the discharge to sea of non-aqueous drilling fluids such as oil-based muds and synthetic-based muds. Discharge of drilling cuttings to sea is only allowed subject to conditions such as distance to shore, expected dispersion of solids and if the concentration of certain substances is below specified limits.

Our standards prohibit the use of mineral oil or diesel non-aqueous drilling fluids when drilling through aquifers or other beneficial use water-bearing zones.

See "Water stewardship" on page 395 for information about our water consumption standards.

Soil and groundwater

Under normal operating conditions, our assets are designed to avoid emissions and discharges to soil or groundwater. However, there is potential for unintentional contamination to occur for reasons such as operational failure, accidents, unusual corrosion or third-party interference including theft or sabotage.

Our standards on process safety prescribe technical standards and operating practices designed to prevent losses of containment and to prevent escalation and mitigate impacts should an incident occur. Our standards on emergency response are designed to ensure that we are appropriately prepared to respond to all credible emergency and worst-case spill scenarios.

See "Safety" on page 429 for information about our standards on process safety and emergency response.

Our standards on soil and groundwater apply to assets, projects or businesses under Shell's operational control. We apply similar requirements to divested sites where Shell retains responsibility for managing soil and groundwater issues.

Our standards require our assets, projects or businesses to proactively assess and manage soil- and groundwater-related impacts and risks. This includes requirements to carry out soil and groundwater assessments on a regular basis and to determine whether any investigation, control or remedial action is required. Our standards require known or suspected releases to soil and groundwater to be investigated, assessed and, depending on the outcome of a risk assessment, remediated.

For assets deemed to be at higher risk for soil and groundwater contamination, our standards require a groundwater monitoring plan, including an annual monitoring programme and the design of appropriate systems. For sites where benzene or ether oxygenates are present or suspected, we apply additional monitoring, control and remediation measures.

In line with site-level assessments, our standards require our assets, projects or businesses to develop a remedial action plan documenting the actions to be taken to address potential soil and groundwater contamination.

Product stewardship

Our approach to product stewardship aims to make sure our products are safe throughout the life cycle. We also manage the use of hazardous substances and materials in our operations to minimise harm to people or the environment.

Product safety

Our standards require our assets, projects or businesses to identify, assess and manage hazards and risks associated with our products throughout the life cycle, from development, product handling, storage and transport to final disposal. As part of this process, we implement measures to prevent and mitigate actual or potential health, safety or environmental impacts. Our standards require re-evaluating existing products when entering a new market, altering a product's formulation or manufacturing, or when new health, safety, environmental or regulatory information becomes known.

We communicate the hazards and requirements to manage the risks of our products to customers, employees, contractors and authorities through product safety data sheets and product hazard labels.

These standards apply to products such as fuels, lubricants and chemicals.

Hazardous substances and materials in our operations

Our standards require our assets, projects or businesses to identify, assess and manage the hazards and risks associated with substances and materials used in our operations. As part of this process, we evaluate hazards associated with the use, storage, transport and disposal of substances and materials and implement controls to prevent and mitigate actual or potential health, safety or environmental impacts.

Our standards require a systematic approach to evaluating and managing hazards associated with purchased products through a chemical and product approval process.

We communicate the hazards and requirements to manage the risks of hazardous substances in our operations to employees, contractors and authorities through product safety data sheets, product inventories, product hazard labels and other health, safety and environmental information.

Animal testing

Global chemical safety regulations require animal testing to assess the risks of new products. We aim to replace animal testing with suitable alternatives while continuing to innovate, develop and maintain new and safe products and technologies.

Our standards require assets, projects or businesses to apply a hierarchy of controls to replace animal tests with alternatives where possible, to reduce the number of animals used and to refine test methods to make them as humane as possible. When animal testing is required by regulation, our standards require controls to ensure that stringent animal welfare standards are followed.

See shell.com for our Animal Welfare Report.

Other policies

See "Impact assessment" on page 355, "Water (E3)" on page 395, "Resource use and circular economy (E5)" on page 404 and "Safety" on page 429 for information about other standards relevant to pollution control.

Actions and resources related to pollution (E2-2)

In 2024, we took action to reduce our air emissions, manage our water discharges and improve our performance on air and water quality. We continued to manage soil and groundwater and product stewardship in line with existing standards and procedures.

The scope of the actions described in this section covers Shell companies and joint ventures in which Shell is the operator, unless otherwise stated. Many of our actions are of an ongoing nature. Horizons for the completion of time-bound actions are indicated where applicable.

Our actions are intended to help us achieve the desired outcome of our policies and standards by providing resources and expertise that support our businesses to implement them in fit-for-purpose ways.

Air quality

We follow our own standards and those of local regulators to manage airborne pollutants, including emissions of nitrogen oxides, sulphur oxides and volatile organic compounds.

In 2024, we continued to implement leak detection and repair programmes to reduce emissions of volatile organic compounds, with a focus on sources of VOC emissions exceeding 100 tonnes per year. We also continued to implement greenhouse gas improvement opportunities, which often reduce emissions of other air pollutants. For example, reducing site power generation or routine flaring can lower greenhouse gas emissions, as well as volatile organic compounds, NO_x and SO_x.

Water quality

We follow our own standards and those of local regulators to manage waste-water discharges.

In 2024, we continued to embed our refreshed approach to water management in our operations, based on water stewardship principles. In some offshore assets, such as our Prelude floating LNG facility in Australia, our UK assets in the North Sea and our deep-water assets in the Gulf of America, we are implementing programmes to further assess waste-water discharges in response to new regulations.

We continue to participate in industry consortia to develop tools and methodologies to improve the management of waste-water discharges.

See "Water stewardship" on page 395 for more information about our approach to managing water.

Soil and groundwater

Shell operates a global soil and groundwater programme comprising an in-house team and experienced consultants who support Shell businesses to understand, assess and manage their soil and groundwater risks.

We have an active research and development programme that helps develop best practice and we conduct scientific research on potential impacts associated with our activities. We often share our research findings with government agencies, researchers and other stakeholders to support the development of sustainable and risk-based environmental guidelines.

We design, operate and maintain our facilities with the intention of preventing spills. To minimise the risk of spills, Shell has routine programmes in place to help reduce failures and maintain the reliability of facilities and pipelines. See "Process safety" on page 431 for more information.

Product stewardship

We work to ensure our products – such as fuels, lubricants and chemicals – are safe throughout their life cycle. We carry out risk assessments for products and additives and publish and distribute safety data sheets to customers globally.

Working through industry consortia, Shell conducts research and development on tools and methodologies to better identify, assess and manage risks to water, air and soil. This includes understanding the implications of new scientific research and emerging regulations on pollutants.

Resourcing our actions

The Executive Vice President for Safety, Environment and Asset Management is the most senior executive in Shell with accountability for the development, governance and oversight of the SEAM Standards. Leaders of assets, performance units, businesses or functions are accountable for assessing which SEAM Standards are relevant, based on their objectives, risk profile and activities, and for implementing those standards as appropriate.

Implementation of SEAM Standards relevant to pollution control is supported by members of Shell's Safety, Environment and Asset Management function, which includes subject matter experts in impact assessment, air emissions, water, ecotoxicology, soil and groundwater, process safety, emergency response and other disciplines. The requirements of our standards are communicated to people involved with implementation through various mechanisms, including internal communication channels, management systems and training, as appropriate.

Planned actions

In 2025, we will to continue to:

- manage air emissions, water discharges, soil and groundwater, and hazardous substances in line with own standards and those of local regulators;
- implement leak detection and repair programmes at large facilities to address emissions of volatile organic compounds; and
- work towards improving our asset integrity and process safety performance, a key factor in our spills performance.

Our action plans are responsive to changing business conditions. Planned actions not directly related to compliance with regulations or our own standards are subject to change. The actions indicated above represent key focus areas rather than an exhaustive list.

Targets related to pollution (E2-3)

Emissions of pollutants to air and water during normal operating conditions are often subject to limits and permit conditions established by local regulators at the asset level, which establish the performance level to be achieved for any improvements between a base period and a future period. Due to the diversity of our operations and the different regulatory frameworks to which we are subject, we have not set consolidated targets at a Group level for specific air pollutants, emissions to water, pollution to soil or specific loads, substances of concern or substances of very high concern.

We measure the effectiveness of our policies and standards by monitoring our performance data and compliance with permit conditions. These efforts are supported by experts who monitor trends and provide technical advice to our operating assets.

Pollution of air, water and soil (E2-4)

This section describes our performance on air quality, water quality and spills in 2024.

We present data on emissions to air and discharges to water against an operational control boundary. See "Supplementary data for pollution, water, biodiversity and waste, including estimates for non-operated assets" on page 434-437 for data reported against an ESRS boundary.

Air quality

We gather data on emissions to air from the day-to-day running of our facilities. We work to minimise these emissions according to local regulatory requirements and our own standards.

Emissions to air (operational control) [A] [B]

	unit	2024
Sulphur oxides (SO_X)	thousand tonnes	21
Nitrogen oxides (NO_X)	thousand tonnes	92
Volatile organic compounds (VOCs)	thousand tonnes	32
Benzene (C_6H_6).	tonnes	201
Ethylene oxide (C_2H_4O)	tonnes	2
Hydrochlorofluorocarbons (HCFCs)	tonnes	1
Particulate matter (PM)		
PM10	thousand tonnes	3
PM2.5	thousand tonnes	3
Carbon monoxide (CO)	thousand tonnes	29
Metals		
Chromium (Cr)	tonnes	0.1
Copper (Cu)	tonnes	0.5
Nickel (Ni)	tonnes	6
Polycyclic aromatic hydrocarbons (PAH) [C]	tonnes	1
Naphthalene ($C_{10}H_8$)	tonnes	8
Ammonia (NH_3)	tonnes	323
Arsenic (As)	tonnes	0.2
Hydrogen cyanide (HCN)	tonnes	8

[A] Emissions to air are defined as the total mass of pollutants emitted to the atmosphere. Data are calculated at site level and consolidated for assets under Shell's operational control. In the absence of local regulation or an approved voluntary scheme, the highest practical tier from the following hierarchy is used: continuous monitoring, periodic monitoring, derived emission factors based on monitoring over a range of conditions; engineering calculations; equipment manufacturer emission factors; or use of default or standard emission factors. When emission factors are used, reference information and guidance include the European Monitoring and Evaluation Programme, the European Environment Agency, Concawe, the American Petroleum Institute and the International Maritime Organization. There is a degree of measurement uncertainty arising from the number of emission points for which data are calculated and variations in the emission factors used at site level, which in some cases are governed by local regulation. As a result of these limitations, it is not possible to furnish a range of estimates with confidence.

[B] Includes reporting by facilities with emissions above the thresholds specified in the European Pollutant Release and Transfer Register regulation. Some facilities with emissions below these thresholds also submit data, particularly for SO_X, NO_X and VOCs.

[C] PAH excludes naphthalene ($C_{10}H_8$), which is reported separately.

Our SO_X emissions in 2024 decreased to 21 thousand tonnes from 31 thousand tonnes in 2023. The decrease was mainly due to a reduction in our flaring at the Shell Energy and Chemicals Park Singapore and the Shell-operated Scotford Upgrader in Canada.

Our NO_X emissions in 2024 increased to 92 thousand tonnes from 88 thousand tonnes in 2023. The rise was partly driven by activity by facilities in Nigeria and logistics in the UK.

Our emissions of VOCs in 2024 were 32 thousand tonnes compared with 32 thousand tonnes in 2023 (restated from 36 thousand tonnes following a review of the performance data).

Our assets are often required by regulators to gather data on various air pollutants for local performance monitoring and reporting. In 2024, we began collecting data on several additional pollutants for certain assets. We intend to provide further contextual information in the future when additional comparative data are available.

Water quality

We gather data on pollutants in water returned to the environment from the day-to-day running of our facilities (referred to as "discharges to surface water"). We work to minimise these discharges according to local regulatory requirements and our own standards.

Pollutants discharged to surface water (operational control) [A] [B] [C]

	tonnes
	2024
Total organic carbon (TOC) (as total C or COD/3)	1,557
Metals	
Arsenic (As)	0.3
Cadmium (Cd)	0.02
Chromium (Cr)	0.3
Copper (Cu)	0.3
Lead (Pb)	0.1
Nickel (Ni)	1
Zinc (Zn)	3
Mercury (Hg)	0.001
Phenol	1
Benzene	0.04
Absorbable organic halogens (AOX)	35
Nitrogen	340
Phosphorus	63

[A] Pollutants discharged to surface water are defined as the total mass of pollutants present in controlled or regulated effluent discharges to surface water directly from onshore assets. Figures are expressed on the basis of net discharge derived from measured concentrations and discharged effluent volumes. The scope includes pollutants discharged through produced water, process water, oil or water interceptors, cooling water and boiler blow-down water. It excludes oil spills, pollutants in water injected in reservoirs, quantities discharged to third-party treatment facilities and surface run-off water.

[B] Data on pollutants discharged to surface water are calculated at site level and consolidated for assets under Shell's operational control. In the absence of a locally required analysis method, the reported pollutants are analysed in samples taken from representative streams such as treated process water using pollutant-specific methodologies based on the American Public Health Association, the Royal Netherlands Standardization Institute and the International Organization for Standardization (ISO). There is a degree of measurement uncertainty arising from effluent sampling and logistics, local analytical capabilities and applied methods, and from the determination of the effluent volumes. Standardisation will reduce such uncertainties, but as a result, it is currently not possible to furnish a range of estimates with confidence.

[C] Includes reporting by facilities with discharges above the thresholds specified in the European Pollutant Release and Transfer Register regulation. Some facilities with discharges below these thresholds may also submit data.

Our assets are required by regulators to gather data on various discharges to water for local performance monitoring and reporting. In 2024, we began collecting data at a Group level on several pollutants that were previously monitored at a local level. We intend to provide further contextual information in the future when additional comparative data are available.

Spills

See "Spills" on page 433 for metrics and commentary related to oil spills, including in Nigeria. Because of the importance of process safety to preventing losses of containment, and preventing escalation and mitigating impacts should an incident occur, spills data are placed in this section so that they can be viewed alongside related disclosures on process safety and emergency response.

Water and marine resources (E3)

Water is essential to life and is an important resource in many industrial processes. As an energy company we need water for our operations, and this can affect other water users.

Our double materiality assessment has identified fresh-water consumption, especially in water-stressed areas, as a material topic. See "Material impacts, risks and opportunities and their interaction with strategy and business model (SBM-3)" on page 351 and "Description of the process to identify and assess material impacts, risks and opportunities (IRO-1)" on page 354 for more information.

Why it matters

Shell's businesses consume water for a variety of uses. In 2024, around 79 million cubic metres of fresh-water consumed was used for manufacturing oil products and chemicals (88%), with the remaining 11 million cubic metres mainly used for oil and gas production.

Our use of water can have impacts on ecosystems and people. Consumption of water by our business activities has the potential to cause physical changes to ecosystems, affecting habitats and species. In water-stressed areas, it can exacerbate existing pressure on ecosystems and lead to competition with communities and other water users. To help us manage these impacts, we are implementing water stewardship principles across our businesses and developing local improvement plans.

This section explains how Shell manages the sourcing, use, treatment and disposal of water. See "Pollution (E2)" on page 391 for information about our approach to water quality and soil and groundwater. See "Biodiversity and ecosystems (E4)" on page 397 for information about our approach to marine habitats.

Policies related to water and marine resources (E3-1)

Our approach to water is governed by our Safety, Environment and Asset Management (SEAM) Standards. These contain standards addressing water stewardship, management of discharges and the use of technology in our facilities, among other topics. See "SEAM Standards" on page 130 for more information.

The standards described in this section apply to Shell companies and joint ventures in which Shell is the operator, except where otherwise stated. We expect non-operated joint ventures to adopt appropriate and acceptable policies to manage their risks.

Water stewardship

Our standards require our assets, projects or businesses to manage sourcing, use, treatment and disposal of water based on recognised water stewardship principles. Our standards are informed by external best practices, such as those developed by the Alliance for Water Stewardship.

The objective is to manage our use and sourcing of water in ways that are socially equitable, environmentally sustainable, economically beneficial and achieved through a stakeholder-inclusive process that involves site- and catchment-based actions, in line with a water stewardship management plan. Such plans help us to move away from a traditional inside-out approach focusing on our impact on the environment to an outside-in approach that considers how we impact, and are impacted by, the environment. They also help us to reduce consumption in water-stressed areas.

The water stewardship principles are applicable to fresh-water and marine environments. To account for the diversity of Shell's operations, we expect assets, projects or businesses to meet the intent of the principles by applying them to their local circumstances in a fit-for-purpose way.

Water stewardship principles

Principles of water stewardship	What this means for Shell
Adopt good water governance	Responsible sharing of water resources in a watershed or catchment of relevance through engagements with stakeholders such as industry associations, local authorities, collective water action networks and other users.
Implement a sustainable water balance	Withdraw sustainable amounts of fresh water from the catchment, taking into consideration current and future users. Consider recycling and reusing fresh water and taking water efficiency measures.
Ensure good water quality	Good water quality refers to water that meets the needs of native flora and fauna and people. This applies to surface water, groundwater and the marine environment. Shell contributes to this objective by managing effluent discharges.
Focus on important water-related areas	Consider mitigation actions if business activities within the catchment impact important water-related areas of high value to nature or people.
Ensure safe water, sanitation and hygiene (WASH) for all	WASH refers to efforts to address basic human water needs and rights related to access to safe and sufficient water for drinking and sanitation. In contexts where WASH provision is lacking, Shell may support provision for employees, customers and communities.

For new projects, we undertake environmental and social impact assessments to identify measures to avoid or minimise impacts on water. We evaluate the long-term sustainability of water resources to select options that avoid or minimise disruption to the environment and other users. This helps to ensure we have a continued supply of water for our operations, while also minimising impacts and bringing benefits to others. See "Impact assessment" on page 355 for more information.

See "Water quality" on page 393 for information about our standards on prevention and abatement of water pollution.

Shell is not a producer of biological or non-biological marine resources such as deep-sea minerals or seafood products. Accordingly, we have not adopted standards on these topics.

Our approach to promoting sustainable oceans and seas is covered by our standards on biodiversity, water stewardship and pollution control.

Actions and resources related to water and marine resources (E3-2)

Our actions in 2024 focused on embedding water stewardship management plans in applicable operations, with an emphasis on reducing fresh-water consumption in water-stressed areas.

The scope of the actions described in this section covers Shell companies and joint ventures in which Shell is the operator, unless otherwise stated. Many of our actions are of an ongoing nature. Horizons for the completion of time-bound actions are indicated where applicable.

Our actions are intended to help us achieve the desired outcome of our policies and standards by providing resources and expertise that support our businesses to implement them in fit-for-purpose ways.

Water stewardship management plans

Our assets, projects or businesses are required to implement water stewardship principles by developing and implementing water stewardship management plans in accordance with our SEAM Standards.

Since 2021, we have conducted water stewardship assessments at 18 assets across different businesses and regions, with a priority on operations in areas of high water stress and those that use significant quantities of fresh water. The insights gained from these assessments have moved us towards a more holistic stewardship approach. This goes beyond only focusing on water use to also considering factors such as water footprint, regional water stress, water quality, catchments, governance and stakeholder engagement. Building on these efforts, our Mobility and US Midstream businesses developed water stewardship plans in 2024.

Areas of high water stress

In 2024, we continued to make progress in reducing our consumption of fresh water in water-stressed areas, which we classify in accordance with World Resources Institute definitions, subject to the qualifications set out below.

In 2018, we assessed four facilities as being located in areas of high water stress, based on the Aqueduct Water Risk Atlas and the materiality of contribution to total fresh-water consumption in such areas. These included the Pearl GTL gas-to-liquids facility in Qatar; the Shell Import Facility in Tabangao in the Philippines; and the Shell Energy and Chemicals Park Singapore, which comprises integrated refining and chemical assets on Pulau Bukom and Jurong Island. Although Singapore was subsequently reclassified by the Aqueduct Water Risk Atlas as being at low overall water stress, we continue to treat the Shell Energy and Chemicals Park as part of a water-stressed region, based on our original 2018 assessment.

In 2024, the Shell Energy and Chemicals Park Singapore commissioned a waste-water recovery project that resulted in a further reduction of fresh-water withdrawal rates. In 2024, Shell reached an agreement to sell its interest in the Energy and Chemicals Park Singapore. This transaction is expected to be completed in 2025, subject to regulatory approvals.

Working with others

Shell collaborates with universities, technology providers and other energy companies to identify and develop opportunities to improve our water management performance. We work with other companies through Ipieca, the global oil and gas industry association for advancing environmental and social performance across the energy transition, to support the development of water risk assessment tools to improve the way companies define, assess and respond to water-related risks. Our collaboration priorities focus on the practical implementation of water stewardship principles and the development and adoption of technology solutions for sustainable water management. These activities concern impacts related to water consumption and water quality.

Resourcing our actions

The Executive Vice President for Safety, Environment and Asset Management is the most senior executive in Shell with accountability for the development, governance and oversight of the SEAM Standards. Leaders of assets, performance units, businesses or functions are accountable for assessing which SEAM Standards are relevant, based on their objectives, risk profile and activities, and for implementing those standards as appropriate.

Implementation of SEAM Standards relevant to water is supported by members of Shell's Safety, Environment and Asset Management function, which includes subject matter experts in impact assessment, water management, ecotoxicology and other disciplines. The requirements of our standards are communicated to people involved with implementation through various mechanisms, including internal communication channels, management systems and training, as appropriate.

Planned actions

In 2025, we will continue to:

- manage water consumption and quality in line with our own standards and those of local regulators;
- embed water stewardship management plans; and
- engage with external stakeholders and industry peers on water-related issues.

Our action plans are responsive to changing business conditions. Planned actions not directly related to compliance with regulations or our own standards are subject to change. The actions indicated above represent key focus areas rather than an exhaustive list.

Targets related to water and marine resources (E3-3)

In 2021, we set a voluntary commitment to reduce our consumption of fresh water by 15% by 2025 compared with 2018 levels in areas where there is high fresh-water stress. We achieved this commitment ahead of time in 2022. Shell's commitment meets the ESRS definition of a target.

In 2024, our consumption of fresh water in areas of high water stress was 16 million cubic metres compared with 25 million cubic metres in the base year of 2018, a 36% reduction over the period. The reduction was mainly the result of a net decrease in water consumption at the Pearl GTL facility in Qatar, the Shell Energy and Chemicals Park Singapore and the Shell Import Facility in Tabangao in the Philippines, and reflects a combination of hardware changes, improvements in operating practices and the conversion of Tabangao from a refinery to a terminal. This level of progress is consistent with our expectations when setting the commitment.

The scope of this commitment covers the four facilities that account for most of our consumption of fresh water in water-stressed areas. The adoption of this commitment responds to emerging scientific evidence about water-stressed areas and stakeholder concerns about our potential impact on such areas. We have not adopted targets for commodities related to marine resources as we consider this topic to have limited relevance for our business.

Water consumption (E3-4)

Our water performance data for 2024 are presented below.

We present data for water consumption against an operational control boundary. See "Supplementary data for pollution, water, biodiversity and waste, including estimates for non-operated assets" on page 435 for water consumption data reported against a financial control boundary.

Water consumption (operational control) [A] [B]

	million cubic metres
	2024
Water consumption [C]	90
Water consumption in areas of high water stress [C] [D]	16
Water recycled and reused [E]	18
Water stored [F]	–
Changes in water storage	–

[A] Water volumes are reported at site level using one or more of the following methods: metering; water bills from public utilities; pumping capacity multiplied by the time of pumping; and process requirement estimates. Due to the site-specific nature of these calculations, it is not possible to state a degree of measurement uncertainty with confidence.
[B] Fresh water figures do not include once-through cooling water
[C] Water consumption is defined as fresh water withdrawn minus fresh water discharged. Where "fresh water" is not defined by local regulation, below 2,000 mg/l total dissolved solids is used. Fresh water generally includes water from public utilities, water wells, lakes, ponds, streams and rivers.
[D] Areas of high water stress are areas where the ratio of water demand and water availability is high or extremely high in the Aqueduct Water Risk Atlas tool of the World Resources Institute. We assess four material facilities as located in areas of high water stress: Pearl GTL in Qatar; the Shell Import Facility at Tabangao in the Philippines; and the Shell Energy and Chemicals Park Singapore, which comprises integrated refining and chemical assets on Pulau Bukom and Jurong Island. Figures include reporting by a small number of assets in water-stressed areas which make an immaterial contribution to total water consumption in water-stressed areas.
[E] Water recycled and reused is the volume of fresh water used in more than one process or more than once before final treatment and/or discharge to the environment. It does not include water used in re-circulating cooling towers, nor non-fresh water used, such as sea water or brackish surface water and groundwater.
[F] Water stored means water continuously collected in containment structures. This is typically the last stage of processing where the water is managed by passive evaporation. The water may include treated or untreated associated water or rainwater.

Biodiversity and ecosystems (E4)

Our activities can affect natural habitats and the communities that depend on them. We seek to have a positive impact on biodiversity.

Our double materiality assessment has identified biodiversity loss, sensitive areas and species, and ecosystem services as material topics. See "Material impacts, risks and opportunities and their interaction with strategy and business model (SBM-3)" on page 351 and "Description of the process to identify and assess material impacts, risks and opportunities (IRO-1)" on page 354 for more information.

Why it matters

We recognise the urgency to protect and enhance biodiversity and ecosystem services. The links between nature and climate are recognised in the UN Kunming–Montreal Global Biodiversity Framework of 2022 and successive meetings of the Conference of the Parties under the UN Framework Convention on Climate Change. We also acknowledge the important links between biodiversity and communities.

Our business activities have the potential to contribute directly or indirectly to drivers of biodiversity loss such as climate change, pollution, land use change, fresh-water use change and sea use change. They also have the potential to impact critical habitats and other biodiversity sensitive areas, and to contribute to changes from natural to modified habitats, which can affect the quality or availability of ecosystem services used by local communities. We seek to minimise our impact on nature through operating standards that address biodiversity and other aspects of environmental performance.

Our business activities depend on ecosystem services such as provision of fresh water and natural resources, and benefits obtained from the natural processes and functioning of ecosystems, such as climate and flood regulation and erosion control.

We are still at an early stage of understanding how these issues may affect our business in the future, including with respect to our value chain. This section explains how Shell manages impacts on biodiversity and ecosystems, critical habitats and deforestation. See "Climate change (E1)" on page 364, "Pollution (E2)" on page 391, "Water and marine resources (E3)" on page 395 and "Resource use and circular economy (E5)" on page 404 for information about our approach to other environmental topics relevant to biodiversity.

Transition plan and consideration of biodiversity and ecosystems in strategy and business model (E4-1)

Shell businesses operate within land and marine ecosystems. For example, we need access to land for onshore operations such as oil and gas production, refineries, chemical plants, pipelines, retail facilities, and electricity generation and storage. We need access to marine areas for oil and gas production, pipelines, carbon capture and storage, wind power generation, marine terminals and shipping. Our operations also use natural resources such as fresh water.

Our ability to develop new projects and opportunities depends in part on our ability to meet the expectations of regulators, communities and other stakeholders for managing our impact on biodiversity.

Our dependencies on nature will change as we progress in the energy transition. For example, our biofuel activities depend on access to land and availability of natural resources such as soil and water and the regulating ecosystem services they provide. Our nature-based solution activities depend on access to land as well as the supporting ecosystem services needed to capture CO_2 and enhance biodiversity.

We manage biodiversity in our operations through our operating standards and environmental management systems. We also work with peers through organisations like Ipieca, the global oil and gas industry association for advancing environmental and social performance across the energy transition, to deepen our understanding of the industry's impacts on biodiversity and to develop best practices.

Considering the integrated approach of our strategy, and how our approach to identifying and managing biodiversity impacts is embedded within it, we have not yet carried out a comprehensive assessment of the resilience of our strategy and business model specifically in relation to biodiversity and ecosystems as set out under the ESRS. We aim to undertake further work to deepen our understanding. See "Respecting nature" on page 109-113 for further information.

Material impacts, risks and opportunities and their interaction with strategy and business model (ESRS 2 SBM-3)

We provide a consolidated list of sites in biodiversity sensitive areas in the table "Sites impacting biodiversity sensitive areas" on pages 398-400.This table is prepared by undertaking geospatial analysis of the overlap between Shell's operated asset footprint and mapped biodiversity sensitive areas (BSAs). To identify these areas, we use the World Database of Protected Areas (WDPA), maintained by the UN Environment Programme World Conservation Monitoring Centre (UNEP-WCMC), and the World Database of Key Biodiversity Areas (WDKBA), maintained by BirdLife International.

The BSAs used or applied in the assessment include UNESCO World Heritage Sites, the Natura 2000 network of protected areas, key biodiversity areas and other protected areas. The latter encompass Ramsar Wetlands of International Importance, UNESCO Man and the Biosphere Reserves, areas designated under regional agreements such as OSPAR and Emerald Network, as well as nationally designated areas reported as International Union for Conservation of Nature (IUCN) Management Category I–IV in the UNEP-WCMC WDPA.

Certain areas have multiple BSA designations with defined conservation objectives that may target different species or habitats. We analyse all applicable designations and their associated geographic areas and list them in the table accordingly.

Owing to the large number of operated assets that potentially impact biodiversity sensitive areas, uncertainties in interpreting ESRS requirements, and various data limitations, we apply judgement in consolidating sites by country and provide an indication of the business activities impacting the areas listed in the table.

Our assessment includes Shell sites under operational control, excluding our retail network and real estate locations, which generally have less potential for negative impact on BSAs due to their size, the nature of their activity and because they are often located in urban and developed areas.

Our analysis is based on global datasets and may exclude other nationally designated sites that have not been submitted to the WDPA or WDKBA. Due to the setup of this analysis, it does not yield data on all site-specific impacts and dependencies on, or the ecological status of, all BSAs. We aim to undertake further work on site-level impacts and dependencies and approaches to defining ecological status with reference to specific ecosystem baseline levels.

We assess land use change as a material impact. On a stand-alone basis, we do not assess land degradation, desertification or soil sealing as material impacts at a Group level. Some of our operations take place in locations where they may affect threatened species.

See "Supplementary data for pollution, water, biodiversity and waste, including estimates for non-operated assets" on page 437 for estimated information about joint operations not under operational control impacting biodiversity sensitive areas.

Sites impacting biodiversity sensitive areas (operational control) [A] [B]

Country	Activity [C]	World Heritage Sites	Key biodiversity areas	Natura 2000 [D]	Other protected areas [E]
Australia	▫ LNG production ▫ Pipelines ▫ Gas-fired power	▫ Great Barrier Reef, World Heritage Site (natural or mixed) [F]	▫ Northern Swan Coastal Plain		
Canada	▫ Terminals ▫ Aviation fuel		▫ English Bay and Burrard Inlet ▫ Comox Valley ▫ Fraser River Estuary		
Italy	▫ Lubricants				▫ Valle del Ticino, UNESCO-MAB Biosphere Reserve
Malaysia	▫ Terminal		▫ North-central Selangor coast		
Netherlands	▫ Hydrocarbon exploration and production ▫ Pipelines ▫ Renewables ▫ Refinery ▫ Chemical plant	▫ Wadden Sea, World Heritage Site (natural or mixed) [G]	▫ Hollandse Kust; Bargerveen ▫ Fochteloërveen ▫ Drentsche Aa-gebied ▫ Reestdal ▫ Slagharen - de Krim; De Wieden ▫ Oldambt; Zuidoost-Achterhoek ▫ Westerwolde ▫ Lauwersmeer; Noordzeekustzone ▫ Polder Zeevang ▫ Kagerplassen e.o. ▫ Meijendel & Berkheide ▫ Zoetwatergetijderivieren, Midden Delfland & Oude Leede ▫ Krimpenerwaard; Panningen – Roggel ▫ Hollandse Kust ▫ Voordelta ▫ Zuidlaardermeergebied, Hund- und Paapsand ▫ Waddenzee ▫ Duinen Ameland ▫ Duinen Terschelling ▫ Noordzeekustzone ▫ Friese Front ▫ Hollands Diep	▫ Noordhollands Duinreservaat, SAC ▫ De Wieden, SPA ▫ Bargerveen, SPA ▫ Fochteloërveen, SPA ▫ Drentsche Aa-gebied, SAC ▫ Springendal & Dal van de Mosbeek, SAC ▫ Achter de Voort, Agelerbroek & Voltherbroek, SAC ▫ Elperstroomgebied, SAC ▫ Landgoederen Oldenzaal, SAC ▫ Vecht- en Beneden-Reggegebied, SAC ▫ Lauwersmeer, SPA ▫ Noordzeekustzone, SPA ▫ Duinen Den Helder - Callantsoog, SAC ▫ Polder Zeevang, SPA ▫ Voordelta, SPA ▫ Meijendel & Berkheide, SAC ▫ Westduinpark & Wapendal, SAC ▫ Solleveld & Kapittelduinen, SAC ▫ Zuidlaardermeergebied, SPA	▫ Noordhollands Duinreservaat, NCA ▫ De Wieden, Ramsar Site ▫ Bargerveen, Ramsar Site ▫ Vecht- en Beneden-Reggegebied, NCA ▫ Drentsche Aa-gebied, NCA ▫ Achter de Voort, Agelerbroek & Voltherbroek, NCA ▫ Elperstroomgebied, NCA ▫ Springendal & Dal van de Mosbeek, NCA ▫ Nationaal beek- en esdorpenlandschap Drentsche Aa, National Park ▫ Weerribben-Wieden, National Park ▫ Landgoederen Oldenzaal, NCA ▫ Fochteloërveen, NCA ▫ Lauwersmeer, Ramsar Site ▫ Waddensea Area, UNESCO-MAB Biosphere Reserve ▫ North Sea Coastal Area, Ramsar Site ▫ Noordzeekustzone, OSPAR MPA ▫ Duinen Den Helder-Callantsoog, NCA ▫ Oostelijke Vechtplassen, Ramsar Site ▫ Voordelta, Ramsar Site ▫ Meijendel & Berkheide, NCA ▫ Polder Zeevang, NCA

Country	Activity [C]	World Heritage Sites	Key biodiversity areas	Natura 2000 [D]	Other protected areas [E]
Netherlands, continued				◦ Waddenzee, SPA ◦ Hund und Paapsand, SPA ◦ Friese Front, SPA ◦ Duinen Terschelling, SPA ◦ Duinen Ameland, SPA; Doggersbank, SAC; Hollands Diep, SPA	◦ Westduinpark & Wapendal, NCA ◦ Solleveld & Kapittelduinen, NCA ◦ Wadden Sea, Ramsar Site ◦ Zuidlaardermeergebied, Ramsar Site
Nigeria	◦ Hydrocarbon production ◦ Pipelines		◦ Upper Orashi forests, Biseni forests		◦ Upper Orashi Forests, Ramsar Site ◦ Apoi Creek Forests, Ramsar Site
South Africa	◦ Terminals		◦ Gouritz Cluster - Mossel Bay		
Thailand	◦ Terminals ◦ Lubricants		◦ Lower Central Basin		
Trinidad and Tobago	◦ LNG production ◦ Pipelines		◦ Victoria-Mayaro Forest Reserve		◦ Victoria Mayo Reserve, Nature Reserve
Turkey	◦ Terminals		◦ Tahtali Daglari		
United Kingdom	◦ Hydrocarbon exploration and production ◦ Pipelines		◦ South Pennine and Peak District Moors ◦ North Yorkshire Moors ◦ Ythan Estuary, Sands of Forvie and Meikle Loch ◦ Bowland Fells ◦ North Pennine Moors	◦ Solent and Dorset Coast, SPA	◦ North-east Faroe-Shetland Channel, OSPAR MPA ◦ Faroe-Shetland Sponge Belt, OSPAR MPA ◦ East of Gannet & Montrose Fields, OSPAR MPA ◦ West Shetland Shelf, OSPAR MPA ◦ Liverpool Bay / Bae Lerpwl, OSPAR MPA ◦ Wight-Barfleur Reef, OSPAR MPA ◦ Dogger Bank, OSPAR MPA ◦ North Norfolk Sandbanks and Saturn Reef, OSPAR MPA ◦ Fulmar, OSPAR MPA ◦ Norwegian Boundary Sediment Plain, OSPAR MPA ◦ Southern North Sea, OSPAR MPA ◦ South Pennine Moors, Emerald Network ◦ Flamborough and Filey Coast, Emerald Network ◦ Peak District Moors (South Pennine Moors Phase 1), Emerald Network ◦ Solent and Dorset Coast, Emerald Network ◦ Bentley Wood, SSSI ◦ Dark Peak, SSSI ◦ Haisborough, Hammond and Winterton, OSPAR MPA ◦ Cromer Shoal Chalk Beds, OSPAR MPA ◦ Greater Wash, OSPAR MPA ◦ Mundesley Cliffs, SSSI ◦ Ythan Estuary & Meikle Loch, Ramsar Site ◦ Red Moss of Netherley, Nature Reserve ◦ River Dee, Emerald Network

Country	Activity [C]	World Heritage Sites	Key biodiversity areas	Natura 2000 [D]	Other protected areas [E]
United Kingdom, continued					◦ River South Esk, Emerald Network ◦ Ythan Estuary, Sands of Forvie and Meikle Loch, Emerald Network ◦ River Tay, Emerald Network ◦ Forvie, National Nature Reserve ◦ Meikle Loch and Kippet Hills, SSSI ◦ Sands of Forvie and Ythan Estuary, SSSI ◦ Morecambe Bay Pavements, Emerald Network ◦ Asby Complex, Emerald Network ◦ River Eden, Emerald Network ◦ Ribble Estuary, Marine Conservation Zone ◦ Mersey Estuary, SSSI ◦ Lazonby Fell, SSSI ◦ Farleton Knott, SSSI ◦ Crosby Ravensworth Fell, SSSI ◦ River Eden and Tributaries, SSSI ◦ Oxmoor Wood, Local Nature Reserve ◦ Carstairs Kames, SSSI ◦ River Clyde Meanders, SSSI
USA	◦ Pipelines ▫ Terminals		◦ Active Delta (Mississippi River Birdsfoot Delta) ◦ Atchafalaya Delta; Chenier Plain ◦ Coastal Prairie ◦ Barataria Terrebonne ▫ Byron Area ◦ Isles Dernieres - Timbalier Islands ◦ Lake Martin		◦ Golden Gate UNESCO-MAB Biosphere Reserve ◦ Southern Appalachian UNESCO-MAB Biosphere Reserve ◦ Delta National Wildlife Refuge, Marine Protected Area ◦ Bayou Teche, National Wildlife Refuge

[A] Includes sites located within designated biodiversity sensitive areas. It is not yet possible to provide consolidated information on sites "near" biodiversity sensitive areas due to incomplete availability of information at a Group level about whether and how our activities may affect such areas. We aim to undertake further work to enhance our understanding.
[B] WDPA: UNEP-WCMC and IUCN (2025), Protected Planet: The World Database on Protected Areas (WDPA), January 2025, Cambridge, UK. Available at: ibat-alliance.org (accessed 22/01/2025). KBAs: BirdLife International (September 2024). World Database of Key Biodiversity Areas. Available at ibat-alliance.org (accessed 12/10/2024).
[C] Shell business activity affecting biodiversity sensitive area.
[D] Natura 2000 includes Special Areas of Conservation (SAC) (EU Habitats Directive) and Special Protection Areas (SPA) (EU Birds Directive).
[E] NCA: Nature Conservation Act (Netherlands). OSPAR MPA: Oslo–Paris Convention for the Protection of the Marine Environment of the North-East Atlantic, Marine Protected Area. SSSI: Site of Special Scientific Interest. Emerald Network: includes Areas of Special Conservation Interest established under the Bern Convention aimed at Conservation of European Wildlife and Natural Habitats.
[F] QGC's LNG Plant on Curtis Island is present within the Great Barrier Reef World Heritage Site (declared in 1981). Construction was undertaken by BG Group in 2010, and the plant was operational at the time of Shell's acquisition in 2016. Approval for the development of the plant was granted by the Australian Government and the operations are regulated by both the state and federal governments.
[G] The Wadden Sea World Heritage Site was inscribed in 2009. Shell undertook exploration activities in the area during the 1960s, and since 2007, natural gas has been produced from under the Wadden Sea World Heritage Site. Production takes place from the land outside the boundary of the designated World Heritage Site and is regulated by the Dutch government.

Policies related to biodiversity and ecosystems (E4-2)

Our approach to biodiversity and ecosystems is governed by our Safety, Environment and Asset Management (SEAM) Standards.

These contain standards related to avoiding adverse impacts on biodiversity and ecosystems, applying the mitigation hierarchy, achieving net positive impact on biodiversity in critical habitats and net-zero deforestation. Our standards apply to land and marine environments, unless otherwise stated. See "SEAM Standards" on page 130 for more information.

The standards described in this section apply to Shell companies and joint ventures in which Shell is the operator, except where otherwise stated. We expect non-operated joint ventures to adopt appropriate and acceptable policies to manage their risks.

World Heritage Sites

Shell does not explore for or develop oil and gas resources in natural or mixed World Heritage Sites. We do not enter into joint ventures unless they comply with this requirement.

Biodiversity and ecosystem management

Our standards require our assets, projects and businesses to avoid negative impacts on biodiversity and ecosystem services, and where avoidance is not achievable, to mitigate negative impacts following the mitigation hierarchy. The mitigation hierarchy is a sequence of actions to anticipate and avoid impacts on biodiversity and ecosystem services. It prioritises avoidance, and, where this is not possible, minimisation of impacts, followed by rehabilitation and restoration, and where significant residual impacts remain, the use of offsets.

Critical habitats
When undertaking a project in a critical habitat, we aim to go beyond compensating for a residual adverse impact to deliver an overall conservation gain or net positive impact to biodiversity.

Critical habitats are specific areas of high biodiversity value in which receptors are particularly sensitive to development. We apply the same definition of critical habitats as the International Finance Corporation.

Our standards require all projects located in a critical habitat to develop and implement a biodiversity action plan that sets out the actions needed to follow the mitigation hierarchy and the actions designed to achieve a net positive impact. Such plans are required to include clear objectives, milestones and indicators to monitor progress.

Net positive impact on biodiversity in the context of projects is an outcome in which the impacts on biodiversity caused by the project are outweighed by the actions taken to avoid and reduce such impacts, rehabilitate affected species and/or landscapes and offset any residual impacts.

Deforestation and reforestation
Deforestation occurs when forests are converted to non-forest uses. Our aim is to avoid deforestation in line with the mitigation hierarchy as referenced above. Where avoidance cannot be achieved, we seek to implement reforestation plans that include measures to achieve net-zero deforestation while maintaining biodiversity and conservation value. This standard addresses our commitment to net-zero deforestation which commenced in 2022.

Our standards require our assets, projects and businesses to avoid deforestation, and where avoidance is not achievable, to implement a reforestation plan. Reforestation of at least the same area of an equivalent forest is required to ensure that biodiversity and conservation values are restored. This requirement is intended to address our contribution to land use change.

In line with the definition of forest used by the Food and Agriculture Organization of the United Nations, our commitment to net-zero deforestation as embedded in our standards applies to land spanning more than 0.5 hectares with trees higher than five metres and a canopy cover of more than 10%, or trees able to reach these thresholds in situ. It does not include land that is predominantly under agricultural or urban land use.

Biodiversity management in nature-based solutions
Shell buys high-quality carbon credits generated by projects that protect nature and restore the environment. We also invest directly in projects to increase the supply of carbon credits and help meet demand from customers.

Our standards require Shell-funded nature-based projects or activities that protect, enhance or restore natural ecosystems to generate carbon credits to achieve accreditation from a standard or regulation that delivers net positive impact on biodiversity. Net positive impact in this context means that a project's net impacts on biodiversity in the project zone are positive, compared with the biodiversity conditions under the without-project land use scenario over the project lifetime. Our standards require such projects to meet the Climate, Community and Biodiversity Standards (CCB), an equivalent standard, or compliance with local legislation to deliver net positive impact on biodiversity.

Sourcing of biocomponents
Shell only sources renewable components or feedstocks for low-carbon fuels that meet our standards for human rights, animal care and welfare principles, and protection of areas with high-carbon stock or of high biodiversity value, as set out in our policy on sourcing of biocomponents. See "Sourcing of biocomponents" on page 405 for more information.

How our policies contribute to biodiversity
Our environmental, social and safety standards are designed to work together to reduce negative impacts on nature, ecosystems and people. Some of our standards, such as those related to pollution, directly address drivers of biodiversity loss and the state of species and ecosystems. Others operate indirectly by targeting aspects of our activities which may contribute to those drivers, such as land use change or ecosystem services. Because our standards are designed to work in an integrated manner to achieve outcomes that are appropriate for the local environment, they do not necessarily specify all the potential impact drivers.

Other policies
See "Impact assessment" on page 355 for information about our approach to impact assessment.

Key environmental and social policies or standards contributing directly or indirectly to addressing impacts to biodiversity and ecosystem services [A]

	Drivers of biodiversity loss											
Policy or standard	Climate change	Land use change, fresh-water use and sea-use change	Direct exploitation	Invasive alien species	Pollution	Impacts on state of species	Impacts on the extent and condition of ecosystems	Impacts on ecosystem services	Relates to material biodiversity and ecosystem-related impacts	Sustainable sourcing and traceability of products, components and raw materials	Social consequences of biodiversity and ecosystem-related impacts	Refer to page(s)
GHG and energy management	●					●	●	●	●			369
Impact assessment	●	●	●		●	●	●	●	●		●	355
Air quality					●	●	●	●	●			391
Soil and groundwater					●	●	●	●	●			391
Emergency response					●	●	●	●			●	429
Water and the environment			●		●	●	●	●	●		●	391, 395
World Heritage Sites		●				●	●	●	●		●	400
Biodiversity management		●				●	●	●	●		●	400
Critical habitats		●				●	●	●	●		●	400
Reforestation	●	●				●	●	●	●		●	401
Nature-based solutions			●			●	●	●			●	400
Sourcing of biocomponents	●	●	●			●	●	●	●	●	●	405
Social impact management		●	●					●	●		●	420
Indigenous Peoples		●	●					●	●		●	420
Other				[B]								–

[A] We aim to undertake further work on material dependencies and material physical and transition risks and opportunities.
[B] We aim to undertake further work to understand the risks posed by invasive alien species and how we manage pathways of introduction.

Other disclosures on policies

Shell's standards on biodiversity cover World Heritage Sites, biodiversity and ecosystem management, critical habitats, deforestation and reforestation, biodiversity in nature-based solutions projects and sourcing of biocomponents. We have not adopted overarching biodiversity and ecosystem protection standards covering operational sites owned, leased or managed in or near a biodiversity sensitive area, though our standards on World Heritage Sites, biodiversity and ecosystem management, and critical habitats address relevant aspects.

Shell has not adopted specific standards on sustainable land and agriculture. Our exposure to these issues arises in the context of sourcing of feedstocks for biofuels. Our sourcing of biocomponents policy includes specific consideration of sustainable land use by ensuring we do not source renewable components or feedstocks that have been associated with the clearing of areas with high carbon stock or high biodiversity value. See "Sourcing of biocomponents" on page 405 for more information.

Our approach to sustainable oceans and seas is covered by our environmental, social and safety standards, which apply to land and marine environments. See "Deforestation and reforestation" on page 401 for information about our standards on deforestation.

Actions and resources related to biodiversity and ecosystems (E4-3)

Our actions in 2024 focused on implementing our refreshed standards on biodiversity and ecosystems, with activities located in critical habitats and forest habitats as key priorities.

The scope of the actions described in this section covers Shell companies and joint ventures in which Shell is the operator, unless otherwise stated. Many of our actions are of an ongoing nature. Horizons for the completion of time-bound actions are indicated where applicable.

Our actions are intended to help us achieve the desired outcome of our policies and standards by providing resources and expertise that support our businesses to implement them in fit-for-purpose ways.

Critical habitats

We seek to avoid impacts on critical habitats. Where avoidance is not possible, we aim to mitigate and compensate for our impact based on the mitigation hierarchy.

Our standards require new projects located in critical habitats to develop a biodiversity action plan. This sets out the actions needed to follow the mitigation hierarchy and to achieve a net positive impact on biodiversity.

Projects in critical habitats with biodiversity action plans (operational control) [A] [B]

	number
	2024
Projects in critical habitats	62
Projects in critical habitats with an approved biodiversity action plan and net positive impact programme in place [C]	61

[A] Data on projects in critical habitats are not directly comparable with the table "Sites impacting biodiversity sensitive areas" on pages 398-400. This is primarily due to differences in the definition of a "site" and "project" for reporting purposes. The definition used for biodiversity sensitive area includes only designated protected areas included in the World Database on Protected Areas (WDPA) and the World Database of Key Biodiversity Areas (WDKBA). Not all critical habitats are gazetted protected areas and therefore may not be mapped in these global biodiversity datasets. It is possible for multiple critical habitats or biodiversity sensitive areas to overlap with an individual site. If a project is located in a critical habitat but not within a designated biodiversity sensitive area, it will not be included in the "Sites impacting biodiversity sensitive areas" table. Similarly, not all biodiversity sensitive areas meet the definition of critical habitat and therefore a site located in such an area is not required under our standards to prepare a biodiversity action plan.

[B] Includes Shell-operated projects in critical habitats for which the final investment decision was taken after February 11, 2021. Projects that subsequently become assets are included.

[C] A biodiversity action plan sets out actions to mitigate impacts and to conserve or enhance biodiversity. It identifies priority receptors and details of appropriate management actions, including an implementation plan to progress and deliver net positive impact.

Examples of activities in development or under way in 2024 include:

- in partnership with a local university, we are executing an ecological restoration programme on Browse Island, Australia, to help eradicate invasive alien species, improve reef health and promote the return of breeding seabirds to enhance regional resilience;
- on Príncipe Island, São Tomé and Príncipe, we helped implement a turtle conservation programme in partnership with a local conservation organisation; and
- in partnership with the Marine Alliance for Science and Technology for Scotland (MASTS), and its member institutions, including Scottish government stakeholders, we helped to set up a multi-year research programme to gain insights into the ecology of skates and sharks in Scottish waters to help develop effective conservation strategies.

Also in 2024, we continued to work with industry partners like Ipieca and the International Association of Oil & Gas Producers and through partnerships with the International Union for Conservation of Nature (IUCN) and Proteus Partners to share best practice on approaches to no net loss, net gain, net positive impact to biodiversity and how business can contribute in the future to global nature positive goals.

Reforestation

Deforestation occurs when forests are converted to non-forest uses. We work with partners and stakeholders to develop plans tailored to each reforestation project.

There is typically a time lag between the deforestation of an area and the start of the replanting process, which can range from months to years. As a result, there is often a difference in the number of hectares deforested and the number of hectares replanted within a single reporting period.

In 2024, around 214 hectares were deforested as a result of our activities. This occurred in Australia, Canada and Nigeria, where we are preparing for or implementing reforestation programmes in line with local plans.

We reforested 54 hectares in 2024 in British Columbia, Canada, working in close partnership with the Doig River First Nation to reforest land that had been previously cleared by others in the 1950s. In addition, we also partnered with Swan River First Nation in Alberta to reforest 10 hectares of previously cleared agricultural land.

Biodiversity offsets

Our efforts to achieve net positive impact in critical habitats and net-zero deforestation may require the use of biodiversity offsets. Where relevant, our biodiversity action plans and reforestation plans include biodiversity offsets. Such plans include a description of the offsets and their aims, including area and offset type, standards applied, where required, and criteria and indicators used to monitor delivery. As our standards require application of the mitigation hierarchy with respect to biodiversity impacts at asset, business or project level, local information on biodiversity offsets may exist but is not collated at Group level. We aim to undertake further work to enhance our disclosures on our use of biodiversity offsets.

Collaborating with others

We contribute to programmes that develop best practices and contribute to deepening scientific understanding of biodiversity and ecosystems.

We have a long history of working alongside global environmental partners. For example, as part of the IUCN Renewable Energy and Nature programme Phase 2, we work with the IUCN, industry and non-governmental organisations to develop guidance for cumulative impact assessment, spatial planning, responsible sourcing and biodiversity enhancements in renewable projects.

Shell is one of the industry partners supporting INSITE, an independent science programme examining the effects of man-made structures on the ecology of the North Sea. We also contribute to the Offshore Renewables Joint Industry Programme, a research programme aimed at improving understanding of the effects of offshore wind and other energy projects on the marine environment.

When undertaking impact assessments or developing biodiversity action plans or reforestation plans, we consult with stakeholders to incorporate local and indigenous knowledge and work in partnerships to implement these plans.

Sourcing of biocomponents

See "Renewable and waste-based biofuel feedstocks" on page 406 for information about actions related to biocomponents.

Resourcing our actions

The Executive Vice President for Safety, Environment and Asset Management is the most senior executive in Shell with accountability for the development, governance and oversight of the SEAM Standards. Leaders of assets, performance units, businesses or functions are accountable for assessing which SEAM Standards are relevant based on their objectives, risk profile and activities, and for implementing those standards as appropriate.

Implementation of the SEAM Standards relevant to biodiversity is supported by members of Shell's Safety, Environment and Asset Management function, which includes subject matter experts in impact assessment and biodiversity. The requirements of our standards are communicated to people involved with implementation through various mechanisms, including internal communication channels, management systems and training, as appropriate.

Planned actions

In 2025, we will continue to:

- manage biodiversity and ecosystems in line with our own standards and those of local regulators;
- develop and implement our biodiversity action plans and reforestation plans;
- enhance our processes for analysing biodiversity data; and
- work with external stakeholders and industry peers on biodiversity issues.

Our action plans are responsive to changing business conditions. Planned actions not directly related to compliance with regulations or our own standards are subject to change. The actions given above represent key focus areas rather than an exhaustive list.

Targets related to biodiversity and ecosystems (E4-4)

Our business activities and the ecosystems in which they are located are diverse. As a result, the nature of our impacts on biodiversity varies from location to location. We believe that local goals drive more appropriate outcomes than globally aggregated targets, which may or may not be applicable to every situation. For this reason, we have not set consolidated targets on biodiversity at a Group level. Instead, our site-specific biodiversity action plans and reforestation plans set priorities at a local level for specific objectives, such as net positive impact or net-zero deforestation. Such plans may specify a base year from which progress is measured.

We measure the effectiveness of our policies and standards by monitoring the implementation of our biodiversity requirements. We track progress on implementing biodiversity action plans and reforestation plans at regular intervals. These efforts are supported by specialist teams that monitor internal and external trends and provide technical advice to our operating assets.

Impact metrics related to biodiversity and ecosystems change (E4-5)

Due to the diversity of our operations, the ecosystems in which they are located and different ways in which our activities may impact biodiversity, our monitoring and measurement have a strong local focus. We continue to monitor the development of external frameworks for corporate-level reporting on biodiversity and ecosystem services.

Our sites located in biodiversity sensitive areas are shown below.

Sites located in biodiversity sensitive areas (operational control) [A] [B] [C] [D]

	unit	2024
Number of sites	number	47
Total area	hectares	4,804

[A] A site is a defined geographical area in which Shell business operations take place. A site may consist of one or more facilities or one or more geological fields with associated production and utility facilities. A site generally corresponds to the business accountability of an operations manager or production unit manager.
[B] Biodiversity sensitive areas include UNESCO World Heritage Sites, the Natura 2000 network of protected areas, key biodiversity areas and other protected areas including Ramsar Wetlands of International Importance, UNESCO Man–Biosphere Reserves, areas designated under regional agreements, as well as nationally designated areas reported as IUCN Management Category I-IV.
[C] Includes sites located within designated biodiversity sensitive areas. It is not yet possible to provide consolidated information on sites "near" biodiversity sensitive areas due to incomplete availability of information at a Group level about whether and how our activities may affect such areas. We aim to undertake further work to enhance our understanding.
[D] If a project is located in a critical habitat but not within a designated biodiversity sensitive area, it is not included in this table or in the table "Sites impacting biodiversity sensitive areas". See Footnote [A] to the table "Projects in critical habitats with biodiversity action plans" on page 403 for information.

Deforestation is one of the causes of land use change. We monitor progress on reforestation for sites under Shell's operational control, consistent with our commitment to net-zero deforestation. Our progress on reforestation for sites under Shell's operational control is shown below.

Deforestation and reforestation (operational control) [A]

	hectares
	2024
Total area deforested [B]	214
Total area replanted [C]	64

[A] Includes total area deforested and reforested by Shell-operated projects and activities within the reporting period.
[B] The scope is limited to forests as defined by the Food and Agriculture Organization of the United Nations.
[C] Replanting hectares are counted as soon as seedlings are planted in the ground.

There is typically a time lag between the deforestation of an area and the start of the replanting process, which can range from months to years. As a result, there is often a difference in the number of hectares deforested and the number of hectares replanted within a single reporting period. Since 2022, when our net-zero deforestation commitment commenced, we have deforested 506 hectares and reforested 65 hectares. All sites where deforestation has occurred have reforestation plans in place or under development. See "Deforestation and reforestation" on page 401 for more information.

We aim to continue to explore options to enhance our biodiversity metrics in the future.

Resource use and circular economy (E5)

As part of our respecting nature ambition, we seek to use resources efficiently and to increase reuse and recycling.

Our double materiality assessment has identified waste management as a material topic. See "Material impacts, risks and opportunities and their interaction with strategy and business mode (SBM-3)" on page 351 and "Description of the process to identify and assess material impacts, risks and opportunities (IRO-1)" on page 354 for more information.

Why it matters

Shell's business consumes resources and materials while producing energy and non-energy products for our customers. Our activities also generate waste, which must be managed appropriately to avoid harm to people or the environment. We are improving local practices by prioritising waste prevention, reuse and recycling over energy recovery and disposal.

Fossil fuels are based on a non-renewable natural resource which is combusted at the point of consumption. Such products are linear by nature. We are exploring options to reduce our use of resources, improve efficiency and recycling, and offer products that incorporate circular principles in those parts of our business where it is possible to do so.

Shell purchases biocomponents to produce biofuels, lubricants and chemicals, blend into fuels or to trade. Certain biofuel feedstocks have the potential for negative impacts in areas such as human rights, biodiversity or the release of carbon into the atmosphere. We adopt policies and procedures to prevent and mitigate these potential impacts.

Policies related to resource use and circular economy (E5-1)

Our approach to resource use and circularity is governed by our Safety, Environment and Asset Management (SEAM) Standards, except where otherwise stated. These contain standards for resource efficiency, waste management and circularity. They are designed to increase the use of secondary resources, sustainable sourcing and renewable resources. See "SEAM Standards" on page 130 for more information.

The standards described in this section apply to Shell companies and joint ventures in which Shell is the operator, except where otherwise stated. We expect non-operated joint ventures to adopt appropriate and acceptable policies to manage their risks.

Waste management

Our standards require assets, projects or businesses to identify waste-related impacts and to adopt waste management plans. Our objective is to make sure that collection, storage, transport and disposal of waste is carried out in accordance with applicable laws and Shell standards. Such plans document the legislative context, the quantities and types of waste generated, waste classification and management decision-making processes, and all aspects of waste handling from collection and storage to transport and final disposal. We apply a waste management hierarchy that aims to prevent or reduce waste at source as the most preferred option, followed by reuse, recycling, energy recovery and treatment and disposal.

When disposing of hazardous waste, our standards require the use of disposal sites that meet internationally recognised standards for waste management facilities, as verified by subject matter experts.

We seek to minimise the movement of hazardous waste across international borders. When such movement cannot be avoided, our standards require us to verify compliance with the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal.

Our waste management standards are applied throughout the project life cycle from construction and operation to decommissioning. When developing new assets, we undertake impact assessments to identify measures to avoid or minimise waste-related impacts. When decommissioning assets, we seek to maximise reuse, repurposing and recycling of materials.

Some Shell businesses have adopted waste management policies specific to their business. For example, our Renewables and Energy Solutions business has adopted a ban on the use of landfills for disposing of wind turbine blades. This policy applies to new projects undertaken after 2022 as well as to certain existing projects undertaken before 2022 for which decommissioning is expected within the next decade.

Circular economy

In 2024, Shell introduced a new requirement within the SEAM Standards for our assets, projects or businesses to develop strategies to identify circularity-related risks and opportunities. This requirement aims to encourage the development of fit-for-purpose objectives and strategies based on the principles of rethink, refuse, reduce, reuse, recycle and repair. The intent of this standard is to accelerate progress on our ambition to use resources and materials efficiently and to increase reuse and recycling.

Sourcing of biocomponents

Our approach to sourcing renewable components and feedstock is governed by our policy on sustainable sourcing of biocomponents. This policy applies to all feedstocks regardless of origin. Its aim is to ensure that we do not source renewable components or feedstocks that have been associated with a potential violation of human rights, animal care and welfare principles and/or clearing of areas with high carbon stock or of high biodiversity value.

The policy requires new feedstock type and country combinations to be subject to a risk assessment covering key environmental and social criteria, including human rights, prior to an agreement to procure. Identified risks are mitigated through measures such as certification by recognised sustainability standards (including chain of custody traceability and sustainable production elements) and the inclusion of mandatory contract clauses. The policy requires suppliers to demonstrate alignment with human rights and environmental requirements, which are incorporated in our contractual agreements.

This policy requires palm oil, Latin American soy, sugar-cane derivatives, and forestry products and residues to be certified through recognised voluntary schemes. It prohibits the use of any crude palm oil or palm oil derivatives as a feedstock for the production of low-carbon fuels in our operations.

The scope of this policy applies to components and feedstocks procured by Shell companies and joint ventures in which Shell is the operator. Non-operated joint ventures determine their own policies.

Other policies

See "Impact assessment" on page 355, "Greenhouse gas and energy management plan" on page 369 and "Water stewardship" on page 395 for information about other policies relevant to resource use and waste management.

Actions and resources related to resource use and circular economy (E5-2)

In 2024, we continued to make improvements in our approach to managing waste and circularity. We also continued to refine our approach to the sourcing of biocomponents.

The scope of the actions described in this section covers Shell companies and joint ventures in which Shell is the operator, unless otherwise stated. Many of our actions are of an ongoing nature. Horizons for the completion of time-bound actions are indicated where applicable.

Our actions are intended to help us achieve the desired outcome of our policies and standards by providing resources and expertise that support our businesses to implement them in fit-for-purpose ways.

Waste and circularity

We are working to reduce waste and increase circularity in those parts of our business where it is possible to do so. In 2024, we concluded our aim for zero waste is technically unfeasible. We continue to improve waste and circularity plans at the asset level to drive fit-for-purpose waste reduction and optimise local circular economies.

Since 2021, we have completed 26 detailed assessments across our businesses to better understand the types of waste we generate and identify options to increase circular approaches. Using the results of these assessments, our assets are improving local waste management practices by prioritising waste prevention, reuse and recycling over energy recovery and disposal.

For example, at our Pearl GTL gas-to-liquids facility in Qatar, we have diverted waste to local cement kilns for use as clinker in cement production, thereby reducing use of raw materials and the amount of waste sent to landfill. Our Gulf of America operations are finding ways to reduce the disposal of unused chemicals, for example by testing and treating them so that they can be returned to the supplier for reuse.

We are investigating options to reduce waste streams such as bio-sludge, potentially contaminated soils and drilling fluids and cuttings. For example, at the Nyhamna gas plant in Norway, we send bio-sludge to a local biogas facility, diverting it from landfill to generate electricity and for use as a soil fertiliser.

At our Brazos wind farm upgrade in Texas, we sent decommissioned turbine blades in 2024 to be recycled for use as a component in construction materials.

Our businesses and assets are developing strategies to improve circularity and to address risks and opportunities associated with our material flows. We developed four circularity strategies in 2024 which identified opportunities to increase the use of recycled materials in products and construction, eliminate single-use purchases, and design and select equipment that reduces waste generation.

To build common understanding and progress the circular economy in the energy sector, Shell participates in circularity-related working groups of industry or business associations such as Ipieca, the global oil and gas association for advancing environmental and social performance across the energy transition; the European Chemical Industry Council (Cefic); and the World Business Council for Sustainable Development (WBCSD). We are also members of CHWMEG and the Canadian Waste Receiver Assessment Program, which help to assess waste disposal and recycling facilities on behalf of their members.

Renewable and waste-based biofuel feedstocks

Shell aims to be a significant and profitable supplier of low-carbon fuels to help decarbonise harder-to-abate sectors including aviation, marine and commercial road transport.

We supply and trade low-carbon fuels such as biodiesel, bioethanol, renewable natural gas (also known as biogas or biomethane), renewable diesel (also known as hydrotreated vegetable oil or HVO) and sustainable aviation fuel (SAF) to help lower the carbon emissions from transport. These fuels can be blended with existing fuels – such as diesel, petrol and aviation fuel – or used neat, and do not require costly investment in new infrastructure, which means they are a practical option for reducing transport emissions.

Shell and the non-operated joint venture Raízen (Shell interest 44%) are, together, one of the world's largest blenders and distributors of biofuels. Biofuels, along with natural gas, will play a key role in reducing emissions from heavy-duty transport.

In 2024, around 10.37 billion litres of biofuels (2023: 9.7 billion litres) were blended into Shell's sale of fuels worldwide, which includes the Shell share of sales made by Raízen. Raízen produced, on a 100% basis, around 3.16 billion litres of ethanol in 2024 (2023: 3.12 billion litres).

To support our biofuel production capacity, we are developing multiple sourcing strategies for feedstocks. This includes purchases of feedstocks from third parties as well as equity production.

In line with our biocomponents sourcing policy, the palm oil derivatives and waste, sugar cane and South American soy feedstock we purchase are certified under sustainability standards like the Roundtable on Sustainable Palm Oil, the International Sustainability and Carbon Certification, Bonsucro and the Round Table on Responsible Soy Association. We have also committed not to use crude palm oil or palm oil derivatives as a feedstock in Shell-operated assets producing biofuels or biogas.

Renewable natural gas (RNG), also known as biogas or biomethane, is gas derived from processing organic waste in a controlled environment until it is fully interchangeable with conventional natural gas.

We are using local agricultural waste to grow Shell's RNG portfolio. Our acquisition of Nature Energy in 2023 supports our ambition to build a large-scale integrated RNG value chain to grow our low-carbon offerings across sectors. Nature Energy is one of the largest producers of RNG in Europe, and its main supply chains involve locally sourced agricultural waste.

In the USA, we have two dairy manure-to-RNG facilities in operation, with a third under construction that is expected to become operational in 2025.

In July 2024, we announced that we had paused on-site construction work at the biofuels facility at the Shell Energy and Chemicals Park Rotterdam in the Netherlands to assess the most commercial way forward for the project.

See "Biofuels" on page 58 for more information.

Plastics

Shell supports the need for improved circularity in the global plastics market. We encourage reduction, reuse and recycling of plastics and we are also a founding member of the Alliance to End Plastic Waste, which helps governments to assess and improve waste collection and waste management.

We are working with partners across the plastic waste value chain, such as the waste management industry and pyrolysis oil producers, to encourage the development of a more circular value chain.

Since 2019, Shell has been processing pyrolysis oil made from mixed plastic waste at the Shell Norco Energy and Chemicals Park in the USA. In 2024, we began production at our new pyrolysis oil upgrader at the Shell Chemicals Park Moerdijk in the Netherlands. The upgrader improves the quality of pyrolysis oil, a liquid made from hard-to-recycle plastic waste, and turns it into chemical feedstock. The plant has the capacity to process up to 50,000 tonnes of pyrolysis oil per year.

Packaging

We continue to work towards our priority to increase recycled plastic in our packaging and ensure the packaging we use for our products is reusable or recyclable by design.

In our Global Lubricants business, we continued to work with packaging suppliers to increase recycled plastic in our lubricant packaging. We are also using rewashed or rebottled bulk containers and reconditioned steel drums in select markets. And we collaborate with partners to produce and use fully recycled steel drums in Germany.

In our Mobility business, we continue to work with our suppliers for Shell-branded car care, food and drink products globally to increase packaging sustainability, which includes incorporating packaging sustainability elements in some tenders.

Resourcing our actions

The Executive Vice President for Safety, Environment and Asset Management is the most senior executive in Shell with accountability for the development, governance and oversight of the SEAM Standards. Leaders of assets, performance units, businesses or functions are accountable for assessing which SEAM Standards are relevant, based on their objectives, risk profile and activities, and for implementing those standards as appropriate.

Implementation of SEAM Standards relevant to circularity and waste is supported by members of Shell's Safety, Environment and Asset Management function, which includes subject matter experts in impact assessment and waste management.

The Vice President for Sustainability is the most senior executive in Shell with accountability for the development, governance and oversight of Shell's policy on sourcing of biocomponents, with support from a cross-business Renewable Components and Feedstock Sustainability Committee (RCFS). Leaders of business units that source biocomponents are responsible for compliance with the policy through their procurement focal points, with support from the Low Carbon Solutions sustainability team.

The requirements of our standards and policies are communicated to people involved with implementation through various mechanisms, including internal communication channels, management systems and training, as appropriate.

Planned actions

In 2025, we will continue to:

- manage waste in line with our own standards and those of local regulators;
- support the implementation of our standards on circular economy;
- manage sourcing of biocomponents in line with our policy; and
- explore opportunities for reused or recycled feedstocks for the manufacture of chemicals and plastics.

Our action plans are responsive to changing business conditions. Planned actions not directly related to compliance with regulations or our own standards are subject to change. The actions listed above represent key focus areas rather than an exhaustive list.

Targets related to resource use and circular economy (E5-3)

Shell has set a priority to increase the amount of recycled plastic in Shell-branded packaging to 30% by 2030 and to ensure that the packaging we use for our products is reusable or recyclable by design. Shell's priority meets the ESRS definition of a target.

The scope of this priority includes Shell-branded primary packaging for our lubricants and non-fuel mobility products such as car care and food and drink. It excludes secondary and tertiary packaging; Shell-branded packaging of products manufactured, purchased and used by third parties; and third party producers who make Shell products. Percentages for recycled plastic in Shell-branded packaging and for packaging that is reusable or recyclable are calculated using weight from purchasing specifications.

Recycled plastic content in packaging

By the end of 2024, we had achieved a level of 17% recycled plastic content by weight in Shell-branded plastic packaging compared with 10% in the base year of 2022. This level of progress is consistent with our expectations when setting the priority.

Packaging classified as reusable or recyclable

In 2024, we continued to meet our priority to ensure the packaging we use for our products is reusable or recyclable by design. In our Lubricants business, we maintained 99% total Shell-branded product packaging classified as reusable or recyclable by weight. Our Mobility business increased its use of reusable or recyclable packaging to 92% in 2024, compared with 79% in the base year of 2022. This level of progress is consistent with our expectations when setting the priority.

Other disclosures

Our post-consumer recycled material and reusable or recyclable packaging priorities respond to emerging scientific evidence on the impacts of plastic waste on the environment as well as to customer demand for increased circularity in packaging. By working towards these priorities, we increase our proportional use of recycled plastic and reduce our primary raw material use. These priorities relate to the recycling layer of the waste hierarchy. They have been adopted voluntarily, although as a global priority they also apply in jurisdictions that are adopting mandatory regulations.

Shell has not set consolidated targets for circular product design; minimisation of primary raw materials; sustainable sourcing and use of renewable resources in line with the cascading principle to use, reuse and recycle resources for as long as possible and at the highest value use per stage; waste management; or other matters related to resource use or the circular economy other than as set out above.

Resource outflows (E5-5)

Shell's outflows consist of our products as well as waste generated from our operations.

Products

Shell produces and sells energy and non-energy products with varying levels of technical and economic potential to transition to more circular production processes. Energy products based on fossil fuels such as oil, natural gas and refined products are linear by nature, as they are based on a non-renewable natural resource which is combusted at the point of consumption. Chemicals based on hydrocarbon feedstocks have the potential to increase the use of recycled feedstocks as market incentives and technologies evolve. We are investing in biofuels, which have potential for circular production.

Where relevant, Shell seeks to provide customers with non-fuel products that improve resource efficiency or incorporate circular principles by design. For example, we are the world's leading supplier of bitumen, one of the most recycled products in the construction industry. We have designed next-generation premium asphalts that last up to 20% longer than conventional polymer-modified bitumen. This can extend the service life of roads by up to three years.

Shell also produces lubricants that can be recycled after use, excluding greases and applications where the lubricant is fully consumed in the use phase. Such lubricants can be re-refined through hydroprocessing to achieve the same quality as virgin base oils. In our catalyst manufacturing business, some of our catalysts are designed to be regenerated and reused by the customer to extend useful life. Precious metals in our catalysts are typically leased from third parties and reclaimed after use.

Waste

Shell's operations generate non-hazardous and hazardous waste. Our drilling and production activities produce waste streams such as drilling fluid and cuttings, potentially contaminated soil, spent chemicals, brine water and septic waste. Our manufacturing operations produce waste streams such as bio-sludge, potentially contaminated soil, industrial waste water and spent catalysts.

These streams can include a variety of materials including metals, non-metallic minerals and chemical substances. We aim to recycle catalysts containing rare earth elements and to reclaim catalysts containing precious metals. We also aim to regenerate to extend catalyst life and recycle to reduce disposal.

We present data below for waste against an operational control boundary. See "Supplementary data for pollution, water, biodiversity and waste, including estimates for non-operated assets" on pages 434-437 for data reported against a financial control boundary.

Waste (operational control) [A]

	thousand tonnes
	2024
Waste generated [B]	2,661
Hazardous waste [C]	851
Radioactive waste [D]	1
Hazardous waste diverted from disposal [C] [F]	315
Hazardous waste diverted from disposal due to preparation for reuse	10
Hazardous waste diverted from disposal due to recycling	66
Hazardous waste diverted from disposal due to other recovery operations [G]	239
Non-hazardous waste diverted from disposal [E] [F]	413
Non-hazardous waste diverted from disposal due to preparation for reuse	161
Non-hazardous waste diverted from disposal due to recycling	225
Non-hazardous waste diverted from disposal due to other recovery operations [G]	27
Hazardous waste directed to disposal [C] [H]	536
Hazardous waste directed to disposal by incineration	97
Hazardous waste directed to disposal by landfilling	23
Hazardous waste directed to disposal by other disposal operations	416
Non-hazardous waste directed to disposal [E] [H]	1,396
Non-hazardous waste directed to disposal by incineration	8
Non-hazardous waste directed to disposal by landfilling	538
Non-hazardous waste directed to disposal by other disposal operations	850
Non-recycled waste [I]	1,933
Percentage of non-recycled waste [I]	73%

[A] Waste data are calculated using methods required or recommended by relevant regulatory agencies or authorities. In the absence of these, mass is determined by direct measurement using weighbridges. In the absence of weighing facilities, mass is estimated. Due to the complex and site-specific nature of these calculations, it is not possible to state a degree of measurement uncertainty with confidence. These data include liquid waste streams that are classified as waste by regulators and sent for disposal to a third-party facility or re-injected on-site. They exclude process waste water, produced water and waste-water streams not classified as waste by regulators, including waste water discharged to a municipal or public treatment works. They also exclude contaminated soil remediated on-site or in situ. Split by category may not add up to the total due to rounding.
[B] Waste generated is the total mass of hazardous and non-hazardous waste generated and disposed of or diverted from disposal.
[C] Hazardous waste includes all waste that is defined as hazardous, toxic, dangerous, listed, priority, special or some other similar term as defined by an appropriate country, regulatory agency or authority.
[D] Radioactive waste is classified according to local regulations.
[E] Non-hazardous waste is all waste not classified as hazardous waste.
[F] Waste diverted from disposal may be reused, recycled or otherwise recovered, for example recovery of catalysts or precious metals.
[G] Other recovery operations include incineration with energy recovery.
[H] Waste directed to disposal may be incinerated, sent to landfill or disposed of in some other way, such as chemical, physical or biological (or a combination) treatment that acts as the final disposal point.
[I] Non-recycled waste is the total mass of hazardous and non-hazardous waste that is directed to disposal.

In 2024, we disposed of 1,933 thousand tonnes of waste, compared with 2,251 thousand tonnes in 2023.

We disposed of 1,396 thousand tonnes of non-hazardous waste in 2024, compared with 1,619 thousand tonnes in 2023. The decrease was primarily due to the return-to-service of water treatment equipment after maintenance at the Scotford Upgrader in Canada.

We disposed of 536 thousand tonnes of hazardous waste in 2024, compared with 631 thousand tonnes in 2023. The decrease was due to improved classification of generated waste in our Mobility and Low Carbon Fuels businesses and a reduction of drilling waste in Argentina.

We diverted 728 thousand tonnes of residual materials for reuse, recycling or use as a raw material in another process. This includes waste that might otherwise go to landfill being incinerated to generate energy.

Social | Own workforce (S1)

Our people are essential to our purpose of powering progress together. They are key to delivering our strategy and we believe in helping them to develop their skills.

Our double materiality assessment has identified working conditions and equal treatment and opportunities as material topics. See "Material impacts, risks and opportunities and their interaction with strategy and business model (SBM-3)" on page 351 and "Description of the process to identify and assess material impacts, risks and opportunities (IRO-1)" on page 354 for more information.

Why it matters

The successful delivery of our strategy depends on our people and on a culture that aligns with our goals and reflects the changes we need to make as part of the energy transition. Attracting, retaining, developing and motivating our people is core to our success.

This section explains Shell's approach to its own workforce. See "Workers in the value chain (S2)" on page 415 for information about our approach to non-employees in our value chain.

Material impacts, risks and opportunities and their interaction with strategy and business model (ESRS 2 SBM-3)

Except where otherwise stated, this ESRS S1 section covers Shell's own workforce, which comprises employees and, where relevant, non-employees whom we engage on a temporary basis to augment our existing staff as the need arises.

Shell's total workforce comprises employees and external workers, whom we refer to as our contingent workforce or contingent workers.

Shell considers employees to be persons with whom we have an employment relationship, subject to the laws of the countries in which we do business. This includes people employed in Shell subsidiaries and Shell-operated joint ventures, and those seconded to non-operated joint operations, joint ventures or associates.

Our contingent workforce is categorised in accordance with applicable laws and regulations, based on job duties and responsibilities. We recognise different categories of contingent workers, including:

(1) people who work under our day-to-day supervision on a temporary basis to augment existing staff;
(2) people who provide professional services based on a defined scope of work; and
(3) people who work for suppliers providing outsourced services on a long-term basis.

The people under (1) are referred to as non-employees for the purpose of our disclosure and the people under (2) and (3) are together referred to as workers in the value chain, value chain workers or workers and fall under the scope of ESRS S2 for the purpose of our disclosure. People employed or otherwise engaged by non-operated ventures and by business partners are not part of our total workforce.

Human capital is fundamental to Shell's business model and the delivery of our strategy. As the energy system transforms and we reshape our portfolio, elements of our culture will need to adapt. For example, we will have to develop new skills, and adapt our processes and systems, which, in some areas, will need to be different from those required for our traditional oil and gas businesses.

Our business activities have a positive economic impact on employees by creating jobs and providing competitive pay and benefits. Our employees and, where relevant, non-employees, also benefit from personal development opportunities through on-the-job learning, coaching and formal training.

Our approach to diversity, equity and inclusion has the potential for positive impacts by promoting equal opportunity based on objective factors and creating an environment where people feel included.

We take active steps to avoid potential negative impacts, including discrimination, harassment, non-respect of fundamental human or labour rights, and occupational health and safety incidents. As potential human rights and labour rights impacts can occur in any country, our systems are designed to assess potential exposure to forced labour and child labour based on the nature of the business activity and the location in which it is performed. We operate in some locations where potential negative impacts may arise from exposure to systemic human and labour rights risks or from individual incidents. The changing nature of our business has the potential to result in organisational changes which may affect the number of employees and expertise we require.

We pay particular attention to the needs of groups who may have heightened exposure to potential negative impacts associated with discrimination and harassment, such as women and ethnic minorities. We also give particular attention to workers whose roles involve exposure to operational safety hazards.

Portfolio companies

Portfolio companies are non-integrated entities within the Shell Group. To give these companies the flexibility they need, they operate as subsidiaries while generally retaining their own processes and systems. Portfolio companies comply with Shell's minimum requirements for controls and compliance. These include the Shell Performance Framework and mandatory requirements for ethics and compliance, risk management and safety. Portfolio companies generally maintain their own human resources policies, processes and systems. We expect them to comply with Shell's minimum standards on maternity leave, parental leave and life/accident/disability cover, subject to factors such as local laws and regulation. Our disclosures in ESRS S1 exclude portfolio companies except as stated above.

Policies related to own workforce (S1-1)

Shell's approach to managing impacts, risks and opportunities associated with our own workforce is guided by a combination of global and local policies.

Shell employs people in more than 70 countries and is subject to different labour laws and practices in the jurisdictions where we do business. Our global policies are designed to establish minimum standards across countries. Our local policies respect applicable law, regulations and practices at a local level.

The policies described in this section apply to employees and, where required by law, to non-employees working in Shell subsidiaries and Shell-operated joint ventures and to those employees seconded to non-operated joint operations (except in certain cases where we are precluded from offering Shell's minimum standards owing to the non-operated venture structure), joint ventures or associates, or where otherwise stated.

We communicate our policies to our own workforce through a variety of channels, including new employee induction, Code of Conduct refresher training, internal communications and other Human Resources processes.

Human rights

Our commitment to respect the human rights of our total workforce is described in the Shell General Business Principles, which set the standard for how we conduct business aligned with our core values of honesty, integrity and respect for people. All people who form part of our total workforce are expected to behave in line with these principles.

The Shell Code of Conduct explains how employees, contingent workers and anyone else acting on behalf of Shell must behave to live up to our business principles. It sets out our expectations with regard to a safe and healthy workplace, equal opportunity, freedom from discrimination and harassment, respect for fundamental human and labour rights, anti-bribery and fair competition.

Shell is committed to respecting human rights as set out in the United Nations Universal Declaration of Human Rights and the International Labour Organization's Declaration on Fundamental Principles and Rights at Work. This includes respect for freedom of association and the effective recognition of the right to collective bargaining, elimination of forced and child labour, the elimination of discrimination in respect of employment and occupation, and a safe and healthy working environment. We support relevant voluntary codes, including the OECD Guidelines for Multinational Enterprises and the UN Global Compact.

Shell has an integrated approach to human rights which is informed by the UN Guiding Principles on Business and Human Rights and is embedded in our policies and management systems. We set similar expectations for our contingent workforce and suppliers through the Shell Supplier Principles (see page 425). Our policies and systems specifically address child labour and forced labour. In general, this would include human trafficking.

See "Processes for engaging with own workforce and workers' representatives about impacts (S1-2)" on page 410 for information about our approach to workforce engagement. See "Processes to remediate negative impacts and channels for own workforce to raise concerns (S1-3)" on page 411 for information about access to remedy.

Discrimination and equal opportunity

Shell's Code of Conduct sets out our expectations for equal opportunity in employment decisions based on objective factors. It recognises the value of diversity and prohibits discrimination based on race, colour, religion, age, gender, sexual orientation, gender identity, marital status, disability, ethnic origin or nationality. It does not explicitly refer to political opinion, national extraction or social origin. However, it requires employment decisions to be based solely on objective factors such as merit, qualifications, performance and business considerations.

The Code of Conduct prohibits harassment, defined as any action, conduct or behaviour which is humiliating, intimidating or hostile. We expect employees, contingent workers and anyone else acting on behalf of Shell to treat others with respect and to avoid situations that may be perceived as inappropriate.

Due to differences in employment laws in the countries in which we operate, our global policies do not include specific commitments related to positive action for groups within our workforce, other than those indicated above. Local policies may vary depending on local laws, regulations or practices for specific groups within our workforce. See "Diversity, equity and inclusion" on page 117 for more information.

Our policies and management practices are designed to eliminate discrimination and seek to address bias in attraction, selection, development, performance and reward management. Examples of procedures for implementing these policies include our job resourcing guidelines and accessibility standards applied through the hiring process, a global performance management approach that determines pay outcomes, gender and salary grade checks for skewness in individual performance outcomes, a global job evaluation and benchmarking system, and regular country pay equity checks. When evidence of bias is detected, follow-up actions may include further work to understand the reasons and taking corrective steps where appropriate.

Life/accident/disability cover

Shell has a global standard of a minimum of twice the annual base salary for death in service or an injury benefit associated with a workplace accident. This is a total figure that includes both state-provided benefits and employer-provided contributions.

Maternity leave

Shell has a global minimum standard of 16 weeks paid maternity leave, enabling new mothers to put their families first and spend more time with their newborns.

Parental leave

Shell has a global minimum standard of eight weeks' paid leave to all non-birthing parents, subject to any local restrictions. This policy includes new fathers and parents welcoming a child through surrogacy or adoption. Paid parental leave for non-birthing parents applies regardless of gender, gender identity or marital status.

Pay philosophy and Fair Pay Principles

Our Fair Pay Principles are designed to manage pay at Shell and help us ensure that employees are valued, respected and recognised for the work they do. Shell's pay is designed to be market competitive and free from bias. Shell sets clear performance expectations, gives employees the opportunity to share in Shell's success through a variety of variable pay schemes, and is transparent and clear in its communication of pay.

We ensure fairness by applying our Fair Pay Principles across pay-related matters and limit the opportunity for bias through several internal processes and practices. We do not pay differently owing to gender, ethnicity or other characteristics. Portfolio companies generally maintain their own pay philosophies and principles.

Health and safety

The Shell Code of Conduct requires every Shell company, supplier and joint venture under Shell operational control to have a systematic approach to managing health, safety, security, environment and social performance (HSSE & SP). We expect non-operated joint ventures to adopt appropriate and acceptable policies to manage their risks.

This requirement is designed to ensure compliance with the law and to achieve continuous performance improvement while promoting a culture in which our total workforce shares this commitment. See "Policies related to safety" on page 429 for details of our safety policies and standards.

Processes for engaging with own workforce and workers' representatives about impacts (S1-2)

Insight into employee needs and perspectives enables Shell to continually learn and improve our policies, processes and practices. The Shell People Survey is one of the key tools we use to measure employee engagement, motivation, affiliation and commitment to Shell. External and internal research shows that increased employee engagement can result in better business performance and improved safety. In 2024, the response rate to the survey was 86%, compared with 88% in 2023 which indicates our people's desire to provide feedback. The overall employee engagement score decreased to 75 (compared with the top quartile 80 points) from 79 points in 2023, which we believe reflects the level of changes introduced in the organisation as we transform our business to deliver more value with less emissions.

Across Shell, employees have access to senior leaders, local employee forums and employee resource groups. These engagements enable Shell to maintain a constructive employee and industrial relations environment.

Management regularly engages with employees and, where relevant, non-employees, through elected employee representatives and a range of local formal and informal channels. These channels include webcasts and all-employee messages from our CEO and other senior leaders, as well as town halls, team meetings and site visits by the Board and Executive Committee. Engagement takes place continually throughout the year.

We respect the right to collective bargaining and freedom of association. Shell respects local law in our efforts to advance labour principles.

Where appropriate, engagement takes place with union and employee representatives at asset and country level, as well as with the Shell European Works Council.

We gain insight into the needs of specific groups of employees and, where relevant, non-employees, through a network of around 120 employee resource groups in 30 countries and regions. These groups cover areas such as gender, race and ethnicity, LGBT+, disability inclusion, parents, new graduates, experienced hires and veterans. Engagement with employee resource groups takes place on a regular basis, including at senior leadership levels. We may also obtain insights from third parties and external partnerships.

Shell's Human Resources (HR) function, headed by the Chief Human Resources and Corporate Officer, has operational responsibility for employee engagement.

Processes to remediate negative impacts and channels for own workforce to raise concerns (S1-3)

Where we have potentially caused or contributed to adverse impacts, we seek to provide and facilitate access to remedy.

Providing access to remedy

Shell provides multiple channels for employees and, where relevant, non-employees, to raise concerns and seek access to remedy. We use information generated by these processes to monitor trends, assess effectiveness and improve performance.

Where appropriate, we encourage employees and non-employees to raise concerns directly with their line manager or an HR representative. In some countries, additional resources may be available to facilitate conversations, such as an employee representative body.

Employees and non-employees can raise concerns confidentially via the Shell Global Helpline, a formal channel for receiving and following up enquiries and complaints. Employees and non-employees can submit reports to the Shell Global Helpline on a named or anonymous basis. If the report is a query, or a dilemma for which advice is sought, it will be passed to someone qualified to provide that advice, such as an appointed expert in the subject or a member of our legal team. If the report is of the nature of an allegation that requires investigation, an investigator or investigation team will be assigned. This will usually involve one or more trained investigators with subject matter experience and any needed local knowledge.

In locations where effective third-party complaint systems are established by local law, policy or practice, we may also participate in these as a channel to receive and respond to concerns.

In 2024, all our employees and non-employees had access to channels to raise their employment concerns or grievances, including the Shell Global Helpline. We communicate the existence of these channels to our own workforce on a regular basis through new employee induction, Code of Conduct refresher training and leadership messages.

Assessing effectiveness

We use several mechanisms to assess the effectiveness of our engagement and access to remedy.

Shell's Business Integrity Department collects and analyses data on allegations involving potential violations of the Shell Code of Conduct and the outcome of the investigation, whether received via the Shell Global Helpline or a local Human Resources process. This information enables us to monitor trends in complaints received and how they are addressed.

The annual Shell People Survey includes questions designed to test whether employees feel safe to speak up, whether teams are free from harassment and bullying, whether there are equal opportunities for people to develop and progress and whether employees trust that discrimination, harassment and bullying will be investigated and appropriately actioned.

We maintain a stringent no retaliation policy to protect any person making an allegation in good faith. This protection extends to those who participate in or conduct an investigation as well as workers' representatives.

Taking action on material impacts on own workforce, and approaches to managing material risks and pursuing material opportunities related to own workforce, and effectiveness of those actions (S1-4)

The scope of the actions described in this section cover Shell employees and non-employees, where applicable. Many of our actions are of an ongoing nature. Horizons for the completion of time-bound actions are indicated where applicable.

Our actions are intended to help us achieve the desired outcome of our policies and standards by providing resources and expertise that support our businesses to implement them in fit-for-purpose ways.

In 2024, we continued our employee dialogue to mitigate the impact on our own workforce arising from portfolio and structural changes in the organisation.

The Shell Performance Framework supports the delivery of sustainable business outcomes. In 2024, we continued to embed the Shell Performance Framework in our human resources processes, with the aim of ensuring all elements of our culture are harnessed to deliver on our strategy.

We continued to raise awareness and promote skill building on mental well-being at Shell through Shell's Global Mental Well-being Programme. We continued to increase resources available to our employees and, where relevant, to non-employees, on other pertinent topics such as financial well-being.

We supported several countries to develop country-level diversity, equity and inclusion (DE&I) plans. We make our progress transparent through an internal DE&I dashboard that is accessible on a voluntary basis to all Shell employees.

We track the effectiveness of our actions through several mechanisms, including internal reporting and analysis of performance data, and feedback received though the Shell Global Helpline, Shell People Survey and other engagement channels.

We take action to support access to remedy through a variety of channels, including the Shell Global Helpline. We also seek to understand the needs of our workforce through mechanisms such as the Shell People Survey and our Global Mental Well-being programme.

We identify actual or potential impacts on our workforce through a variety of means. These include feedback from human resources and line managers, feedback from engagement and the Shell People Survey, learning from Shell Global Helpline cases and other mechanisms. Impacts that are relevant at a global level are discussed at an appropriate management level. Where necessary, this may result in actions being taken.

Shell seeks to avoid or minimise material adverse impacts on our own workforce by embedding respect for the rights of our employees and, where relevant, non-employees, in our policies and practices. Shell is committed to respecting human rights as set out in the UN Universal Declaration of Human Rights and the International Labour Organization Declaration on Fundamental Principles and Rights at Work. Our approach is informed by the UN Guiding Principles on Business and Human Rights. We provide and facilitate access to remedy. See "Policies related to own workforce (S1-1)" on page 409 for more information.

Resourcing our actions

The Chief Human Resources and Corporate Officer is the most senior executive in Shell with accountability for the overall development, governance and oversight of Shell's Human Resources policies. Human Resources leaders in legal entities are accountable for implementation of applicable policies and for compliance with applicable laws and regulations. Human resources policies are implemented by members of Shell's Human Resources function. The requirements of our policies are communicated to people involved with implementation through various mechanisms, including internal communication channels, management systems and training as appropriate.

Planned actions

In 2025, we will continue to:

- engage in constructive dialogue with employees and, where relevant, with non employees;
- measure engagement through the Shell People Survey;
- implement our global policies;
- work towards our diversity, equity and inclusion ambitions; and
- support access to remedy through the Shell Global Helpline and other channels.

Our action plans are responsive to changing business conditions. Planned actions not directly related to compliance with regulations or our own standards are subject to change. The actions indicated above represent key focus areas rather than an exhaustive list. See "Our People" on pages 115-119 for more information.

Targets related to managing material negative impacts, advancing positive impacts, and managing material risks and opportunities (S1-5)

Shell has set voluntary ambitions to advance our aim to become one of the most diverse and inclusive organisations in the world. We engage with our own workforce and employee resource groups on Shell's approach to diversity, equity and inclusion. These voluntary ambitions as specified below meet the ESRS definition of a target.

We inform employees and employee representative bodies about our progress towards our ambitions and how we can improve our performance. We communicate our progress transparently in internal and external reporting where relevant.

Women in senior leadership

To meet our aim of improving gender balance, we have an ambition to achieve 35% representation of women in our senior leadership positions by 2025 and 40% by 2030, compared with 29.5% in the baseline year of 2021 (excluding portfolio companies). At the end of 2024, representation of women was 33% compared with 32% at the end of 2023. This level of progress is consistent with our expectations when setting the ambition.

The scope of this ambition refers to an existing Shell measure for senior leadership based on compensation grades. The total number of these positions may change from year to year. We focus on representation as a percentage of this total group.

Ethnic minorities in Senior Management

In support of the UK's Parker Review recommendations, we have an ambition to achieve 15% ethnic minority representation in Senior Management by 2027, compared with 14% in the baseline year of 2023 (excluding portfolio companies). At the end of 2024, our representation was 15%. This level of progress is consistent with our expectations when setting the ambition.

As per Parker Review recommendations, Senior Management refers to senior leadership based in the UK and is a Shell measure based on compensation grades. We have moved to this Shell definition of Senior Management for 2024 onwards to align with our self-identification data collection and processes. Ethnic minority refers to an individual who self-identifies as Asian, Black, Mixed/multiple, or other ethnic minority group, in line with UK Office for National Statistics classifications.

Characteristics of the undertaking's employees (S1-6)

This section describes the key characteristics of employees in our own workforce.

Employees by gender

Employees by gender [A] [B]

	Men	Women	Other	Not reported	Total
Number of employees (thousand)	63	33	–	–	96
Percentage of employees	65%	35%	–%	–%	100%

[A] Employee numbers are based on headcount as of December 31, 2024.
[B] Includes employees seconded to joint ventures.

Note 33 to the "Consolidated Financial Statements" provides employee numbers based on average headcount during the reporting period, excluding employees seconded to joint ventures and associates. See page 311 for more information.

Employees by country [A] [B] [C]

	thousand
	2024
India	13
United States of America	18
Netherlands	10
Other	55
Total employees	96

[A] Employee numbers are based on headcount as of December 31, 2024.
[B] Includes employees seconded to joint ventures.
[C] Countries with more than 50 employees representing at least 10% of total employees.

Note 33 to the "Consolidated Financial Statements" provides employee numbers based on average headcount during the reporting period, excluding employees seconded to joint ventures and associates. See page 311 for more information.

Employees by contract type and gender

See the table "Employee contract type by gender and region" on page 116 for the number of employees on permanent contracts (including employment-at-will) and temporary contracts by gender.

Employee turnover

Employee turnover [A] [B]

	unit	2024
Departing employees	number	6,227
Rate of turnover [C]	%	7.6%

[A] Excludes employees in portfolio companies.
[B] Includes employees seconded to joint ventures.
[C] Calculated as the aggregate number of employees who leave voluntarily or due to dismissal, retirement or death in service, divided by average employee headcount for the reporting period. Excludes termination due to divestment.

Data for our own workforce are reported on the basis of headcount at the end of the reporting period.

See "Changes in headcount" on page 115 for more information.

Collective bargaining coverage and social dialogue (S1-8)

We respect the right to collective bargaining and freedom of association. Where appropriate, engagements take place with union representatives at asset and country level, as well as with the Shell European Works Council. Employees covered by collective bargaining agreements are those individuals to whom Shell is obliged to apply the agreement. Agreements may apply to unionised and non-unionised employees. An employee covered by more than one collective bargaining agreement is only counted once.

Collective bargaining coverage and social dialogue [A]

	Collective bargaining coverage	Social dialogue
Coverage rate	Employees EEA [B], [C]	Workplace representation (EEA only) [C]
0-19%	-	-
20-39%	Netherlands	-
40-59%	-	-
60-79%	-	-
80-100%	-	Netherlands

[A] Excludes employees in portfolio companies.
[B] The European Economic Area (EEA) countries include the 27 member states of the European Union plus Iceland, Liechtenstein and Norway.
[C] For countries with more than 50 employees representing at least 10% of total employees.

See "Employee engagement" on page 117.

Diversity metrics (S1-9)

This section describes the gender distribution at senior leadership level and the age distribution of our employees.

Gender distribution of senior leadership [A]

	Men		Women	
Level	Number	%	Number	%
Executive Committee	3	43%	4	57%
Senior Leadership roles [B]	768	67%	370	33%

[A] As at December 31, 2024.
[B] Senior Leadership is a Shell measure based on compensation grade levels.

See the table "Employees by age group" on page 116 for information on the distribution of employees by age group.

Adequate wages (S1-10)

Shell's pay is designed to be market competitive. We expect that our employees can meet their basic needs through the pay and benefits that we provide. Shell pays its employees an adequate wage, in line with applicable benchmarks, which we regularly check.

See "Pay philosophy and Fair Pay Principles" on page 410 for more information.

This assessment does not take into account any additional non-salary components of total remuneration that may be applicable, such as benefits and share awards.

Health and safety metrics (S1-14)

The Shell Commitment and Policy on Health, Security, Safety, the Environment and Social Performance (HSSE & SP) requires Shell companies, contractors and joint ventures under our operational control to adopt a systematic approach to managing HSSE risk to achieve compliance with the law and continuous improvement in performance. We expect ventures not under our operational control to adopt an equivalent approach.

All employees and non-employees working under our day-to-day supervision are covered by the appropriate HSSE & SP requirements which may be implemented through our own management system based on our standards or the supplier's management system, depending on the contract mode.

See "Contractor HSSE management" on page 429 for information on our approach to managing HSSE in contracts and "Personal safety" on page 432 for information on our safety performance.

Remuneration metrics (pay gap and total remuneration) (S1-16)

We operate objective pay processes and seek to address bias. The basis for paying fairly is equal pay for equal work, taking into account factors such as performance and experience. We monitor pay equity through regular analysis to obtain confidence that we have pay equity between genders for performing the same jobs. We address any unexplained pay differences related to gender through rigorous internal processes.

See "Discrimination and equal opportunity" on page 410 for more information.

Remuneration metrics [A]

	unit	2024
Gender pay gap [B]	%	20%
Ratio between highest paid individual and the median remuneration for employees [C]	number	99

[A] Excludes employees in portfolio companies, apprentices and interns.
[B] Defined as the difference in average pay levels between female and male employees, expressed as a percentage of the average pay level of male employees.
[C] Calculated as annual total remuneration for the highest paid individual, divided by the median employee annual total remuneration excluding the highest paid individual. Annual total remuneration includes salary, bonus, the fair value of long-term incentives awarded, and relevant allowances and benefits.

We continue to make progress towards gender balance across Shell, but a gender pay gap exists for several reasons, including fewer women in senior leadership positions and fewer women in higher-paid specialist roles. See "Diversity, equity and inclusion" on page 117.

The reporting basis for calculating the annual total remuneration ratio of the highest paid individual to the median annual total remuneration for all employees follows the European Sustainability Reporting Standards. This methodology differs from calculations performed to comply with UK reporting regulations. See "CEO pay ratio" on page 204.

Incidents, complaints and severe human rights impacts (S1-17)

In 2024, a total of 2,025 reports were submitted to the Shell Global Helpline, the main channel for employees and non-employees to raise concerns outside of their management line. These reports include both enquiries and allegations. Of these, 691 reports involved concerns about discrimination or harassment. Another 75 reports involved concerns related to health and safety, working conditions or other work-related rights.

A total of 82 cases of discrimination or harassment were found to be substantiated, along with 23 cases related to health and safety, working conditions or other work-related rights. Cases found to be substantiated include reports received in the current period as well as reports received in a prior period and closed in the current one. These figures do not include cases that remain open at the end of the reporting period. Because we allow concerns to be submitted anonymously, our data do not distinguish between concerns filed by employees and non-employees.

In 2024, no complaints concerning our own workforce were filed with a National Contact Point for the OECD Guidelines for Multinational Enterprises.

An incident is a legal action or complaint registered with the undertaking or competent authorities through a formal process, or an instance of non-compliance identified by the undertaking through established procedures. According to the UN Guiding Principles on Business and Human Rights, a severe human rights incident is characterised by the significant impact it may have, which is evaluated based on its scale, scope and irremediable nature. An incident may be severe by virtue of one or more of these criteria.

In 2024, no severe human rights incidents involving our own workforce were identified.

Workers in the value chain (S2)

Care for people reflects our core values and our approach to safety and human rights. We also know that when people feel cared for, they perform at their best. We seek to respect and promote the rights and welfare of our employees, contingent workforce and others in our value chain.

Our double materiality assessment has identified workers in the value chain and responsible sourcing as material topics. See "Material impacts, risks and opportunities and their interaction with strategy and business model (SBM-3)" on page 351 and "Description of the process to identify and assess material impacts, risks and opportunities (IRO-1)" on page 354 for more information.

Why it matters

Our business depends on a competitive and resilient supply chain. Suppliers play an important role in helping us deliver our strategy and creating value for us and our stakeholders.

Our supply chain is diverse, encompassing small, medium and large enterprises across many countries and categories of goods and services. Across Shell's supply chains, we seek to source goods and services responsibly. These supplier relationships have positive impacts as well as the potential for negative impacts.

This section discusses our approach to workers in the value chain. See "Management of relationships with suppliers (G1-2)" on page 425 for information about our general approach to responsible sourcing.

Material impacts, risks and opportunities and their interaction with strategy and business model (ESRS 2 SBM-3)

Shell's total workforce comprises employees and external workers, to whom we refer as our contingent workforce or contingent workers.

Our contingent workforce is categorised in accordance with applicable laws and regulations, based on job duties and responsibilities. We recognise different categories of contingent workers, including:
(1) people who work under our day-to-day supervision on a temporary basis to augment existing staff;
(2) people who provide professional services based on a defined scope of work; and
(3) people who work for suppliers providing outsourced services on a long-term basis.

The people under (1) are referred to as non-employees for the purpose of our disclosure and fall under the scope of ESRS S1. People employed or otherwise engaged by non-operated ventures and by business partners are not part of our total workforce.

Our standards address two main types of value chain worker. Our worker welfare standards focus on people under (2) and (3) who work on Shell sites or as dedicated supplier staff on non-Shell sites. In addition to the categories listed above, our enhanced value chain due diligence policy applies to people who work in our supply chains for non-hydrocarbon goods and services and who are not generally considered part of our contingent workforce. For the purpose of our disclosure under ESRS S2, we refer to people covered by these policies as workers, workers in the value chain, value chain workers or supplier staff, subject to the scope limitations set out above.

Throughout this section, we discuss worker welfare and enhanced value chain due diligence separately to highlight differences in approach to workers covered by these standards.

Our disclosures in this section cover different types of workers who may be impacted directly or indirectly by Shell's operations or business relationships. Across these types, the nature of our contractual relationships and our ability to influence varies.

Our disclosure covers our upstream value chain for non-hydrocarbon goods and services. It does not cover workers in our downstream value chain, such as persons working for independent licencees or dealers in our retail network who sell Shell-branded products. We aim to carry out further work in the future to deepen our understanding of this population.

For workers on Shell sites and dedicated supplier staff on non-Shell sites, we aim to prevent and mitigate potential negative impacts on physical and/or mental well-being arising from inadequate living and/or working conditions as relevant. This includes requiring suppliers to manage potential impacts associated with accommodation, safety, workload, wages and job security. We also seek to prevent and mitigate potential labour rights impacts in areas such as forced labour, child labour, freedom of association and collective bargaining, recruitment practices and access to remedy. These impacts are generally managed through our suppliers.

As potential human rights impacts can arise in any country or category, we take a risk-based approach to assessing suppliers. We derive supply-chain country information from a third-party vendor, who assess certain activities and countries to be more exposed to potential negative impacts. Examples of areas assessed as having high exposure to labour rights risks include parts of Asia, Africa and the Middle East and South and Central America.

Depending on the nature of the contract and the location in which the work is performed, we may pay particular attention to sub-groups of value chain workers who are identified as especially vulnerable, such as migrant workers. We use a third-party vendor for analysis of countries with high potential for negative impacts on labour rights and for internal assessments of high-potential-impact activities.

The changing nature of our business has the potential to affect the types of goods and services we procure, which may have indirect impacts on workers employed by our suppliers.

When considering workers covered by our enhanced value chain due diligence policy, certain categories of goods and services, including raw materials and feedstocks, may also be assessed as having high potential exposure to human rights impacts. In these situations, we proceed on the basis that potential negative impacts could be more likely to arise, triggering the need for additional due diligence to manage the potential impacts on workers effectively.

Our operations also have positive impacts on value chain workers through economic opportunity, skill development, and improved working conditions and safety standards.

Showing care for people is part of our core values and is reflected in the Shell General Business Principles and Shell Performance Framework. Care for workers in our value chain also benefits Shell by improving safety, productivity and quality in our operations.

Policies related to value chain workers (S2-1)

Shell has adopted policies and standards to identify and manage impacts on value chain workers in specified parts of our upstream value chain. We also set expectations for how our suppliers, and non-operated joint ventures, manage potential impacts. Our approach reflects the varying degrees of influence we have at different levels of the value chain based on our contractual rights and obligations.

The policies and standards described in this section apply to Shell companies and joint ventures in which Shell is the operator. We expect non-operated joint ventures to adopt appropriate and acceptable policies to manage their risks.

Human rights and value chain workers

We are committed to respecting the Universal Declaration of Human Rights; the United Nations Guiding Principles on Business and Human Rights; and the 1998 Declaration on Fundamental Principles of Rights at Work of the International Labour Organization (ILO), which covers: freedom of association and the effective recognition of the right to collective bargaining, the elimination of forced or compulsory labour, the abolition of child labour, the elimination of discrimination in respect of employment and occupation, and a safe and healthy working environment. We also support voluntary frameworks such as the OECD Guidelines for Multinational Enterprises, the United Nations Global Compact, and the Building Responsibly Principles. Our approach to workers in the value chain is informed by the United Nations Guiding Principles on Business and Human Rights. As outlined in the Shell Supplier Principles, our suppliers should provide workers with a dedicated whistle-blowing mechanism where grievances related to the above topics can be logged confidentially. In 2024, no cases of non-respect of the UN Guiding Principles on Business and Human Rights, the ILO Declaration on Fundamental Principles and Rights at Work or the OECD Guidelines for Multinational Enterprises were identified in our upstream and downstream value chain.

Shell Supplier Principles

Shell seeks to work with suppliers that behave in an economically, environmentally and socially responsible manner.

The Shell Supplier Principles set out our expectations of suppliers with respect to business integrity; health, safety, security, environment and social performance (HSSE & SP); and labour and human rights. We carry out risk-based pre-contractual screening to assess the ability of suppliers to meet our requirements. In our procurement contracts, suppliers agree to adhere to the Shell General Business Principles, the Shell Supplier Principles and the Shell Code of Conduct. Suppliers are required to comply with all applicable laws and regulations and agree to provide and maintain safe and healthy working conditions for all their workers. We specify in our contracts that we expect suppliers to impose the same or equivalent requirements on their direct suppliers.

The Shell Supplier Principles set out our expectations that suppliers should conduct their activities in a manner that respects human rights as set out in the United Nations Universal Declaration of Human Rights and the core conventions of the International Labour Organization (ILO). In particular, suppliers are expected to ensure no use of child or forced labour; no payment of recruitment fees by workers; compliance with applicable laws on freedom of association and collective bargaining; a safe and healthy workplace free of discrimination, harassment or retaliation; compliance with applicable laws on working hours; and wages and benefits that meet or exceed national legal standards. We also expect suppliers to provide value chain workers with a dedicated grievance mechanism where concerns can be logged confidentially.

The Shell Supplier Principles apply to contracts managed by Shell's Supply Chain organisation, which generally manages procurement of non-hydrocarbon goods and services on behalf of Shell companies and joint ventures in which Shell is the operator. See "Shell Supplier Principles" on page 425.

Worker welfare

Shell has established standards to ensure compliance with fundamental labour rights for value chain workers on Shell sites and dedicated supplier staff on non-Shell sites. These are embedded in our Safety, Environment and Asset Management (SEAM) Standards and our Category Management and Contracting Process Framework. We refer to them collectively as "worker welfare". See "SEAM Standards" on page 130.

Our approach is based on the 10 principles established by Building Responsibly, an alliance of companies that seeks to promote the rights and welfare of workers in the engineering and construction industry.

Before awarding a contract, our standards require an assessment of whether the contract has high potential exposure to worker welfare impacts. If so, our standards require us to pre-qualify the supplier's capability to manage these issues. For contracts with high potential exposure to worker welfare risks, our standards require the supplier to develop a worker welfare management plan.

The plan is designed to achieve compliance with the Building Responsibly Principles and International Finance Corporation and European Bank for Reconstruction and Development standards on worker accommodation. It establishes minimum expectations for labour rights, including: no discrimination; no forced, trafficked or child labour; ethical recruitment; freedom to change employment; access to documentation; respect for wage and benefit agreements; worker representation; access to grievance mechanisms; and healthy, safe and habitable living and working conditions. The plan includes regular performance measurement and reviews. Our standards require suppliers to consider worker feedback when developing or updating the plan.

Building Responsibly Worker Welfare Principles

Our standards require us to assure the effectiveness of worker welfare management plans, review performance against contractual requirements and agree actions for continuous improvement.

We use a risk-based approach to verify implementation of action plans through mechanisms such as audits, site visits and updates as part of general business performance reviews with suppliers.

Enhanced value chain due diligence

In 2024, we took steps to strengthen our human rights due diligence processes for sourcing goods and services. Identifying and mitigating potential negative impacts in this part of our value chain can be challenging, as the nature of our contractual relationships means we may have less visibility into potential issues and less scope to exert influence. We have introduced a new policy within our Category Management and Contracting Process Framework requiring additional due diligence for new contracts with the highest potential for human rights impacts. The scope of this policy is limited to procurement contracts managed by Shell's Supply Chain organisation, which generally manages procurement of non-hydrocarbon goods and services on behalf of Shell companies and joint ventures in which Shell is the operator.

For new contracts, we apply a risk-based approach to screening for potential human rights impacts during pre-qualification or tendering. We conduct due diligence to verify suppliers' ability to meet our standards for categories of goods and services with the highest potential exposure to negative impacts. These categories include specified raw materials, feedstocks, components and transport and logistics services.

For high risk contracts, the policy requires suppliers to complete a capability assessment of their ability to prevent, mitigate and remediate negative impacts within their own operations and relevant parts of their supply chain. If gaps are identified, suppliers are required to develop an action plan with controls in place prior to contract commencement.

For contracts assessed as high risk for potential negative impacts, the policy also requires the inclusion of human rights due diligence clauses and progress checks during contract performance reviews.

Processes for engaging with value chain workers about impacts (S2-2)

Suppliers are responsible for undertaking engagement with their own workforce. Our approach to supporting them in this responsibility is set out below.

We discuss worker welfare and enhanced value chain due diligence separately to highlight differences in approach to workers covered by these standards.

Worker welfare

Suppliers working on Shell sites or providing dedicated staff on non-Shell sites are responsible for undertaking engagement with their own workforce. Shell may support such engagement as part of our approach to avoiding and managing potential negative impacts. We encourage our suppliers to undertake regular and constructive dialogue with their employees. For contracts assessed as having high potential exposure to worker welfare impacts, we ask suppliers to gather worker feedback when developing and implementing worker welfare management plans. We encourage our suppliers to engage directly with value chain workers or their legitimate representatives where possible. Shell is not a party to direct engagement between value chain workers and their employers nor are we involved in collective bargaining agreements between value chain workers and their employers.

Engagement with value chain workers on Shell sites takes place on a regular basis though channels such as leadership engagements, onboarding, training, worker surveys and pre-work meetings. We encourage suppliers to engage in regular dialogue with their employees about worker welfare.

Suppliers are responsible for direct engagement with their employees and for complying with contractual requirements related to worker welfare. The most senior role in the relevant Shell entity with operational responsibility for monitoring compliance with contractual requirements is the local Shell contract holder. Overall accountability for contract management on site rests with the project or asset manager.

We offer training to suppliers to help them meet our expectations, including with respect to implementing the Building Responsibly Principles. Suppliers are also informed about channels for raising concerns on an anonymous basis through the Shell Global Helpline or local grievance mechanisms. Supplier staff working on Shell sites undergo training in Shell's safety and worker welfare standards before starting work.

Our approach to safety and worker welfare places a consistent focus on human performance. This starts with the recognition that people make mistakes and that our preventive barriers need to be capable of managing the impact of those mistakes without undesirable consequences for people or the environment. We seek to promote a culture where everyone feels empowered to intervene and to speak up freely without repercussions so that we and/or the employing supplier can address impacts and learn from any feedback received.

We assess the effectiveness of our engagement through various means. This includes feedback received from value chain workers or their representatives during leadership or supervisor engagements, concerns raised via Shell or supplier grievance mechanisms, and indirect indicators of engagement such as safety performance. Depending on the contract, we may agree key performance indicators with the supplier that are tailored for the local context.

We consult with international organisations and industry associations to understand and respond to current and emerging human rights issues relevant to our business. These include Ipieca, the global oil and gas industry association for advancing environmental and social performance across the energy transition; Building Responsibly; and the human rights working group of Business for Social Responsibility. When we identify groups who are particularly vulnerable to negative impacts, such as migrant workers, we may take additional steps to understand their needs and concerns, through consultation with suppliers or knowledgeable third parties.

Enhanced value chain due diligence
Our ability to engage with workers covered by our enhanced value chain due diligence policy is constrained by the nature of our contractual relationship with the supplier and the fact that we may not have direct or indirect access to such workers. In these situations, we are generally more reliant on publicly available information or third parties to help us understand potential negative impacts.

Processes to remediate negative impacts and channels for value chain workers to raise concerns (S2-3)
Shell aims to provide multiple channels for value chain workers to raise concerns and obtain access to remedy. If we become aware of concerns pertaining to one of our suppliers, we will raise this as part of supplier performance management.

We discuss worker welfare and enhanced value chain due diligence separately to highlight differences in approach to workers covered by these standards.

Worker welfare
We expect suppliers working on Shell sites or providing dedicated staff on non-Shell sites to provide grievance mechanisms where workers can raise concerns on an anonymous basis. For contracts assessed as having high potential exposure to worker welfare impacts, we require suppliers to detail how they will provide a grievance mechanism.

Shell employees, contingent workers and third parties can raise concerns anonymously through the Shell Global Helpline, which is available in multiple languages 24 hours a day, seven days a week.

At sites where value chain workers are drawn from the local community, workers may also use community feedback mechanisms that have been established to receive, track and respond to questions and complaints. It is possible to raise concerns via this mechanism anonymously. See "Providing access to remedy" on page 411 for more information.

Regardless of the channel, we seek to address concerns in a timely and equitable manner. Participation in a grievance mechanism provided by Shell or a supplier does not prevent a complainant from raising their concern with a third party if it is not possible to achieve a resolution through mutual agreement.

Our standards require our own grievance mechanisms and those of suppliers to include measures for tracking concerns and using the feedback to update the worker welfare management plan. We encourage suppliers to assess whether the mechanism is trusted and provides effective access to remedy.

We communicate the existence of grievance mechanisms to workers in the value chain. We maintain a stringent no-retaliation policy to protect any person making an allegation in good faith. This protection extends to those who participate in or conduct an investigation.

Enhanced value chain due diligence
The Shell Supplier Principles require suppliers to establish grievance mechanisms for their own employees and to impose a similar requirement on their direct suppliers. Concerns can also be raised anonymously through the Shell Global Helpline.

Taking action on material impacts on value chain workers, and approaches to managing material risks and pursuing material opportunities related to value chain workers, and effectiveness of those actions (S2-4)
In 2024, we continued to take steps to improve our approach to worker welfare and enhanced value chain due diligence.

The scope of the actions described in this section cover Shell companies and joint ventures in which Shell is the operator, unless otherwise stated. Many of our actions are of an ongoing nature. Horizons for the completion of time-bound actions are indicated where applicable.

Our actions are intended to help us achieve the desired outcome of our policies and standards by providing resources and expertise that support our businesses to implement them in fit-for-purpose ways.

We discuss worker welfare and enhanced value chain due diligence separately to highlight differences in approach to workers covered by these standards.

Worker welfare
In 2024, we continued to collaborate with peers and suppliers to drive higher standards and consistency across the industry.

With Ipieca, we developed a toolkit of definitions and resources to support energy companies to enhance worker engagement and responsible recruitment.

We continued to work with a group of businesses in the energy sector including bp, Equinor, Ørsted and TenneT to further develop the Worker Welfare Group, a partnership focused on labour rights and worker welfare within the marine construction sector. The group has developed a set of principles and guidelines to support, in the first instance, the Singapore marine construction sector to meet international standards for labour rights and worker welfare, focusing on responsible recruitment, improved accommodation, better transport, and improved access to grievance mechanisms. The group has also engaged with key stakeholders to advocate systemic improvements and, additionally, is working with local organisations to facilitate access to remedy for workers.

To improve how we manage worker welfare, we updated our expectations in the Shell Commitment and Policy on HSSE & SP to include implementation of the Building Responsibly Principles. For contracts assessed as having high potential for negative impacts on worker welfare, we introduced new requirements as part of our SEAM Standards on worker welfare to ensure value chain workers are informed of labour rights issues and how to get access to remedy before starting work.

Enhanced value chain due diligence
In 2024, we began embedding our policy on enhanced value chain due diligence processes for suppliers of highest risk goods and services. See "Policies related to value chain workers (S2-1)" on page 415 for information.

Also in 2024, we exchanged best practice on implementing human rights due diligence in supply chains with a cross-sectoral group of companies organised by Business for Social Responsibility. We actively collaborate with industry peers in Ipieca's supply chain working group.

Assessing effectiveness
We discuss worker welfare and enhanced value chain due diligence separately to highlight differences in approach to workers covered by these standards.

Worker welfare
To assess the effectiveness of our actions on worker welfare, including effectiveness of grievance mechanisms, we may undertake checks ranging from self assessment and peer review to internal audits. We also perform periodic contract reviews which may include assessing the effectiveness of the grievance mechanism and contract-specific key performance indicators. We may gather worker feedback through surveys, site visits and other channels.

Enhanced value chain due diligence
Having adopted our enhanced value chain due diligence policy in 2024, we aim to conduct internal assessments to verify compliance with the new policy as well as periodic contract reviews.

Responding to concerns
We discuss worker welfare and enhanced value chain due diligence separately to highlight differences in approach to workers covered by these standards.

Worker welfare
We may become aware of actual or potential negative impacts through channels such as local grievance mechanisms, the Shell Global Helpline or information provided by a supplier or third party. Depending on the nature of the issue, we may investigate the concern ourselves or refer it to the supplier for follow-up.

If an incident is confirmed, we review the circumstances and decide on the action to be taken. When the impacts are preventable or remediable, we may engage with the supplier to take appropriate measures.

Enhanced value chain due diligence
Our approach to enhanced value chain due diligence encourages collaboration with suppliers to address potential dilemmas and gaps in performance through ongoing performance management. We intend to periodically review and update our assessment of value chains with high potential exposure to negative impacts to help us to make sure our risk-based controls are as up to date as possible.

For more information on our approach to access to remedy, see "Processes to remediate negative impacts and channels for value chain workers to raise concerns (S2-3)" on page 417.

Resourcing our actions
The Executive Vice President for Safety, Environment and Asset Management is the most senior executive in Shell with accountability for the development, governance and oversight of the SEAM Standards. Leaders of assets, performance units, businesses or functions are accountable for assessing which SEAM Standards are relevant based on their objectives, risk profile and activities, and for implementing those standards as appropriate.

Implementation of SEAM Standards relevant to worker welfare is supported by members of Shell's Safety, Environment and Asset Management function as well as our Health, Supply Chain and Real Estate organisations. These include experts in worker welfare, safety and other disciplines.

The Executive Vice President for Supply Chain, Contracting and Procurement is the most senior executive in Shell with accountability for the overall development, governance and oversight of the Shell Supplier Principles and our policy on enhanced value chain due diligence. Contract holders are responsible for implementing these requirements.

Implementation is supported by members of Shell's Supply Chain, Contracting and Procurement function, which includes subject matter experts in procurement, contract management and other disciplines.

The requirements of our standards and policies are communicated to people involved with implementation through various mechanisms, including internal communication channels, management systems and training as appropriate.

Planned actions
In 2025, we will continue to:
- manage worker welfare in line with our standards;
- embed our policy on enhanced value chain due diligence; and
- support efforts to provide access to remedy for value chain workers.

Our action plans are responsive to changing business conditions. Planned actions not directly related to compliance with regulations or our own standards are subject to change. The actions indicated above represent key focus areas rather than an exhaustive list.

Other disclosures
Shell seeks to avoid or minimise material adverse impacts on value chain workers by embedding respect for their rights in our policies and practices. Shell is committed to respecting human rights as set out in the UN Universal Declaration of Human Rights and the International Labour Organization (ILO) Declaration on Fundamental Principles and Rights at Work.

Our approach is informed by the UN Guiding Principles on Business and Human Rights. We provide and facilitate access to remedy. Our suppliers are expected to conduct their activities in a manner that respects human rights as set out in the UN Universal Declaration of Human Rights and the core conventions of the ILO.

See "Shell Supplier Principles" on page 425 and "Policies related to value chain workers (S2-1)" on page 415 for more information.

An incident is a legal action or complaint registered with the undertaking or competent authorities through a formal process, or an instance of non-compliance identified by the undertaking through established procedures. According to the UN Guiding Principles on Business and Human Rights, a severe human rights incident is characterised by the significant impact it may have, which is evaluated based on its scale, scope and irremediable nature. An incident may be severe by virtue of one or more of these criteria.

In 2024, we investigated and substantiated three reports related to workers in the value chain, arising from both external reports and identification through our procedures. These cases concerned matters including late payment of wages, failure to provide unrestricted access to passports and the requirement to pay recruitment fees.

We take these matters very seriously. We are following up with the suppliers and sub-suppliers concerned, and have required them to develop corrective action plans, including setting out how the suppliers provide remedy to the persons affected.

Targets related to managing material negative impacts, advancing positive impacts, and managing material risks and opportunities (S2-5)
Exposure to potential human rights impacts varies according to factors such as the nature of the work being performed, the capability of the supplier and the location in which the activity takes place. As a result, while we may establish key performance indicators at a contractual level, we have not set consolidated targets for workers in the value chain at a Group level.

Our agreements with suppliers specify our performance expectations and period in which these apply. Suppliers are responsible for engagement with value chain workers, including with respect to topics such as goal setting, performance tracking or identifying opportunities for improvement.

We measure the effectiveness of our policies and standards by monitoring performance data and periodic contract performance reviews. Such data may include performance measured against key indicators, inspection reports, audit reports and other sources of information.

Affected communities (S3)

Many of our operations are located close to communities. We aim to be a good neighbour by contributing to their well-being. This includes strong community engagement, managing the negative impacts of our business and delivering a range of benefits.

Our double materiality assessment has identified social impacts, community engagement, security and human rights, and social investment and benefits as material topics. See "Material impacts, risks and opportunities and their interaction with strategy and business mode (SBM-3)" on page 351 and "Description of the process to identify and assess material impacts, risks and opportunities (IRO-1)" on page 354 for more information.

Why it matters
Our business activities have the potential to affect communities directly and indirectly. In our operations, many of our facilities are located close to where people live and work. We aim to minimise negative social and environmental impacts, including by engaging communities and providing access to remedy. We also aim to deliver positive benefits. Managing our impacts responsibly helps us to maintain our reputation and licence to operate.

Material impacts, risks and opportunities and their interaction with strategy and business model (ESRS 2 SBM-3)
Our business activities and the communities in which we operate are diverse. Communities most likely to be impacted by our operations are those living nearest to our projects or assets. In some locations, affected communities may include Indigenous Peoples. The types of communities we interact with vary in their socio-economic status, as do vulnerable groups within these communities. Depending on the nature of our activities and the composition of the local community, groups at potentially greater risk of harm may include women, disabled people, low-income families, persons without formal land tenure, Indigenous Peoples and migrant workers, among others.

Our understanding of affected communities may be developed through means such as direct and indirect engagement, impact assessment and concerns received through grievance mechanisms.

Our activities can have negative and positive impacts on communities where we operate. Potential negative impacts include adverse effects on the environment, livelihoods, community health and safety, cultural heritage and other aspects of socio-economic well-being. These can be the result of planned events, such as land use change, traffic, environmental impacts or the closure of plants. They can also result from unplanned events such as industrial incidents or sabotage.

Our activities contribute positively to local economies through taxes and the creation of jobs and opportunities for local businesses. We also make social investments in areas determined by local community needs and priorities.

Respectful engagement with local communities is critical to the success of our projects and long-term operations. Local opposition can result in a loss of access to resources or relationships, thereby resulting in increased costs or missed business opportunities. Communities can also be an enabler of our business, for example by facilitating access to new opportunities or as a source of human capital.

The scope of this section includes Shell companies and joint ventures where we have operational control and direct relationships with affected communities.

Policies related to affected communities (S3-1)

Our approach to affected communities is governed by our Safety, Environment and Asset Management (SEAM) Standards, except where otherwise stated. These contain standards for stakeholder engagement, managing environmental and social impacts and providing benefits. See "SEAM Standards" on page 130 for more information.

The standards described in this section apply to Shell companies and joint ventures in which Shell is the operator, except where otherwise stated. We expect non-operated joint ventures to adopt appropriate and acceptable policies to manage their risks.

Stakeholder engagement

Respectful two-way engagement with stakeholders is the foundation of our approach. When our assets, projects or businesses have the potential to impact communities, our standards require them to plan for stakeholder engagement. The intent is to identify community stakeholders, determine their needs and expectations, establish an appropriate engagement approach and seek feedback on our management of impacts. We seek to pay particular attention to groups who may be more vulnerable to negative impacts or who require a more tailored engagement approach.

As part of the stakeholder engagement process, our standards require the establishment of community feedback mechanisms to receive, document and address complaints, questions or requests from local stakeholders. These mechanisms are designed to facilitate access to remedy for community complaints in line with the UN Guiding Principles on Business and Human Rights.

Managing impacts

Our standards require assets, projects or businesses to engage stakeholders and to identify and manage potential impacts associated with our activities. Our standards also require environmental and social management to be put in place to prevent and mitigate adverse impacts and enhance positive impacts, with appropriate management oversight and resources.

See "Processes for engaging with affected communities about impacts (S3-2)" on page 421 and "Impact assessment" on page 355 for more information about our approach.

Managing social impacts

Our standards require assets, projects or businesses to apply special procedures in situations involving involuntary resettlement, cultural heritage, Indigenous Peoples or operations in environments with high or unusual social risks.

Our standards require us to apply a hierarchy of controls to such impacts. This means we anticipate and avoid business activity that can result in adverse impacts. Where avoidance is not possible, we seek to minimise impacts by exploring alternatives in the design of the activity.

Where residual impacts remain, our standards require management plans to be established in line with international standards, including where applicable the International Finance Corporation's Performance Standards on resettlement, cultural heritage and Indigenous Peoples.

Involuntary resettlement

We sometimes require temporary or permanent access to areas of land or sea where people are living or working. These situations can result in physical or economic displacement, which need to be carefully managed.

Our standards require assets, projects or businesses to avoid involuntary resettlement whenever possible. When this cannot be avoided, our standards require the development of a resettlement action plan or, in cases of economic displacement not resulting in physical displacement, a livelihood restoration plan. These plans are designed to mitigate the negative impacts of displacement, identify development opportunities and establish the entitlements of all categories of affected persons (including host communities), with particular attention paid to the needs of the poor and the vulnerable. In developing these plans, we seek to work with local communities to help them resettle and maintain or improve their standard of living. Our support may include helping communities to establish alternative livelihoods.

Cultural heritage

Preserving cultural heritage is an important part of our efforts to manage social impacts. Cultural heritage refers to places of archaeological, historical, cultural, artistic or religious significance. It can also include preservation of unique environmental features, cultural knowledge and traditional lifestyles.

Our approach starts with considering how to avoid or minimise impacts on cultural heritage. This can involve carrying out archaeological assessments to inform project design and site selection. If appropriate, we may develop so-called "chance find" procedures to deal with previously unknown heritage resources that could be discovered during construction or operations. Such procedures are important for helping to prevent damage to these resources. Where appropriate, we train staff and contractors to make them aware of these resources and give them the authority to halt work if necessary.

Indigenous Peoples

Our activities can affect Indigenous Peoples who hold specific rights for the protection of their cultures, traditional ways of life and special connections to land and water. In accordance with the Shell General Business Principles and in support of the UN Declaration on the Rights of Indigenous Peoples, we seek the support and agreement of Indigenous Peoples potentially affected by our activities, through dialogue, culturally appropriate grievance mechanisms and impact management processes.

Shell recognises the principle of free, prior and informed consent (FPIC), as interpreted by the International Finance Corporation Performance Standards as a safeguard for Indigenous Peoples' rights. We believe our approach is consistent with the application of this principle while respecting the laws of the jurisdictions where we operate.

High or unusual social risks

Our operations can be exposed to social environments where potential impacts or risks may be more difficult to manage. Examples include areas experiencing conflict, areas where there is a history of community grievances leading to protests and business disruption, or areas where there are unusually high expectations for community benefits such as jobs, contracting opportunities or social investment.

Our standards require assets, projects or businesses operating in environments with high or unusual social risks to obtain specialist advice from a qualified expert. The aim of this requirement is to ensure that input to local management plans is provided by individuals with the necessary expertise.

Social investment

In countries where our social investment spend exceeds $500,000 per year, our standards require a social investment strategy to define goals and measurable social outcomes. The strategy documents how projects are planned and managed, how alignment with stakeholder and business priorities are determined, how project impacts are monitored and evaluated, and how the project will transition once Shell's support ends. Our standards require project- or asset-level social investment plans to align with our country social investment strategy, while reflecting local needs and priorities.

Disaster relief

In countries where Shell expects to provide aid in the event of a natural or humanitarian disaster, our standards require the development of a disaster relief donation plan to predetermine the circumstances in which Shell will make donations and how they will be delivered. The intent is to enable us to be well prepared for a swift and appropriate response to alleviate the impacts of a disaster on communities. This includes partners that are preselected and prescreened, allocated budgets and agreements that are in place where needed.

Security

Shell has incorporated the Voluntary Principles on Security and Human Rights (VPSHR) to give guidance on how to respect human rights while providing security for business operations. Shell avoids the use of armed security except for where there is a requirement under local laws or in countries where threats are most severe.

Our standards require country management teams to identify potential negative impacts and risks associated with security and human rights in line with the Voluntary Principles on Security and Human Rights. Where potential impacts or risks exist, our standards require mitigation actions and monitoring of effectiveness. Our standards require incidents or allegations to be reported internally and investigated. Our Shipping and Maritime business adopts comparable practices for shipping operations.

Communities and human rights

Communities are one of Shell's four key focus areas for human rights, alongside labour rights, workers in our value chain and security. The following human rights commitments are of specific relevance to communities.

Communities and human rights

Topic	Commitment
Social impacts	We manage the social impacts of our business, including potential human rights impacts, while working to enhance the benefits of our activities for local communities and mitigate any negative impacts. Listening and responding to community concerns is an important part of our approach to providing access to remedy.
Indigenous Peoples	Our activities can affect Indigenous Peoples who hold specific rights for the protection of their culture, traditional ways of life and special connections to land and water. Shell seeks the support and agreement of Indigenous Peoples potentially affected by our activities through mutually agreed, transparent and culturally appropriate consultation and impact management processes.
Human rights defenders	Freedom of expression, association and peaceful assembly are basic human rights. Their protection contributes to a well-functioning society. Shell does not interfere with or inhibit the peaceful, lawful and safe activities of human rights defenders to exercise these rights. Shell will not contribute to or support retaliation, threats, intimidation or attacks against those who raise human rights-related concerns in relation to our operations.

Shell's standards with respect to affected communities are based on a commitment to respect human rights as set out in the UN Universal Declaration of Human Rights.

Our approach is informed by the UN Guiding Principles on Business and Human Rights. Our policies with respect to Indigenous Peoples are designed to support the UN Declaration on the Rights of Indigenous Peoples.

See "Other disclosures" on page 419 for information about cases of non-respect of the UN Guiding Principles on Business and Human Rights, the International Labour Organization Declaration on Fundamental Principles and Rights at Work or the OECD Guidelines for Multinational Enterprises involving affected communities in our operations or our upstream and downstream value chain.

Processes for engaging with affected communities about impacts (S3-2)

We engage with communities throughout the project life cycle. This helps us to understand their needs and expectations, obtain input on identifying and managing impacts, and provide access to remedy. Engagement is a continuous process that helps us improve our decision-making and performance.

We use communication channels that are appropriate for local circumstances to enable effective engagement with community members, their legitimate representatives and credible proxies that may have insight into their situation. Engagement is an ongoing process. The people we engage with, the topics we discuss, and the frequency and type of engagement vary across the life cycle and location of our business activities.

The manager of a project or asset is accountable for community engagement, supported by specialists in community engagement or impact management as appropriate. Shell's Vice President for Social Performance is responsible for providing Group-level support for engagement activities where required.

When planning new projects, we undertake environmental and social impact assessments to identify potential impacts on communities. These are designed to help us identify and manage potential impacts on the environment, livelihoods, health, human rights and other aspects of well-being. Impact assessments are usually carried out by specialist external consultants, under the supervision of Shell experts.

At each stage of the process, we consider potential impacts and decide how best to proceed. We apply the mitigation hierarchy, a decision-making framework that helps us to avoid negative impacts and, where this is not possible, to minimise, mitigate or restore. When negative impacts cannot be avoided through improvements in project design, we implement measures to mitigate negative impacts and enhance positive impacts. Community involvement is important for identifying potential impacts and determining whether mitigations or enhancements will have the desired result.

For countries where we have a large community footprint, we undertake an annual review process to assess the effectiveness of our work with affected communities. This includes testing the effectiveness of our engagement approach.

When designing engagements with communities, we prioritise groups that will be most impacted or least resilient to negative impacts. Depending on the circumstances, we may design tailored engagement processes to engage with such groups effectively.

When engaging with Indigenous Peoples, we engage through mutually agreed, transparent and culturally appropriate consultation processes. Shell recognises the principle of free, prior and informed consent (FPIC), as interpreted by the International Finance Corporation Performance Standards, as a safeguard for Indigenous Peoples' rights.

During construction and operations, we maintain engagement with communities about impacts and benefits. When we divest assets or exit areas, we collaborate with partners with the aim of leaving a positive legacy.

For non-operated ventures, we use a risk-based approach to determine where we need to engage with business partners to support their work with affected communities. If necessary, we may offer technical support to our partners or undertake direct engagement ourselves.

Processes to remediate negative impacts and channels for affected communities to raise concerns (S3-3)

Engagement with communities is an important part of our approach to managing human rights and providing access to remedy. Shell offers several channels to encourage affected communities to raise concerns. Large projects and assets have dedicated community engagement practitioners, who act as a bridge between local communities and our operations. We also offer community feedback mechanisms that allow us to receive, track and respond to questions and complaints. Communities can also raise concerns anonymously through the Shell Global Helpline. In locations where third-party-operated complaint systems are in place, such as those of a government, we sometimes use these to inform us of feedback related to our operations and to respond appropriately.

Providing access to remedy

Shell provides and facilitates access to remedy through community feedback mechanisms and the Shell Global Helpline. Shell does not require individuals or communities to permanently waive their legal right to bring a claim through a judicial process as a precondition of raising a grievance through a Shell grievance mechanism, nor will Shell otherwise take extrajudicial measures to obstruct state-based judicial processes.

Shell will not contribute to or support retaliation, threats, intimidation or attacks against those who raise concerns in relation to our operations.

We have assessed our community feedback mechanism against the access to remedy criteria of the UN Guiding Principles on Business and Human Rights. This has enabled us to improve our approach, helping to ensure we treat community feedback consistently across our operations, respect anonymity and allow communities to pursue other options if they disagree with the outcome of the process.

In some locations, community members may be employed by suppliers who perform work on Shell sites. We have contractual requirements for suppliers to provide their own grievance mechanisms (see "Shell Supplier Principles" on page 425). Concerns may also be submitted via the Shell Global Helpline.

Assessing effectiveness

Our standards require assets, projects or businesses where communities are potentially affected to track and respond to questions, complaints and feedback.

For countries where we have a large community footprint, we conduct an annual review of the effectiveness of our work with communities. As part of this process, we analyse concerns raised through community feedback mechanisms to understand opportunities to improve.

We also evaluate the effectiveness of the mechanism in terms of whether it is known, trusted and used. In 2024, we improved our internal tools to make it easier to track user satisfaction with the remedies afforded by the process.

We seek feedback from communities on the effectiveness of feedback mechanisms. Where appropriate, we may involve communities in tracking and monitoring how concerns are addressed.

Taking action on material impacts on affected communities, and approaches to managing material risks and pursuing material opportunities related to affected communities, and effectiveness of those actions (S3-4)

In 2024, we continued to take steps to improve our approach to managing impacts and supporting access to remedy through community feedback mechanisms.

The scope of the actions described in this section covers Shell companies and joint ventures in which Shell is the operator, unless otherwise stated. Many of our actions are of an ongoing nature. Horizons for the completion of time-bound actions are indicated where applicable.

Our actions are intended to help us achieve the desired outcome of our policies and standards by providing resources and expertise that support our businesses to implement them in fit-for-purpose ways.

Building capacity to manage impacts

In 2024, our improvement plan for social performance focused on five themes. These comprised work to embed our standards and strengthen the integration of social performance into business decisions; support local teams to drive continuous improvement; develop the competence of staff in critical positions; deepen our understanding of the potential community issues associated with changes in our business portfolio; and provide risk-based support to our non-operated ventures.

Portfolio changes

For Shell, the energy transition brings new business models that require different approaches to social performance. For example, new business opportunities in Shell's Renewables and Energy Solutions and Nature Based Solutions businesses may require us to work with partners who have less experience in managing community impacts such as land acquisition or disruption to livelihoods.

We seek to offer our support and exert a positive influence on non-operated ventures where we identify a need for additional technical expertise or resources.

Indigenous Peoples

Historically, most of Shell's interactions with Indigenous Peoples have taken place in highly regulated contexts such as in Canada and Australia.

In Australia, our QGC business continues to work on negotiations with several Traditional Owner groups to modernise existing Indigenous land use agreements. The process has proven challenging, partly owing to the need to rebuild trust and confidence between the parties. In Alberta, Canada, Shell Energy and Chemicals Park Scotford signed a good neighbour agreement with its two closest indigenous communities, the Enoch Cree Nation and the Alexander First Nation.

Our potential exposure to Indigenous Peoples issues increasingly extends beyond these countries, especially in the context of nature-based solutions. For these projects, our standards require certification to the Climate, Community and Biodiversity (CCB) Standards or an equivalent, which includes requirements around free, prior and informed consent.

Land acquisition and resettlement
Land acquisition and resettlement is a key focus area across our operated and non-operated ventures, and requires specialist skills to manage. In 2024, we engaged in plans to manage impacts associated with potential economic resettlement in Albania, Norway, South Korea, Trinidad and Tobago, and the UK. We also provided support to resettlement processes in non-operated ventures in Tanzania, Iraq and Brazil. In addition, we supported local assets in the USA and other countries with issues related to encroachment.

Cultural heritage
In 2024, projects in Australia, Namibia, Oman and Trinidad and Tobago established chance-find procedures in their operations, aligned with our standards. We continue to implement cultural heritage procedures in our exploration operations in Albania, where several significant archaeological discoveries have been made since 2019.

Security
Our operations expose us to criminality, civil unrest, activism, terrorism, cyber disruption and acts of war. We take steps to have clear and planned responses to security incidents so that we are able to react effectively if they occur.

Shell is a member of the Voluntary Principles on Security and Human Rights (VPSHR), a multi-stakeholder initiative that gives guidance on how to respect human rights while providing security for business operations. Shell implements this guidance within our operations, concentrating on countries where the risks of working with government and private security forces are identified as greatest.

We carry out annual risk assessments and develop implementation plans to manage the identified risks. As part of these plans, we carry out training and awareness briefings with the security forces that we rely on in our implementation countries. We also screen private security providers on VPSHR and monitor their performance.

Social investment
Our activities contribute to economies through taxes, jobs and business opportunities. We also make social investments in areas determined by local community needs and priorities. These investments are sometimes voluntary and sometimes required by governments or as part of a contractual agreement.

Shell has three priority areas for social investment: access to energy; skills and enterprise development; and science, technology, engineering and maths education. In 2024, we spent $165 million on social investment, of which $87 million (53%) was required by government regulations or contractual agreements. We spent the remaining $78 million (47%) on voluntary social investment.

An important part of our social investment is our contribution to communities that have been impacted by disasters. Typically, Shell provides financial donations to non-governmental and partner organisations that are experienced in providing humanitarian aid in disaster situations. Where possible and needed, we also contribute our products and services, such as fuel, chemical products, transport and logistics.

Community skills and enterprise development
Our community skills and enterprise development programmes benefit communities where we operate by creating employment opportunities and contributing to economic development. These programmes also strengthen the number of potential suppliers and staff for our value chain.

Education in science, technology, engineering and maths
We actively support science, technology, engineering and maths (STEM) through a range of programmes. NXplorers, our flagship STEM programme, aims to help young people develop creative thinking to bridge the skills gap.

Local content
See "Local content" on page 426 for information about our approach.

Tracking effectiveness
For countries where we have a large community footprint, we undertake an annual review process to assess the effectiveness of our work with affected communities. This includes an assessment of how we manage negative and positive impacts on communities, undertaken by local staff and corporate experts. Social performance issues are considered as part of our HSSE & SP internal assurance processes.

Responding to concerns
We may become aware of actual or potential negative impacts through impact assessment, stakeholder engagement or concerns raised through community feedback mechanisms. Depending on the nature of the issue, we may investigate the concern ourselves or refer it to a third party if appropriate.

If an incident is confirmed, we review the circumstances and decide on the action to be taken. When the impacts are preventable or remediable, we may consider appropriate measures. Such measures may be taken on our own or in conjunction with others. When actual or potential impacts arise in relation to topics such as impact management or land acquisition, we aim to ensure our standards are implemented in an appropriate manner.

See "Processes to remediate negative impacts and channels for affected communities to raise concerns (S3-3)" on page 422 for further information about our approach to access to remedy.

Other disclosures
Shell seeks to avoid or minimise material adverse impacts on affected communities by embedding respect for their rights in our policies and practices. Shell is committed to respecting human rights as set out in the UN Universal Declaration of Human Rights and the International Labour Organization Declaration on Fundamental Principles and Rights at Work. Our approach is informed by the UN Guiding Principles on Business and Human Rights. We provide and facilitate access to remedy.

Our policies on impact assessment, environmental management and communities are designed to manage the impacts of our activities. See "Policies related to affected communities (S3-1)" on page 420 and "Communities and human rights" on page 421 for more information.

An incident is a legal action or complaint registered with the undertaking or competent authorities through a formal process, or an instance of non-compliance identified by the undertaking through established procedures. According to the UN Guiding Principles on Business and Human Rights, a severe human rights incident is characterised by the significant impact it may have, which is evaluated based on its scale, scope and irremediable nature. An incident may be severe by virtue of one or more of these criteria.

In 2024, no severe human rights incidents connected to affected communities were identified. No severe human rights incidents connected with land disputes or free prior and informed consent of Indigenous Peoples were identified.

In 2024, no cases of non-respect of the UN Guiding Principles on Business and Human Rights, the ILO Declaration on Fundamental Principles and Rights at Work or the OECD Guidelines for Multinational Enterprises connected to affected communities were identified in our operations or our upstream and downstream value chain.

Resourcing our actions

The Executive Vice President for Safety, Environment and Asset Management is the most senior executive in Shell with accountability for the development, governance and oversight of the SEAM Standards. Leaders of assets, performance units, businesses or functions are accountable for assessing which SEAM Standards are relevant to them based on their objectives, risk profile and activities, and for implementing those standards as appropriate.

Implementation of SEAM Standards relevant to social performance is supported by members of Shell's Corporate Relations and Safety, Environment and Asset Management function. These include experts in community engagement, resettlement, Indigenous Peoples, human rights, impact assessment and other disciplines. The requirements of our standards are communicated to people involved with implementation through various mechanisms, including internal communication channels, management systems and training as appropriate.

Planned actions

In 2025, we will continue to:

- manage stakeholder engagement, impact management, involuntary resettlement, cultural heritage, Indigenous Peoples, high or unusual social risks, social investment, disaster relief, and security and human rights in line with our standards; and
- support efforts to provide access to remedy for affected communities through community feedback mechanisms.

Our action plans are responsive to changing business conditions. Planned actions not directly related to compliance with regulations or our own standards are subject to change. The actions indicated above represent key focus areas rather than an exhaustive list.

Targets related to managing material negative impacts, advancing positive impacts, and managing material risks and opportunities (S3-5)

Our business activities and the communities in which we operate are diverse. Experience shows that local goals drive more appropriate outcomes than globally aggregated targets, which may or may not be applicable to every community. For this reason, we have not adopted consolidated targets on affected communities at a Group level.

We aim for continuous improvement in our performance and may set goals at a local level addressing specific priorities, such as reducing road traffic or enhancing local recruitment and contracting. Such goals may include performance measurement from a base period to a future period. Where appropriate, we engage directly with affected communities to discuss the local priorities. In some cases, this may involve community participation in setting goals, monitoring progress, identifying lessons learned or further opportunities for improvement.

Governance | Business conduct (G1)

Our core values of honesty, integrity and respect for people, as well as our focus on safety and sustainability, are critical to our strategy.

Our double materiality assessment has identified a culture of integrity and responsible sourcing as material topics. It has also identified tax and payments to governments and safety as material entity-specific topics, which we cover in this section in recognition of their overarching relevance for Shell's activities. See "Material impacts, risks and opportunities and their interaction with strategy and business model (SBM-3)" on page 351 and "Description of the process to identify and assess material impacts, risks and opportunities (IRO-1)" on page 354 for more information.

Why it matters

Our core values of honesty, integrity and respect for people underpin our work with employees, customers, investors, contractors, suppliers, non-governmental organisations (NGOs), the communities where we operate and others. We are committed to doing business in an ethical and transparent way.

Business conduct policies and corporate culture (G1-1)

Our core values underpin our work with employees, customers, investors, contractors, suppliers, NGOs, the communities where we operate and others. The Shell General Business Principles, Code of Conduct and Ethics and Compliance Manual help everyone at Shell to act in line with our values.

The Shell General Business Principles set out our responsibilities to shareholders, customers, employees, business partners and society. They set the standards for how we conduct business with honesty, integrity and respect for people. As part of these principles, we commit to contribute to sustainable development, by balancing short- and long-term interests and integrating economic, environmental and social considerations into our decision-making. All Shell employees and contractors, and those at joint ventures we operate, are expected to behave in line with these business principles.

The Shell Code of Conduct explains how employees, contractors and anyone else acting on behalf of Shell must behave to live up to our business principles. It covers safety, anti-bribery and corruption, fair competition, human rights and other important areas.

The Shell Ethics and Compliance Manual defines the detailed requirements for businesses and functions to comply with laws on anti-bribery and corruption, anti-money laundering, preventing the facilitation of tax evasion, antitrust, data privacy and trade compliance.

Shell employees, contractors and third parties can report potential breaches of the Code of Conduct confidentially through several channels, including anonymously through the Shell Global Helpline.

We maintain a stringent no retaliation policy to protect any person making an allegation in good faith. This protection extends to those who participate in or conduct an investigation. We investigate allegations of potential violations of the Shell Code of Conduct or applicable laws promptly and independently of the management line concerned.

Our policies require Shell staff to undergo appropriate ethics and compliance training. The type and depth of training is dependent on the level of risk. Training is repeated every three years, or more frequently for positions where the risk exposure is higher. Functions considered to be at higher risk for exposure to bribery include, but are not limited to, persons involved in procurement and contracting, new business development and engagement with government officials. Staff involved in receiving and investigating potential breaches of the Code of Conduct undergo specific training in managing such cases.

See the conduct and culture risks highlighted in "Risk factors" on pages 135-144 for additional information on how Shell seeks to establish, develop, promote and evaluate our corporate culture.

See "Animal testing" on page 392 for information about Shell's animal welfare standards.

Management of relationships with suppliers (G1-2)

As part of Shell's responsible sourcing approach, we aim to work with suppliers that behave in an economically, environmentally and socially responsible manner.

Shell Supplier Principles

Shell partners with suppliers who adhere to our Shell General Business Principles and Shell Supplier Principles. Our standard contract terms require adherence to these or equivalent principles.

The Shell Supplier Principles apply to contracts managed by Shell's Supply Chain organisation, which generally manages procurement of non-hydrocarbon goods and services on behalf of Shell companies and joint ventures in which Shell is the operator.

Our Supplier Principles comprise the following topics:

- Business Integrity: compliance with Shell standards and applicable laws and regulations, including with respect to corruption, bribery, competition and conflicts of interest.
- Health, Safety, Security, Environment and Social Performance (HSSE & SP): a systematic approach to managing health, safety, security and environment, including environmental protection, energy and resource efficiency, managing social impacts, and respectful engagement with employees, communities and other stakeholders.
- Labour and Human Rights: respect for human rights and labour rights, including no use of forced labour or child labour; no payment of recruitment fees by workers; compliance with applicable laws on freedom of association and collective bargaining; no tolerance for harassment, discrimination or retaliation; compliance with applicable laws on working hours; wages and benefits that meet or exceed national legal standards; and grievance mechanisms where concerns can be raised confidentially.

Suppliers are required to notify Shell in case of any violations of the Shell General Business Principles or the Shell Supplier Principles.

Shell evaluates and selects its suppliers based on, among other things, the following considerations: capability to act in accordance with the Shell General Business Principles and Shell Supplier Principles, clear financial position, technical capability of delivering in line with Shell standards, and ability to deliver the scope of work safely and manage human rights and worker welfare within their own operations and respective supply chains.

After the initial assessment of potential suppliers, we may carry out additional risk assessments. These can trigger further assessment of suppliers' capability on topics such as worker welfare and ethics and compliance. Depending on the risk profile, suppliers may be asked to put mitigation actions in place.

Our purchases of goods and services, including from small and medium-sized enterprises, are governed by standard contractual terms and conditions. These specify the scope of the contract, the responsibilities of the parties to each other and processes for payment.

Our standard terms require suppliers to issue an invoice once the agreed goods or services have been satisfactorily delivered and accepted by Shell. We aim to pay any undisputed amounts within the time period specified in the contract after receiving a correct and adequately supported invoice.

Enhanced value chain due diligence

In 2024, we took steps to strengthen our human rights due diligence processes for sourcing goods and services. We have introduced a new policy within our Category Management and Contracting Process Framework requiring additional due diligence for new contracts with higher potential for human rights impacts. See "Enhanced value chain due diligence" on page 416.

Local content

We want to make a positive difference to countries and local communities where we operate. We do this by creating jobs, training people, supporting local businesses and buying goods and services from local suppliers – collectively referred to as local content. We also work to include in our supply chain enterprises that are part of historically under-represented or underserved groups.

Prevention and detection of corruption and bribery (G1-3)

The Shell General Business Principles, Code of Conduct and Ethics and Compliance Manual define our requirements for complying with laws on anti-bribery and corruption. These requirements apply to all Shell-operated ventures and companies in which Shell holds a controlling interest, either directly or indirectly.

Our approach

To help us prevent and detect corruption and bribery, we require our business and functions to undertake regular risk reviews and implement risk-based controls. We identify roles that are exposed to potential bribery and corruption risks and provide training. We require ethics and compliance due diligence when contracting, engaging in business development, before funding social investment and before entering into relationships with trade associations. We also include ethics and compliance clauses in our contracts.

Specialists in our Business Integrity Department and Human Resources function manage investigations when concerns are raised. Independent audits are conducted by Shell Internal Audit and Investigations (SIAI).

Raising and investigating concerns

If staff wish to report a concern, they may speak to their line manager, the Shell Ethics and Compliance Office (SECO) or a representative of the Human Resources or Legal functions. Alternatively, staff and third parties can contact the Shell Global Helpline, which is available to anyone, 24 hours a day, seven days a week, via telephone or the internet. Reports can be made anonymously and in multiple languages.

Shell has a professional Business Integrity Department that investigates allegations of potential violations of the Shell Code of Conduct. This function operates independently from the management line under investigation. We conduct investigations according to six investigation principles: confidentiality, impartiality, integrity, competence, timeliness and protection from retaliation. Only trained members of the Business Integrity Department and Human Resources function have the authority to direct, manage or conduct such investigations.

Each quarter, the Business Integrity Department reports on Code of Conduct incidents to the Business Integrity Committee, Executive Committee (EC) and the Board Audit and Risk Committee (ARC). Ethics and compliance officers review cases, investigation outcomes, trends, learnings and follow-up actions. Shell's Chief Ethics and Compliance Officer (CECO) reports to the EC and ARC on compliance with the application of the investigation principles and overall consistency of our approach. See "Audit and Risk Committee Report – Compliance and Governance" on page 183 for more information.

Shell Internal Audit and Investigations (SIAI) provides independent and objective assurance on the adequacy and effectiveness of our risk management and internal controls. SIAI conducts investigations of corporate irregularities raised through the Shell Global Helpline and produces causal analysis and learning on business incidents.

See "The role of the administrative, management and supervisory bodies (GOV-1)" on page 345 for information about the governance of ethics and compliance.

Training

Ethics and compliance training in Shell follows a risk-based approach, with the depth of training required of staff dependent on the level of risk associated with their role.

Staff must complete all assigned Shell ethics and compliance training courses. Code of Conduct training, which explains the behaviour Shell expects from its representatives, is mandatory for all employees and contractor staff.

Certain roles pose higher risks for corruption or bribery owing to the sensitive nature of the transactions involved or because they entail engagement with government officials. We prioritise additional training for these roles.

We require all staff in roles identified as being potentially at risk for exposure to corruption or bribery to undergo appropriate training. Training completion is tracked and repetition cycles are defined. Training on anti-bribery and anti-corruption is valid for three years from the date of completion but may be refreshed more frequently, for instance in response to changes in the risk environment. In 2024, 98% of staff in at-risk roles possessed a valid training completion in line with the applicable cycle.

We offer free training in anti-bribery and anti-corruption practices to selected suppliers. This training is available in 14 languages.

The Board endorses the Shell ethics and compliance programme including the required training programmes. An Ethics and Compliance Learning Board, chaired by the CECO, makes decisions on strategic direction and how we run effective training. Anti-bribery and corruption is reviewed on a periodic basis to ensure content is relevant and up to date.

Communicating our expectations

Shell's policies on ethics and compliance are communicated to employees, suppliers and third parties at the start of any contractual relationships and through training, leadership communications and Shell's website. Our Code of Conduct and associated training are offered in multiple languages with the aim of making our expectations clear and easy to understand.

Incidents of corruption or bribery (G1-4)

No Shell company, and to the best of our knowledge, no Shell staff were convicted or fined for criminal violations of anti-corruption and anti-bribery laws in 2024.

We review cases involving alleged violations of anti-corruption and anti-bribery to identify lessons learned and improve our internal processes. We take appropriate steps when violations are substantiated, which can include consequence management and other actions.

Actions and resources

In 2024, we continued to manage ethics and compliance through our policies and systems. This included implementing the detailed requirements of the Ethics and Compliance Manual, providing training, maintaining risk-based compliance programmes and encouraging people to discuss the dilemmas they face in their work. We will continue these activities in 2025.

We have not adopted consolidated targets for ethics and compliance. We track the effectiveness of our policies and actions through data and insights from the Shell Global Helpline, the Shell Ethics and Compliance organisation and the Shell People Survey.

Accountability for ethics and compliance in Shell lies with the Chief Executive Officer and the Executive Committee. Implementation is supported by Shell's Ethics and Compliance Office, which includes subject matter experts in business ethics and compliance.

Tax and other payments to governments

One of the ways Shell makes a meaningful financial contribution to the countries where we operate is by paying taxes. Our operations generate revenues for governments through the taxes and royalties we pay, which are often used to fund essential public services.

Our double materiality assessment has identified tax and other payments to governments as a material entity-specific topic. See "Material impacts, risks and opportunities and their interaction with strategy and business mode (SBM-3)" on page 351 and "Description of the process to identify and assess material impacts, risks and opportunities (IRO-1)" on page 354 for more information.

Why it matters

When we invest in a country, we seek to build long-term relationships and develop our business sustainably. We recognise our responsibility towards investors, governments, employees and the local communities we are part of. Revenue transparency and the taxes we collect and pay are one of the ways we fulfil this responsibility.

Our approach to tax is designed to support our strategy through our commitment to transparency, compliance and open dialogue with our stakeholders, from governments to civil society.

The Board of Directors of Shell plc approves our tax strategy, reviews its effectiveness and maintains sound internal controls.

Our approach to tax

Our tax strategy is designed to support Shell in delivering its strategy

Shell is committed to tax compliance

- We have a taxable presence in 99 jurisdictions
- We file around 44,000 tax returns annually
- We seek to protect the interests of our investors by managing our tax affairs in a sustainable way

Shell is transparent on tax matters

- We publish our global approach to tax and the taxes we pay by country or location
- We publish payments on our extractive activities by project
- We seek to provide tax authorities with timely and comprehensive information on potential tax issues

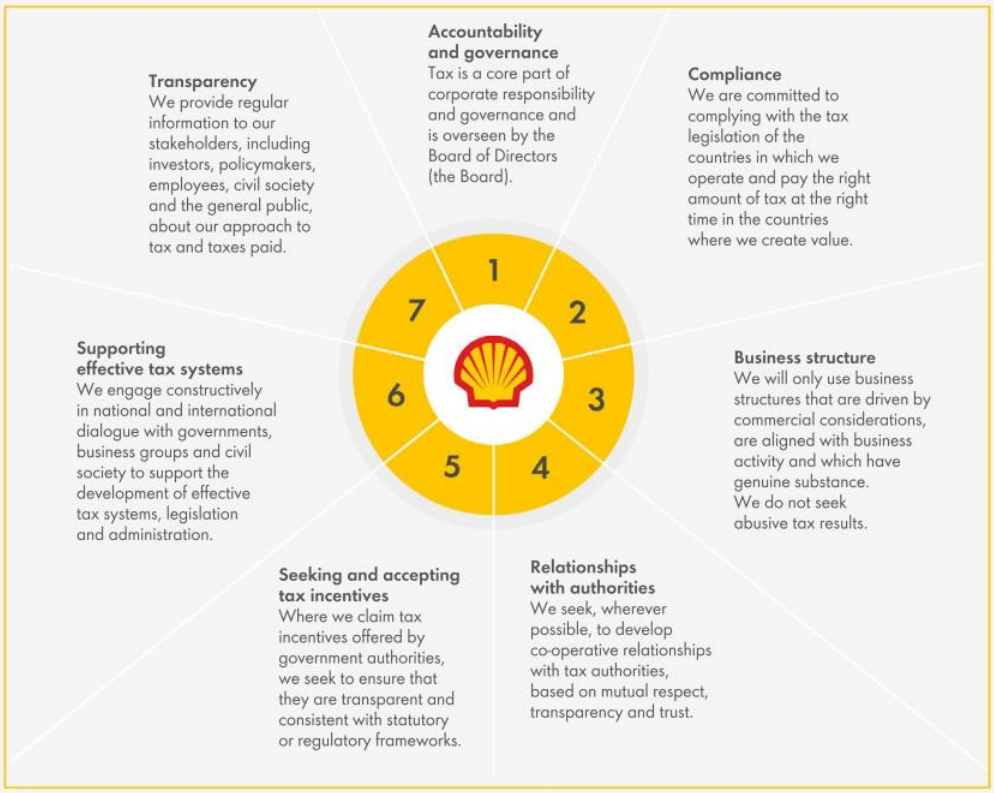
Shell is open to dialogue

- We engage with society on tax matters
- We promote co-operative compliance relationships
- We give constructive input to industry groups and international organisations

Policies related to tax

The B Team Responsible Tax Principles were developed by companies, including Shell, civil society, investors and representatives from international institutions. We adopted The B Team Responsible Tax Principles as our own. The Shell Responsible Tax Principles guide our decisions on tax matters.

Shell Responsible Tax Principles



Actions and resources

In 2024, Shell paid $12,459 million in corporate income taxes and $5,737 million in government royalties. We also collected excise duties, sales taxes and similar levies on our fuel and other products on behalf of governments.

We publish an annual Tax Contribution Report which sets out the corporate income tax that Shell companies paid in the jurisdictions where we have a taxable presence. Shell also publishes an annual Payments to Governments report, prepared in accordance with the UK's Reports on Payments to Governments Regulations 2014 (as amended in December 2015). This report is also published pursuant to article 5:25e of the Dutch FMSA (Wft) and is furnished with the US Securities and Exchange Commission according to Section 13(q) under the US Securities Exchange Act of 1934.

We regularly engage with policymakers to support the development of tax rules and regulations. In this way, we hope to contribute to the development of fair, effective and stable tax systems. We also provide constructive input to industry groups and international organisations, such as the Extractive Industries Transparency Initiative, The B Team Responsible Tax Working Group and the international business network Business at OECD.

The Board of Directors of Shell plc approves our tax strategy, reviews its effectiveness and maintains sound internal controls. The Executive Vice President Taxation and Corporate Structure is responsible for tax matters and provides assurance based on our tax control framework. Implementation is supported by members of Shell's Finance function, which includes subject matter experts on various aspects of tax. In 2025, we will continue to be guided by the Shell Responsible Tax Principles in our tax-related activities.

We have not adopted consolidated targets for this topic. We track the effectiveness of our policies and actions through regular monitoring and review of our financial, operational and compliance controls, including tax controls.

Read more about our approach to tax on shell.com.

Safety

Safety, along with our core values, underpins our strategy. We aim to do no harm to people and to have no leaks across our operations. We call this our Goal Zero ambition.

Our double materiality assessment has identified safety as a material entity-specific topic. See "Material impacts, risks and opportunities and their interaction with strategy and business model (SBM-3)" on page 351 and "Description of the process to identify and assess material impacts, risks and opportunities (IRO-1)" on page 354 for more information.

Why it matters

The nature of our operations exposes us to a wide range of safety risks. We strive to reduce risks and to minimise the potential impact of any incident, with a particular emphasis on the risks with the most serious consequences if something goes wrong.

We seek to improve safety by focusing on the three areas where risks associated with our activities are highest: personal, process and transport.

Personal safety in Shell refers to occupational hazards associated with building, maintaining or operating our facilities. Process safety is about keeping hazardous substances inside pipes, tanks and vessels, and ensuring that well fluids are contained during construction, well interventions (such as maintenance) and operations. Transport safety concerns hazards associated with transporting people, products or equipment by road, sea, air and rail.

Policies related to safety

Our approach to safety is governed by the Shell Commitment and Policy on Health, Security, Safety, the Environment and Social Performance (HSSE & SP). It sets out our expectations for the management of HSSE & SP and applies to all Shell companies, contractors and joint ventures under our operational control.

We translate the Shell Commitment and Policy on HSSE & SP into action through our Safety, Environment and Asset Management (SEAM) Standards. The SEAM Standards set out our requirements for personal safety, process safety, transport safety and emergency response (see "SEAM Standards" on page 130).

The standards described in this section apply to Shell companies and joint ventures in which Shell is the operator, except where otherwise stated. We expect non-operated joint ventures to adopt appropriate and acceptable policies to manage their risks.

Management systems

Our standards require a systematic approach to managing HSSE & SP. The foundation of this approach is our management system.

The SEAM HSSE & SP and Asset Management Foundations Standard sets the requirements for the core elements of our management system. It covers topics such as establishing an organisation to manage HSSE & SP, management accountabilities and responsibilities, assurance, competence management, performance monitoring and continuous learning and improvement. The standard also specifies core processes such as risk management, management of HSSE & SP through a hierarchy of controls, permit to work and management of change. It also sets out our requirements for HSSE & SP in joint ventures, capital projects, acquisitions and divestments.

Contractor HSSE management

When contracting for goods and services, our standards require assets or businesses to specify the activities in the contracted scope of work and to determine the associated level of HSSE risk. Our standards require verification that the supplier is capable of managing the HSSE risks in the contract scope.

Our standards require HSSE requirements to be established in contracts. These requirements formalise our expectations for HSSE risk management associated with the contracted scope and the supplier's capability to manage those risks. Based on the contract scope, the assessed risk, and the capability of the supplier, a contract mode is determined which describes the HSSE risk management responsibility of Shell and the supplier, which in turn determines the HSSE management system applicable in controlling each risk.

Our standards require suppliers to demonstrate readiness to implement HSSE risk management before starting work. Our standards also require assets or businesses to assure effective implementation of HSSE risk management and to conduct performance management against contractual requirements.

The above requirements apply to contracts providing goods or services to the company with the exception of non-differentiated goods and services which are of a standard nature, common to all customers, where it is not practically possible to impose and verify effectiveness of additional requirements or controls to manage HSSE risks beyond the Shell Supplier Principles. See "Shell Supplier Principles" on page 425 for more information.

Personal safety

The SEAM Workplace Health, Safety and Security Standard establishes requirements for occupational health and safety hazards that have the potential to result in harm to people.

Examples include standards to manage control of work, working in confined spaces, diving and tunnelling operations, electrical safety, excavation, hot work, ionising radiation, lifting and hoisting, personal protective equipment, safe isolation and working at heights. Additional standards cover building safety, business travel, company-sponsored events, health hazard management, product stewardship, fatigue risk management, fitness to work, human factors management and security.

Process safety

The SEAM Process Safety and Asset Management Standard establishes requirements from project design and construction throughout the life cycle to keep sites, employees, contractors and communities safe.

The standard defines our requirements for the identification of process safety hazards and the design of controls to prevent the release of the identified hazards. In the event of a spill or a leak, our standards require the use of independent recovery measures to reduce the likelihood of a release becoming catastrophic. We regularly inspect, test and maintain these barriers so that they meet our standards.

Transport safety

The SEAM Transport Safety Standard sets out our requirements for road, rail, sea and air transport.

Road safety

Our standards define requirements for managing risks related to road transport. Examples of topics covered by these standards include vehicle specifications and inspection, training and qualification for drivers, journey management and fatigue risk management. Our standards align with industry standards for land transport safety published by the International Association of Oil & Gas Producers.

Maritime safety
Our standards define requirements for managing risks related to maritime operations. These cover the use of cargo transport vessels and support vessels, ports and berths, and the operation of facilities with maritime interfaces. Our procedures include positive vetting for cargo transport vessels and support vessels. We require double hulls for bulk liquid transport in vessels of 600 deadweight tonnes and above. We maintain detailed procedures for managing maritime risks associated with floating production, storage and offloading units (FPSO) and floating storage and offloading units (FSO).

Air safety
Our standards, which incorporate the requirements of the International Association of Oil & Gas Producers (IOGP) Industry Air Transport Requirements, define requirements for managing risks related to aircraft operations, covering fixed wing, rotary, remotely piloted airborne systems and drone operations. Our procedures include processes for assessing aircraft operators used for Shell-owned, chartered or other contracted air transport operations. We only use aircraft types and aircraft operators that have been assessed as acceptable based on our standards.

Rail safety
Our standards define requirements for managing risks related to rail operations. These include requirements for procedures, controls and mitigations to manage risks associated with rail operations.

Emergency response
The SEAM Standards set out our requirements for emergency response, oil spill response and medical emergencies. These standards are designed to ensure that we are appropriately prepared to respond to all credible emergency and worst-case spill scenarios.

Our standards require assets and businesses to understand the potential emergencies that could happen as a result of our operations and develop plans to respond to these scenarios.

Our standards require asset and business incident management teams to be trained and to exercise the response plans regularly. These exercises often involve working closely with local emergency services and regulatory agencies to jointly ensure our capability to respond to an incident.

Our emergency and spill response plans and procedures are driven by our internal risk management processes and local regulatory requirements. Our standards require alignment with industry emergency and spill management systems to facilitate inter-organisational collaboration by responders.

Actions and resources
The scope of the actions described in this section covers Shell's operated businesses unless otherwise stated. Many of our actions are of an ongoing nature. Schedules for the completion of time-bound actions are indicated where applicable.

Our actions are intended to help us achieve the desired outcome of our policies and standards by providing resources and expertise that support our businesses to implement them in fit-for-purpose ways.

Our multi-year process of refreshing our approach to safety for all employees and contractors started in 2020. This approach is rooted in a consistent focus on human performance. We ask people at Shell to apply a learner mindset, by which we mean the belief that we can always improve, enhance individual capabilities, learn from mistakes and successes, and speak up freely without repercussions.

In practice, our refreshed approach to safety is about enhancing how we prepare for and conduct high-risk activities by:
- improving our preparation and execution of frontline work, building an environment of trust and learning;
- moving to industry-wide tools so that Shell and contractors work on the same basis to manage risks; and
- using technology to reduce exposure and identify conditions that could lead to serious incidents.

It is also about capturing more insights by:
- focusing on serious injuries, illness and fatalities (SIF) and the lessons we can derive from high-potential incidents where the most serious consequences that could have led to SIF did not materialise;
- focusing on learning from losses or potential losses of containment, and on any degradation of barriers designed to prevent or minimise the consequences of leaks;
- capturing underlying causes through incident investigations; and
- embedding lessons learned in our training and instructions for future work.

In 2024, we continued to integrate this approach into the plans of our facilities, projects and functions. Some of our non-operated ventures have also chosen to implement elements of our refreshed approach.

Personal safety
When our employees and contractors perform tasks, we expect them to consider the hazards that could potentially cause serious harm and the effectiveness of the barriers in place to avoid serious harm. We establish and maintain competence management systems to ensure people are competent to perform their roles and responsibilities.

We run safety awareness programmes and hold an annual global Safety Day to give employees and contractors time to discuss safety culture on the frontline, and reflect on how to prevent incidents and how to improve performance. In 2024, the focus was on "Before I start work", which means pausing to reflect on what needs to be in place before we start work, for that work to be done safely.

Working with others
We work with contractors and suppliers to help them understand our requirements for managing risk and operating safely. We strive to help improve the energy industry's safety performance by sharing safety standards and experience with other operators, joint venture partners, contractors and professional organisations.

In 2024, senior executives from more than 20 of our major contractors joined Shell executives in Houston, Texas, for our annual Contractor Safety Leadership workshop. Discussion focused on preventing fatal and life-changing injuries through a focus on human performance, learning from and improving normal work, mental well-being, and worker welfare. Additionally, we support industry safe work coalitions in the oil products terminal sector and maritime sector with safety-specific work groups and regional conferences.

We also work with industry organisations to develop standards and practices supporting safe and disciplined operations. Some of the organisations we work with include the International Association of Oil & Gas Producers, the American Petroleum Institute, the Center for Chemical Process Safety, and the Energy Institute.

Process safety
In 2024, we continued to focus on strengthening our core work processes to improve the health of the human and technical barriers that help us to prevent process safety incidents and to recover effectively if they occur.

Our key focus areas are to standardise our risk assessment tools, embed human performance in frontline work execution and shift to performance indicators that help us better identify the preconditions that can lead to incidents, with a greater emphasis on risk potential.

We continued to embed our Process Safety Fundamentals, a set of 10 good operating practices that help us strengthen asset integrity and process safety. We also conducted work to better understand potential process safety risks associated with new business activities such as hydrogen, ammonia and carbon capture and storage.

Also in 2024, we continued to learn from investigations into industry incidents and embed this knowledge into our process safety standards and our training programmes. Such learning helps us to better understand the causes of process safety incidents so that we can improve our controls to prevent them from occurring.

Transport safety
In 2024, we continued to embed our standards. We worked with specialist contractors, industry bodies, non-governmental organisations and governments to find ways of reducing transport safety risks. We also took specific actions on road safety, aviation safety and maritime safety.

Road safety
In 2024, we continued to focus on strengthening our controls and implementing technology solutions that help us to better detect the conditions which can lead to accidents.

Our standards require Shell employees and contractors who are identified as driving on work-related business to receive defensive driver training.

We are installing active fatigue and distraction detection (AFDD) devices in vehicles operated by Shell or our contractors in countries where road transport risks are highest. These devices help us detect the conditions that can lead to accidents, which allows for earlier intervention to improve prevention. The AFDD devices have recorded and intervened in high-risk fatigue events, to prevent what could have resulted in motor vehicle incidents if the devices had not alerted the drivers.

Maritime safety
At the end of 2024, we managed and operated a global fleet of 22 tankers, liquefied natural gas carriers and the world's first liquefied hydrogen carrier. We are one of the world's largest charterers of oil and gas vessels. We work with our global maritime partners through our Maritime Partners in Safety Programme to improve the safety performance of the shipping industry.

Air safety
In 2024, for Shell-operated ventures, our owned and contracted aircraft flew around 37,000 hours and carried around 292,000 Shell and contractor passengers to destinations across the world. In addition, remotely piloted aircraft completed flights on surveys, inspections, emissions surveillance, and security and incident response.

Emergency response
In 2024, we held large-scale emergency response exercises at Shell Energy and Chemicals Park Rotterdam in the Netherlands and in Perth, Australia for offshore exploration to support our Prelude floating LNG facility.

We manage three regional Emergency Response Leadership Councils for the Americas; Asia–Pacific; and Europe, the Middle East and Africa. The councils bring together experts from different teams that need to be able to work together seamlessly in case of emergencies. In 2024, the councils held annual conferences in each region that covered a variety of topics such as lessons learned, dynamic risk assessments, new response technology, non-fluorinated firefighting foam tactics and response preparedness.

We continued to be involved in industry consortia to improve well-containment capabilities such as the Marine Well Containment Company for the Gulf of America region and Oil Spill Response Limited, a global industry consortium. For oil spills, we have created a global response support network that enables us to deal more effectively with oil spills, by supplementing local response capability.

Resourcing our actions
The Executive Vice President for Safety, Environment and Asset Management is the most senior executive in Shell with accountability for the development, governance and oversight of the SEAM Standards. Leaders of assets, performance units, businesses or functions are accountable for assessing which SEAM Standards are relevant based on their objectives, risk profile and activities, and for implementing those standards as appropriate.

Implementation of SEAM Standards relevant to safety is supported by members of Shell's Safety, Environment and Asset Management function, which includes subject matter experts in personal safety, process safety, transport safety and other disciplines. The requirements of our standards are communicated to people involved with implementation through various mechanisms, including internal communication channels, management systems and training as appropriate.

Planned actions
In 2025, we will continue to:
- manage personal safety, process safety, transport safety and emergency response in line with our standards;
- collaborate with peers and industry partners to drive continuous improvement in safety performance; and
- further mature and embed our refreshed approach to safety.

Our action plans are responsive to changing business conditions. Planned actions not directly related to compliance with regulations or our own standards are subject to change. The actions indicated above represent key focus areas rather than an exhaustive list.

Targets
We aim to do no harm to people and to have no leaks across our operations. We call this our Goal Zero ambition.

Although we do not have consolidated targets for safety at a Group level that meet the criteria set out by the European Sustainability Reporting Standards (ESRS), we consider our Goal Zero ambition to be fundamental to the success of our company. We therefore track our performance through the metrics provided under "Safety performance" below and through our efforts to learn from incidents to understand underlying causes, including technical, behavioural, organisational and human factors.

Safety performance

Our safety performance in 2024 is shown below. We report data in this section on a 100% basis for companies and joint ventures in which Shell is the operator, unless stated otherwise.

Personal safety

Our personal safety performance in 2024 is shown below.

Personal safety and health [A]

	unit	2024
Fatalities [B]	number	2
Employees	number	0
Contractors	number	2
Fatal accident rate	number per 100 million hours	0.4
Serious injury, illness and fatality (SIF) [C]	number	7
Serious injury, illness and fatality frequency (SIF-F) [C]	number per 100 million hours	1.5
Total recordable cases [D]	number	501
Total recordable case frequency (TRCF) [D]	number per million hours	1.1
Lost time injury frequency (LTIF) [E]	number per million hours	0.5
Cases of recordable work-related ill health [F]	number	262
Total recordable occupational illness frequency (TROIF) [F]	number per million hours	0.6

[A] In line with industry practice, we distinguish three contract modes. Mode 1: Shell has control of the workplace or work activity; Mode 2: Shell and the contractor control their own workplace, but these workplaces can have a potential impact on each other which requires management of interfaces; Mode 3: Contractor or another external party controls the workplace and the contractor controls the work activity. In accordance with industry practice, we report on personal safety performance for Mode 1 and Mode 2. Mode 3 contractors are non-reporting unless working on Shell premises.
[B] Total deaths resulting from a work-related injury or occupational illness. Includes fatalities still under review that are probable to be confirmed as work related. Excludes fatalities still under review that are improbable to be confirmed as work related.
[C] Serious work-related injury or illness, including those resulting in fatality or a permanent impairment (defined as both an inability to return to the previous work role and inability to return to previous whole person function performing the activities of daily living).
[D] Total injuries resulting in a fatality, lost workday case, restricted work case or medical treatment case.
[E] Injuries resulting in a fatality or lost workday case.
[F] Total occupational illnesses identified and meeting the criteria for being recordable.

Personal safety and health

Tragically, two of our contractor colleagues in Shell-operated ventures lost their lives in incidents which happened in 2024 while working for us. One contractor colleague in the Netherlands lost his life in an accident at Shell Energy and Chemicals Park Moerdijk in June 2024. Another contractor colleague in India was bitten by a snake in May 2024 and subsequently passed away in January 2025.

We sadly note that a contractor who sustained burn injuries in a flash fire at our EcoOils facility in Malaysia in February 2025 passed away later that month. The investigation into the incident remained under way at the time of publishing this report.

The death in February 2024 of a contractor colleague in Nigeria, who was injured in a fire incident in December 2023, was reported in our 2023 Annual Report.

Shell is profoundly impacted by these losses. We are resolutely committed to learn from these incidents and we aim to take all necessary measures to prevent anything similar from happening again. We continue to work closely with our contractors to help build a strong safety culture at the frontline.

We use serious injury, illness and fatality (SIF) and serious injury, illness and fatality frequency (SIF-F) to measure our safety performance. SIF is defined as a serious work-related injury or illness that resulted in a fatality or a permanent impairment, which is defined as a long-term or permanent injury or illness with a significant impact on daily activities. SIF-F is calculated by dividing the number of employee and contractor SIF by 100 million working hours. SIF-F enables us to focus our investigations on the most serious incidents. The aim is to collect and analyse relevant, high-quality data that can help us improve our efforts to prevent serious injuries and fatalities.

In 2024, the number of serious work-related injuries or illnesses, including those that resulted in fatality or permanent impairment, decreased to 7 from 12 in 2023. The SIF-F was 1.5 cases per 100 million working hours compared with 2.6 in 2023.

In 2024, the number of injuries per million working hours – the total recordable case frequency – was 1.1 compared with 1.1 in 2023. The number of injuries that led to time off work per million working hours – the lost time injury frequency – was 0.5 in 2024 compared with 0.5 in 2023.

Process safety

Our process safety performance in 2024 is shown below.

Process safety performance

	number
	2024
Operational process safety events [A] [B]	90
Tier 1	30
Tier 2	60

[A] A Tier 1 process safety event is an unplanned or uncontrolled release of any material from a process, including non-toxic and non-flammable materials, with the greatest actual consequence resulting in harm to employees, contract staff or a neighbouring community, damage to equipment, or exceeding a defined threshold quantity. A Tier 2 process safety event is a release of lesser consequence. Process safety events are classified according to guidance from the International Association of Oil & Gas Producers and the American Petroleum Institute (API 754 3rd edition).
[B] Excludes sabotage-related process safety events. In 2024, there were two Tier 1 sabotage-related events. The classification of sabotage-related process safety events is made on a best-endeavours basis.

The number of Tier 1 and 2 operational process safety events in 2024 increased compared with 2023. There were 90 events reported during the year compared with 63 in 2023. The increase in process safety tiered events was driven by our Downstream, Renewables and Energy Solutions business. We are actively addressing these challenges by refining our operational strategies, renewing our focus on fundamentals and leveraging new technologies to return to the downward trend of previous years.

A well control incident is defined as a well set-up with fewer than two barriers in place to protect it against a release through any potential path. In 2024, there were no Level 1 or Level 2 well control incidents in Shell-operated ventures. There were also no events in 2023.

Process safety events related to crude theft and sabotage in Nigeria are recorded separately. In Nigeria, there were two such events in 2024, compared with two in 2023. See "SPDC JV - Nigeria: Spills caused by crude theft and sabotage" on page 433 for more information.

Spills

We design, operate and maintain our facilities with the intention of preventing spills. To minimise the risk of spills, Shell has routine programmes and technologies in place to help reduce failures and maintain the reliability of facilities and pipelines. However, spills can still occur for reasons such as operational failure, accidents, unusual corrosion or theft or sabotage. Our spills performance in 2024 is shown below.

Spills [A]

	unit	2024
Operational spills	number	69
Nigeria [B]	number	20
Rest of the world	number	49
Operational spills - total volume	thousand tonnes	1.23
Nigeria [B]	thousand tonnes	0.37
Rest of the world	thousand tonnes	0.86
Sabotage spills [C]	number	84
Sabotage spills - volume [C]	thousand tonnes	2.0

[A] All spill volumes and numbers are for hydrocarbon spills of more than 100 kilograms to the environment (land or water). Operational and sabotage total volumes include the total amount of the spill that reached the environment, not correcting for any amounts subsequently recovered, evaporated or otherwise lost.
[B] In 2024, Nigeria includes SPDC JV operations only.
[C] All theft or sabotage-related spills in 2024 occurred in Nigeria.

In 2024, there were 69 operational spills of more than 100 kilograms compared with 71 in 2023 (restated from 70 operational spills of more than 100 kilograms following a review of the performance data). The volume of operational spills of oil and oil products in 2024 was 1.23 thousand tonnes, compared with 0.37 thousand tonnes in 2023. The increase in operational spill volumes is partly attributable to a spill that occurred during severe weather in the Gulf of America, as well as incidents in Singapore, Canada and Nigeria.

Spills in Nigeria

SPDC JV - Nigeria: Operational spills

In 2024, The Shell Petroleum Development Company of Nigeria Limited (SPDC) [A], as operator of the SPDC joint venture (SPDC JV, Shell interest 30%), reported 20 operational spill incidents of more than 100 kilograms of crude oil, compared with 9 reported in 2023. The increase in the number of operational spill incidents was largely because of a rise in cases of failure due to factory defects in a locally manufactured clamp used in pipeline repairs following the removal of illegal connections. The company that manufactured the clamps has recalled the affected batch, and SPDC has commenced the replacement of the clamps.

In 2024, the volume of operational spills of oil and oil products was 0.37 thousand tonnes compared with 0.005 thousand tonnes reported in 2023. The majority (89%) of the 2024 volume relates to two significant incidents, one onshore on the Trans Niger Pipeline and the other offshore at a terminal loading buoy.

SPDC JV has an ongoing work programme to appraise, maintain and replace key sections of pipelines and flow lines to reduce the number of operational spills.

[A] Unless otherwise stated, all activities reported for or as relating to The Shell Petroleum Development Company of Nigeria Limited (SPDC) in this section should be understood as SPDC acting as the operator of the SPDC joint venture (SPDC JV). SPDC, as the corporate entity, owns 30% of the joint venture.

On March 13, 2025, Shell completed the sale of SPDC to Renaissance. By preserving the full range of SPDC's operating capabilities, the transaction has been designed to ensure that the company can continue to perform its role as operator and to meet its share of commitments within the joint venture, including those relating to health, safety, security and environment.

SPDC JV - Nigeria: Spills caused by crude theft and sabotage

In 2024, about 81% of crude oil spill incidents of more than 100 kilograms from SPDC JV facilities were caused by the illegal activities of third parties. In 2024, the volume of crude oil spills of more than 100 kilograms caused by crude theft and sabotage was 2.0 thousand tonnes (84 incidents), compared with 1.4 thousand tonnes (139 incidents) in 2023. The decrease in the number of incidents in 2024 shows an increased effectiveness of anti-theft protection mechanisms.

Prevention

In 2024, SPDC JV continued on-ground surveillance of its areas of operation, including its pipeline network, to mitigate third-party interference and ensure that spills are detected and responded to as quickly as possible.

Regular surveillance flights and drones are used to inspect the most vulnerable segments of the pipeline network, monitor security and identify any new spills or illegal activity. SPDC JV continued to install and improve anti-theft protection mechanisms for key infrastructure, such as wellheads and manifolds. These include protective measures such as cages, anti-theft nuts and improved CCTV and networking capabilities. These measures continue to help deter theft and improve response.

SPDC JV continued to work with the government security agencies in 2024 to maintain surveillance and address illegal activities of third parties, primarily along the SPDC JV pipelines and their operational areas.

Response and remediation

Regardless of the cause, SPDC JV cleans up and remediates areas affected by spills originating from its facilities. Clean-up activities include bio-remediation which stimulates micro-organisms that naturally break down and use carbon-rich oil, effectively removing it. Once clean-up and soil remediation operations are completed, the work is inspected and, if satisfactory, approved and certified by the Nigerian regulators. In the event of operational spills, SPDC JV also pays compensation to affected people and communities.

Road safety

Our road safety performance in 2024 is shown below.

Road safety [A]

	unit	2024
Severe motor vehicle incidents [B]	number	17
Road-transport-related fatalities	number	–
Kilometres driven	million kilometres	424

[A] In line with industry practice, we distinguish three contract modes. Mode 1: Shell has control of the workplace or work activity; Mode 2: Shell and the contractor control their own workplace, but these workplaces can have a potential impact on each other which requires management of interfaces; Mode 3: Contractor or another external party controls the workplace and the contractor controls the work activity. In accordance with industry practice, we report on personal safety performance for Mode 1 and Mode 2. Mode 3 contractors are non-reporting unless working on Shell premises.
[B] Motor vehicle incidents involving a fatality, lost time injury, vehicle rollover, medical treatment case or restricted work case.

In 2024, Shell employees and contractors drove around 424 million kilometres on work-related business. Commercial road transport accounts for most of the kilometres driven. There were 17 severe motor vehicle incidents. There were no road-transport-related fatalities in 2024.

Supplementary data for pollution, water, biodiversity and waste, including estimates for non-operated assets

This section provides data for pollution, water, biodiversity and resource use and circular economy according to the reporting boundaries specified by the European Sustainability Reporting Standards (ESRS), including estimated data for non-operated assets.

In line with industry practice, Shell has historically reported sustainability data using an operational control boundary, whereby data are reported on a 100% basis for assets under operational control. This approach reflects the prevalence of joint operations in the oil and gas sector and the common industry practice of designating an operating partner to create and apply operating policies and standards. We have historically considered the operational control boundary to be the most appropriate way to report sustainability data, as it reflects performance we directly manage through the application of our operating standards.

The ESRS specify different reporting boundaries per environmental topic. These boundaries differ from our historical reporting. For pollution and biodiversity, the ESRS specify a hybrid boundary that combines elements of operational control and financial control, which we refer to as the "ESRS boundary". For water and for resource use and circular economy, ESRS specifies a financial control boundary. See "General basis for preparation of Sustainability Statements (BP-1)" on page 342 for an explanation of the differences between these boundaries and how they are applied.

To report data against a financial control or ESRS boundary requires access to data from non-operated ventures. Shell has more than 50 joint operations not under operational control that fall within the ESRS boundary, of which 85% operate outside the European Economic Area. These ventures are not subject to the EU Corporate Sustainability Reporting Directive (CSRD), nor are they contractually obliged under the operator agreement to provide the volume and granularity of data required by the ESRS.

Shell sample-tested data availability from non-operated ventures and observed gaps in availability, quality and completeness. We have therefore, in accordance with the ESRS, estimated the data for non-operated ventures. See "General basis for preparation of Sustainability Statements (BP-1)" on page 342 for information about our efforts to gather data from non-operated ventures.

In the absence of actual data, information must be estimated, resulting in a high level of uncertainty. The preparation of estimates requires management to make judgements, estimates and assumptions that affect the information reported. Actual results may differ from estimates. The circumstances and operating standards of non-operated ventures may vary from Shell-operated ventures, which may result in differences in which metrics are assessed as reportable and how they are measured. Areas of significant judgement are highlighted below.

Estimation methodology for pollution, water and waste

The data presented in this section are based on a combination of actual data for operated assets and estimated data for joint operations not under Shell's operational control (non-operated ventures).

We assessed different options for estimating data for non-operated ventures. These included the use of data on production volumes, Scope 1 greenhouse gas (GHG) emissions, and Scope 1 and 2 GHG emissions as a proxy for pollution, water consumption and waste. We concluded that the use of Scope 1 emissions is an appropriate proxy for these metrics.

Pollution

For pollution-related metrics, we calculated data for non-operated assets based on data from Shell-operated assets. To do so, we established a ratio between actual Scope 1 GHG emissions and the relevant pollution metrics for Shell-operated ventures. This factor was then applied to actual Scope 1 GHG emissions reported on the ESRS boundary, which contains both operated and non-operated ventures. This method allows us to derive estimated totals for pollution on the ESRS boundary.

Water consumption and waste

For water consumption and waste, we calculated data for non-operated assets based on data from Shell-operated assets. To do so, we established a ratio between actual Scope 1 GHG emissions and the relevant metrics for Shell-operated ventures. This factor was then applied to actual Scope 1 GHG emissions reported on a financial control boundary, which contains both operated and non-operated ventures. This method allows us to derive estimated totals for water consumption and waste on a financial control boundary.

For water metrics, we assess that it is not possible to estimate stored water, as this metric is subject to variation depending on the individual asset circumstances.

Estimation uncertainties

Estimation of this total environmental data for pollution, water and waste is subject to inherent uncertainty due to factors such as limitations in the availability of non-operated data and the high level assumptions applied in the selection and application of proxy indicators. These estimates should be interpreted with an understanding of these factors.

Estimation methodology for non-operated sites impacting biodiversity sensitive areas

We provide an estimate of non-operated sites impacting biodiversity sensitive areas. Our ability to perform this exercise is constrained by lack of spatial data for the more than 50 assets not under Shell operational control that fall within the ESRS boundary.

Due to limited availability of information at a Group level about the spatial boundaries of non-operated assets as well as local impacts and dependencies, we selected a sample of assets for assessment, using Scope 1 and 2 emissions as a proxy for materiality. The assets in scope of this analysis represent more than 90% of the Scope 1 and 2 emissions from joint operations not under Shell's operational control in 2024.

Using the S&P Global spatial layers, we established a representative geographic feature set for each asset. Features were identified from a combination of the following layers: Onshore and offshore blocks, onshore and offshore pipelines, floating production storage and offloading (FPSO) units, platforms, gas plants and refineries.

We applied the same definition of biodiversity sensitive areas as for the sites under operational control. These include UNESCO World Heritage Sites, the Natura 2000 network of protected areas, key biodiversity areas and other protected areas. The latter encompass Ramsar Wetlands of International Importance, UNESCO Man–Biosphere Reserves, areas designated under regional agreements such as OSPAR and Emerald Network, as well as nationally designated areas reported as International Union for Conservation of Nature (IUCN) Management Category I–IV.

Although well datasets were excluded due to the large number of identified features, licence blocks, where appropriate, were identified as a proxy.

The resulting analysis was imported to the Integrated Biodiversity Assessment Tool (IBAT), which incorporates the World Database of Protected Areas (WDPA) maintained by the UN Environment Programme World Conservation Monitoring Centre (UNEP-WCMC) and the World Database of Key Biodiversity Areas (WDKBA) maintained by BirdLife International. The IBAT Disclosure Report function was used to identify potential sites based on their overlap with key biodiversity areas and protected areas.

In the absence of actual footprint data, we applied a 1 kilometre buffer to the imported data to identify overlaps with key biodiversity areas and WDPA protected areas. Proximity to or overlap with a designated area does not necessarily mean the area is impacted by the activities.

Estimates of sites impacting biodiversity sensitive areas are subject to inherent uncertainty due to factors such as limitations in the completeness or accuracy of the spatial datasets used for the analysis, and the possibility that datasets may exclude infrastructure that is part of the asset or include infrastructure that is not part of the asset. These estimates should be interpreted with an understanding of these factors.

See "Material impacts, risks and opportunities and their interaction with strategy and business model (ESRS 2 SBM-3)" on page 397 for information about our approach to assessing Shell-operated sites impacting biodiversity sensitive areas.

Emissions to air

Estimated emissions to air reported against the ESRS boundary are presented below. See "Emissions to air (operational boundary)" on page 394 for actual data reported against an operational boundary.

Emissions to air (ESRS boundary) [A] [B]

	unit	2024
Sulphur oxides (SO_x)	thousand tonnes	31
Nitrogen oxides (NO_x)	thousand tonnes	134
Volatile organic compounds (VOCs)	thousand tonnes	47
Benzene (C_6H_6).	tonnes	293
Ethylene oxide (C_2H_4O)	tonnes	3
Hydrochlorofluorocarbons (HCFCs)	tonnes	1
Particulate matter (PM)		
PM10	thousand tonnes	4
PM2.5	thousand tonnes	4
Carbon monoxide (CO)	thousand tonnes	42
Metals		
Chromium (Cr)	tonnes	0.1
Copper (Cu)	tonnes	0.7
Nickel (Ni)	tonnes	9
Polycyclic aromatic hydrocarbons (PAH) [C]	tonnes	1
Naphthalene ($C_{10}H_8$)	tonnes	12
Ammonia (NH_3)	tonnes	471
Arsenic (As)	tonnes	0.3
Hydrogen cyanide (HCN)	tonnes	12

[A] Emissions to air are defined as the total mass of pollutants emitted to the atmosphere.
[B] Data are provided for the consolidated accounting group (the parent and subsidiaries) and jointly controlled operations, plus investees such as associates or joint ventures for which Shell has operational control. For Shell-operated assets, data are based on actual submissions, in accordance with the methodological considerations set out in the footnotes to the table "Emissions to air (operational control)" on page 394.
[C] PAH excludes naphthalene ($C_{10}H_8$), which is reported separately.

Discharges to water

Estimated discharges to water reported against the ESRS boundary are presented below. See "Pollutants discharged to surface water (operational boundary)" on page 394 for actual data reported against an operational boundary.

Pollutants discharged to surface water (ESRS boundary) [A] [B]

	tonnes
	2024
Total organic carbon (TOC) (as total C or COD/3)	2,270
Metals	
Arsenic (As)	0.4
Cadmium (Cd)	0.03
Chromium (Cr)	0.4
Copper (Cu)	0.4
Lead (Pb)	0.1
Nickel (Ni)	1
Zinc (Zn)	4
Mercury (Hg)	0.001
Phenol	1
Benzene	0.06
Absorbable organic halogens (AOX)	51
Nitrogen	496
Phosphorus	92

[A] Pollutants discharged to surface water are defined as the total mass of pollutants present in controlled or regulated effluent discharges to surface water.
[B] Data are provided for the consolidated accounting group (the parent and subsidiaries) and jointly controlled operations, plus investees such as associates or joint ventures for which Shell has operational control. For Shell-operated assets, data are based on actual submissions, in accordance with the methodological considerations set out in the footnotes to the table "Pollutants discharged to surface water (operational control)" on page 394.

Water consumption

Estimated water consumption reported against a financial control boundary are presented below. See "Water consumption (operational boundary)" on page 397 for actual data reported against an operational boundary.

Water consumption (financial control boundary) [A]

	million cubic metres
	2024
Water consumption [B]	117
Water consumption in areas of high water stress [B]	21
Water recycled and reused	23
Water stored	–
Changes in water storage	–

[A] The financial control boundary includes 100% of the parent company and subsidiaries and the Shell share for joint operations. Joint ventures and associates are excluded. For Shell-operated assets, data are based on actual submissions, in accordance with the methodological considerations set out in the footnotes to the table "Water consumption (operational control)" on page 397.
[B] Water consumption is defined as fresh water withdrawn minus freshwater discharged.

Waste

Estimated waste reported against a financial control boundary is presented below. See "Waste (operational control boundary)" on page 408 for actual data reported against an operational boundary.

Waste (financial control boundary) [A]

	thousand tonnes
	2024
Waste generated	3,452
Hazardous waste	1,104
Radioactive waste	1
Hazardous waste diverted from disposal	409
Hazardous waste diverted from disposal due to preparation for reuse	13
Hazardous waste diverted from disposal due to recycling	86
Hazardous waste diverted from disposal due to other recovery operations	310
Non-hazardous waste diverted from disposal	536
Non-hazardous waste diverted from disposal due to preparation for reuse	209
Non-hazardous waste diverted from disposal due to recycling	292
Non-hazardous waste diverted from disposal due to other recovery operations	35
Hazardous waste directed to disposal	695
Hazardous waste directed to disposal by incineration	126
Hazardous waste directed to disposal by landfilling	30
Hazardous waste directed to disposal by other disposal operations	540
Non-hazardous waste directed to disposal	1,811
Non-hazardous waste directed to disposal by incineration	10
Non-hazardous waste directed to disposal by landfilling	698
Non-hazardous waste directed to disposal by other disposal operations	1,103
Non-recycled waste	2,507
Percentage of non-recycled waste	73%

[A] The financial control boundary includes 100% of the parent company and subsidiaries and the Shell share for joint operations. Joint ventures and associates are excluded. For Shell-operated assets, data are based on actual submissions, in accordance with the methodological considerations set out in the footnotes to the table "Waste (operational control)" on page 408.

Sites impacting biodiversity sensitive areas

Estimated information about joint operations not under operational control impacting biodiversity sensitive areas is presented below. See "Sites impacting biodiversity sensitive areas (operational control)" on pages 398-400 for information presented against an operational control boundary.

Sites impacting biodiversity sensitive areas (joint operations not under operational control) [A] [B] [C] [D] [E]

Country	Activity [F]	World Heritage Sites	Key biodiversity areas	Natura 2000 [G]	Other protected areas
Australia	◦ LNG production ◦ Pipelines		◦ Barrow Island		◦ Barrow Island Nature Reserve ◦ Great Sandy Island Nature Reserve ◦ Murujuga National Park ◦ WA36915 Nature Reserve
Germany	◦ Refinery		◦ Hördter Rheinaue inkl. Kahnbusch u.Oberscherpfer Wald sowie Karlkopf und Leimersheimer Altrhein	◦ Hördter Rheinaue, SAC ◦ Hördter Rheinaue inklusive Kahnbusch und Oberscherpfer Wald, SPA ◦ Rheinniederung von Karlsruhe bis Philippsburg, SAC	
Italy	◦ Hydrocarbon exploration and production		◦ Val d'Agri	◦ Abetina di Laurenzana, SAC ◦ Faggeta di Monte Pierfaone, SAC ◦ Lago Pertusillo, SAC ◦ Monte Caldarosa, SAC ◦ Monte della Madonna di Viggiano, SAC ◦ Monte Volturino, SAC ◦ Serra di Calvello, SAC ◦ Appennino Lucano, Monte Volturino, SPA ◦ Appennino Lucano, Valle Agri, Monte Sirino, Monte Raparo, SPA	◦ Parco nazionale dell'Appennino Lucano - Val d'Agri - Lagonegrese National Park ◦ Riserva regionale Abetina di Laurenzana Nature Reserve
Oman	◦ Hydrocarbon exploration and production ◦ Pipelines		◦ Ar Rub al Khali ◦ Jabal Samhan ◦ Jiddat al Harasis ◦ Ad Duqm ◦ Al Jabal al Akhdar		◦ Jabal Samhan Reserve
United Arab Emirates [H]	◦ Hydrocarbon exploration and production		◦ Arabian Oryx Conservation area at Um al Zumoul		◦ Arabian Oryx Protected Area

[A] Includes sites located in biodiversity sensitive areas, assuming a 1 kilometre buffer around key features in the absence of actual spatial footprint data. It is not yet possible to provide consolidated information on sites "near" biodiversity sensitive areas due to incomplete availability of information at a Group level about whether and how these activities may affect such areas. We aim to undertake further work to enhance our understanding.
[B] Our analysis is based on global datasets and may exclude other nationally designated sites that have not been submitted to the WDPA or WDKBA. Due to the set-up of this analysis, it does not yield data on all site-specific impacts and dependencies on, or the ecological status of all biodiversity sensitive areas. We aim to undertake further work on site-level impacts and dependencies and approaches to defining ecological status with reference to specific ecosystem baseline levels.
[C] Sites for which no overlaps with key biodiversity areas or WDPA protected areas could be identified are excluded from the table.
[D] Generated under licence from the Integrated Biodiversity Assessment Tool (accessed 28/02/2025 and 03/03/2025). Data includes WDPA: UNEP-WCMC and IUCN (2025), Protected Planet: The World Database on Protected Areas (WDPA), January 2025, Cambridge, UK; KBAs: BirdLife International (September 2024), World Database of Key Biodiversity Areas.
[E] Includes data supplied by S&P Global and its affiliated and subsidiary companies. Copyright © S&P Global 2025. All rights reserved.
[F] Business activity by joint operation not under operational control affecting a biodiversity sensitive area.
[G] Natura 2000 includes Special Areas of Conservation (SAC) (EU Habitats Directive) and Special Protection Areas (SPA) (EU Birds Directive).
[H] Includes biodiversity sensitive areas impacted by business activity taking place in another country adjacent to an international border.

Independent Auditor's report related to the Sustainability Statements

INDEPENDENT ASSURANCE REPORT TO THE DIRECTORS OF SHELL PLC ON THE SUSTAINABILITY STATEMENTS

Ernst & Young LLP ('EY') was engaged by Shell plc ('the Company') to perform a limited assurance engagement in accordance with International Standard on Assurance Engagements (ISAE) 3000 (Revised), to report if the sustainability statements for the year ended 31 December 2024, including the information incorporated in the sustainability statements by reference (together hereafter referred to as the 'Sustainability Statements'), is in all material respects in accordance with the European Sustainability Reporting Standards ('ESRS') as adopted by the European Commission and is compliant with the reporting requirements provided for in Article 8 of Regulation (EU) 2020/852 (Taxonomy Regulation) (together the 'Criteria') as set out on pages 377-390 of Shell plc's Annual Report and Accounts.

Conclusion

Based on the procedures performed and evidence obtained, nothing has come to our attention that causes us to believe that the Sustainability Statements is not, in all material respects:

- in accordance with the European Sustainability Reporting Standards ('ESRS') as adopted by the European Commission;
- inclusive of all material sustainability-related impacts, risks and opportunities for Shell plc as identified by the double materiality assessment process carried out by the Company in compliance with the ESRS; and
- Compliant with the reporting requirements provided for in Article 8 of Regulation (EU) 2020/852 (Taxonomy Regulation).

Basis for our conclusion

We conducted our engagement in accordance with International Standard on Assurance Engagements 3000 (Revised), Assurance Engagements Other than Audits or Reviews of Historical Financial Information, as promulgated by the International Auditing and Assurance Standards Board (IAASB) and the terms of our engagement letter dated August 8, 2024 as agreed with Shell plc.

In performing this engagement, we have applied International Standard on Quality Management ('ISQM') 1 Quality Management for Firms that Perform Audits or Reviews of Financial Statements, or Other Assurance or Related Services engagements, which requires that we design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

We have maintained our independence and other ethical requirements of the Institute of Chartered Accountants of England and Wales ('ICAEW') Code of Ethics (which includes the requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants ('IESBA')). We are the independent auditor of the Company and therefore we will also comply with the independence requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard as applied to listed public interest entities.

Emphasis of matter – The most significant uncertainties affecting the quantitative metrics and monetary amounts

The Sustainability Statements has been prepared in the context of new sustainability reporting standards, requiring entity specific and temporary interpretations and navigating inherent measurement or evaluation uncertainties.

We draw attention to the General basis for preparation of Sustainability Statements on page 342 of the Annual Report and Accounts that identifies the quantitative metrics and monetary amounts that are subject to a high level of measurement uncertainty and discloses information about the sources of measurement uncertainty and the assumptions, approximations and judgements the Company has made in measuring these in compliance with the ESRS.

The comparability of sustainability information between entities and over time may be affected by the lack of historical sustainability information in accordance with the ESRS and by the absence of a uniform practice on which to draw, to evaluate and measure this information. This allows for the application of different, but acceptable, measurement techniques, especially in the initial years.

Emphasis of matter – The double materiality assessment process

The Sustainability Statements, including the disclosure of material impacts, risks and opportunities in accordance with the ESRS, is prepared with the double materiality assessment processes carried out by the Company as described on the pages 351-354 of the Annual Report and Accounts.

The double materiality assessment process requires Shell plc to make key judgments and use thresholds and it is expected that this process will be refined over time. The double materiality assessment process uses quantitative and/or qualitative thresholds to determine which impacts, risks and opportunities are identified and addressed by Shell plc as material and to determine which sustainability matters are material for reporting purposes. Therefore, the sustainability statements may not include every impact, risk and opportunity or additional entity-specific disclosure that each individual stakeholder (group) may consider important in its own particular assessment.

Our conclusion is not modified in respect of these matters.

Responsibilities of the Company for the Sustainability Statements

The directors of the Company are solely responsible for the preparation of the Sustainability Statements in accordance with the ESRS, including the double materiality assessment process carried out by Shell plc as the basis for the Sustainability Statements and the disclosure of the material impacts, risks and opportunities in accordance with the ESRS. As part of the responsibilities for preparation of the Sustainability Statements, the directors of Shell plc are responsible for compliance with the reporting requirements provided for in Article 8 of Regulation (EU) 2020/852 (Taxonomy Regulation).

Shell plc is also responsible for selecting and applying additional entity-specific disclosures to enable users to understand the company's sustainability-related impacts, risks or opportunities and for determining that these additional entity-specific disclosures are suitable in the circumstances and in accordance with the ESRS.

The directors of the Company are also responsible for designing and implementing internal controls, maintaining adequate records, making estimates that are relevant to the preparation of the Sustainability Statements and other processes they determine are necessary, such that the Sustainability Statements is free from material misstatement, whether due to fraud or error.

Responsibilities of EY for the limited assurance engagement on the Sustainability Statements

It is our responsibility to:

- plan and perform the engagement to obtain limited assurance in respect of whether the Subject Matter has not been prepared in all material respects in accordance with the Criteria.
- form an independent conclusion on the presentation of the Subject Matter on the basis of the work performed and evidence obtained; and
- report our conclusion to the directors of the Company.

What EY has assured

Our limited assurance report only covers the Sustainability Statements, presented on pages 341-440 of the Annual Report and Accounts including the information incorporated by reference, on pages 358-364 of the Annual Report and Accounts.

Other than as detailed above, we did not perform assurance procedures on any other information included in the Annual Report and Accounts, and accordingly, we do not express an opinion or conclusion on any such other information.

Our approach

The objective of a limited assurance engagement is to perform such procedures so as to obtain information and explanations in order to provide us with sufficient appropriate evidence to express a negative conclusion on the Sustainability Statements. The nature, timing and extent of procedures performed in a limited assurance engagement is dependent on our judgement, including our assessment of the risk of material misstatement and is less in extent than for, a reasonable assurance engagement. Our procedures were only designed to obtain a limited level of assurance on which to base our conclusion and do not provide all the evidence that would be required to provide a reasonable level of assurance.

Although we considered the effectiveness of management's internal controls when determining the nature, timing and extent of our procedures, our assurance engagement was not designed to provide assurance on internal controls. Our procedures did not include testing controls or performing procedures relating to checking the aggregation or calculation of data within IT systems.

A limited assurance engagement consists of making enquiries, primarily of persons responsible for preparing the Sustainability Statements and related information and applying analytical and other appropriate procedures.

Because a limited assurance engagement can cover a range of assurance, the detail of the procedures we have performed is included below, so that our conclusion can be understood in the context of the nature, timing and extent of the procedures we performed:

- Made inquiries and an analysis of the external environment and obtained an understanding of relevant sustainability themes and issues, the characteristics of the Company, its activities and the value chain and its key intangible resources in order to assess the double materiality assessment process carried out by the Company as the basis for the Sustainability Statements and disclosure of all material sustainability-related impacts, risks and opportunities in accordance with the ESRS;
- Obtained through inquiries a general understanding of the internal control environment, the Company's processes for gathering and reporting entity-related and value chain information, and for identifying the Company's activities, determining eligible and aligned economic activities and preparing the disclosures provided for in Article 8 of Regulation (EU) 2020/852 (Taxonomy Regulation), the information systems and the Company's risk assessment process relevant to the preparation of the Sustainability Statements;
- Assessed the double materiality assessment process carried out by the Company and identified and assessed areas of the Sustainability Statements, including the disclosures provided for in Article 8 of Regulation (EU) 2020/852 (Taxonomy Regulation), where misleading or unbalanced information or material misstatements, whether due to fraud or error, are likely to arise ('selected disclosures');
- Designed and performed further assurance procedures aimed at addressing risks of material misstatements within the sustainability statements responsive to this risk analysis, including making inquiries of management;
- Considered whether the description of the double materiality assessment process in the Sustainability Statements made by management appears consistent with the process carried out by Shell plc;
- Performed analytical procedures on quantitative information in the Sustainability Statements, including consideration of data and trends;
- Assessed whether Shell plc's methods for developing estimates are appropriate and have been consistently applied for the selected disclosures. We considered data and trends, however our procedures did not include testing the data on which the estimates are based or separately developing our own estimates against which to evaluate management's estimates;
- Analysed, on a limited sample basis, relevant internal and external documentation available to Shell plc (including publicly available information or information from participants throughout its value chain) for selected disclosures;
- Read the other information in the Annual Report and Accounts to identify material inconsistencies, if any, with the Sustainability Statements;
- Considered how the Company identified economic activities eligible under the Taxonomy Regulation for each of the environmental objectives, reconciled selected key performance indicators for eligible activities with the accounts, considered whether these were calculated in accordance with the Taxonomy reference framework, and assessed how the Company identified where the eligible economic activities meet the cumulative conditions to qualify as aligned under the Taxonomy Regulation;
- Read the disclosures provided to address the reporting requirements of the Article 8 of the Taxonomy Regulation for consistency; and
- Considered the overall presentation, structure and qualitative characteristics of sustainability information (relevance and faithful representation: complete, neutral and accurate) reported in the Sustainability Statements, including the reporting requirements provided for in Article 8 of Regulation (EU) 2020/852 (Taxonomy Regulation).

We also performed such other procedures as we considered necessary in the circumstances.

Inherent limitations

Non-financial information is subject to more inherent limitations than financial information, given the characteristics of the underlying subject matter. Because there is not yet a large body of established practice upon which to base measurement and evaluation techniques, the methods used for measuring or evaluating non-financial information, including the precision of different techniques, can differ, yet be equally acceptable. This may affect the comparability between entities, and over time.

Comparative information included in the sustainability statements has not been part of our limited assurance engagement. Consequently, we do not provide any assurance on the comparative information and thereto related disclosures in the sustainability statements for Shell Plc. Our conclusion is not modified in respect of this matter.

Our conclusion is based on historical information and the projection of any information or conclusions in the sustainability statements report to any future periods would be inappropriate.

In reporting forward-looking information in accordance with the ESRS, Shell plc is required to prepare the forward-looking information on the basis of disclosed assumptions about events that may occur in the future and possible future actions by Shell plc. Forward looking information relates to events and actions that have not yet occurred and may never occur. The actual outcome is likely to be different since anticipated events frequently do not occur as expected. We do not provide assurance on the achievability of forward-looking information.

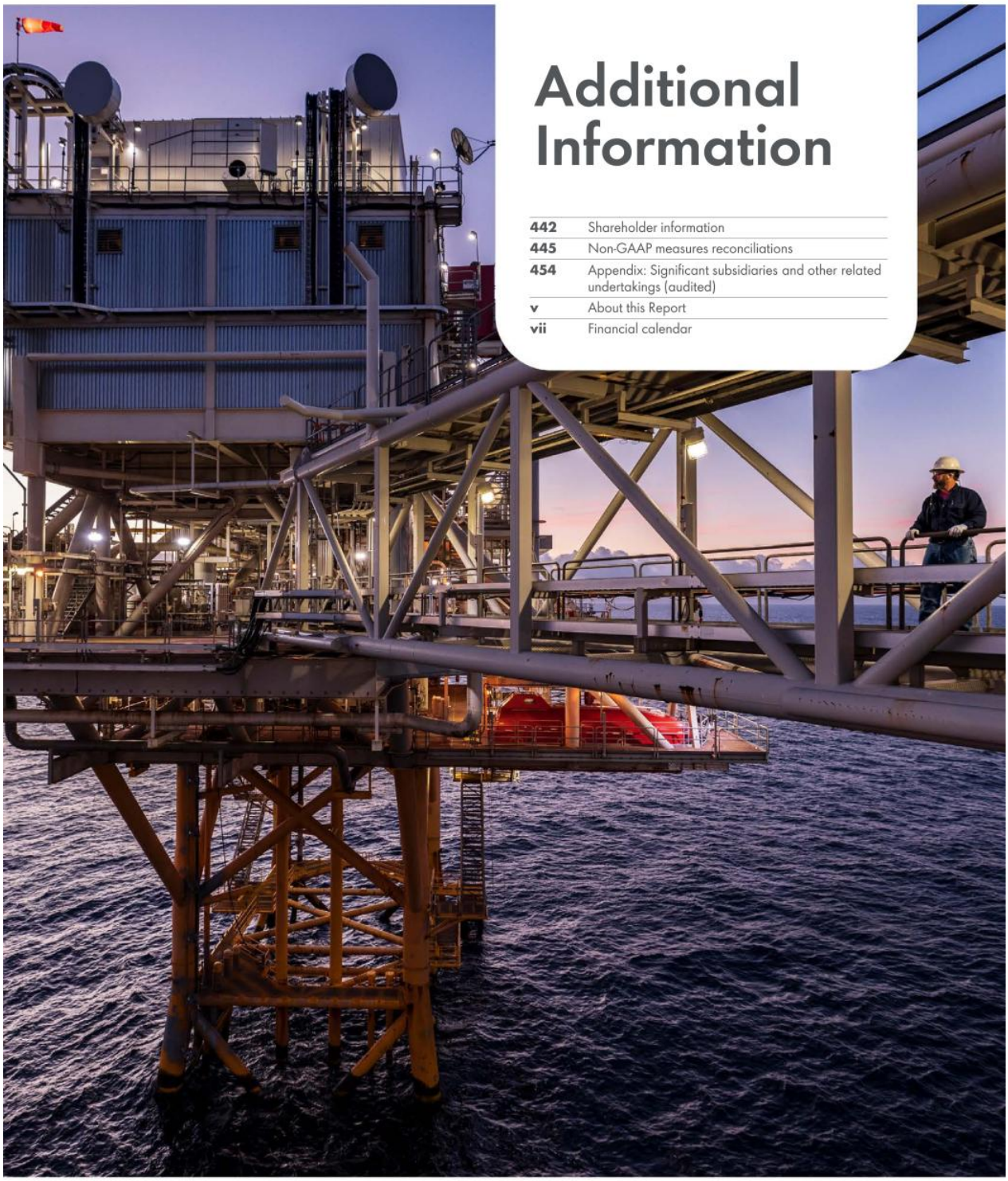
Use of our report

This report is produced in accordance with the terms of our engagement letter dated August 8, 2024, solely for the purpose of reporting to the directors of Shell plc in connection with the Sustainability Statements for the period ended 31 December 2024. Those terms permit disclosure on Shell plc's website, solely for the purpose of Shell plc showing that it has obtained an independent assurance report in connection with the Sustainability Statements. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the Company's directors as a body, for the procedures performed, for this report, or for the conclusions we have formed. This engagement is separate to, and distinct from, our appointment as the auditor to the Company.

/s/Ernst & Young LLP

Ernst & Young LLP
London

March 25, 2025



Additional Information

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Shareholder information

Shell plc (the Company) was incorporated in England and Wales on February 5, 2002, as a private company under the Companies Act 1985, as amended. On October 27, 2004, the Company was re-registered as a public company limited by shares and changed its name from Forthdeal Limited to Royal Dutch Shell plc. On January 21, 2022, the Company changed its name from Royal Dutch Shell plc to Shell plc. The Company is registered at Companies House, Cardiff, under company number 4366849. The Legal Entity Identifier (LEI) issued by the London Stock Exchange is 21380068P1DRHMJ8KU70. The business address for the Directors and Senior Management is Shell Centre, London, SE1 7NA.

On December 31, 2021, the Company became tax resident in the United Kingdom. Its primary objective is to carry on the business of a holding company. It is not directly or indirectly owned or controlled by another corporation or by any government and does not know of any arrangements that may result in a change of control of the Company.

Nature of trading market

On January 29, 2022, the Company established one single line of ordinary shares, each having a nominal value of €0.07. All shares are listed and able to trade at Euronext Amsterdam and the London Stock Exchange. Furthermore, all shares are transferable between these two markets. This makes both these exchanges primary exchanges for the ordinary shares.

Ordinary shares are traded in registered form.

The Company's American Depositary Shares (ADSs) are listed on the New York Stock Exchange [A]. A depositary receipt is a certificate that evidences ADSs. Depositary receipts are issued, cancelled and exchanged at the office of JP Morgan Chase Bank, N.A., 383 Madison Avenue, New York, New York 10179, USA, as depositary (the Depositary), under Second Amended and Restated Deposit Agreement and Amendment No. 1 thereto (Deposit Agreement) between the Company, the Depositary and the holders of ADSs. Each ADS is equivalent to two ordinary shares of Shell plc deposited under the Deposit Agreement. All ordinary shares are capable of being deposited with the Depository in exchange for the corresponding amount of ADSs which may be traded at the New York Stock Exchange. This makes the New York Stock Exchange the primary exchange for the Company's American Depositary Receipts (ADRs). More information relating to ADSs is given on page 443.

[A] At March 4, 2025, 569,992,987 ADSs were outstanding, representing 18.86% of the ordinary share capital, held by holders of record with an address in the USA. In addition to holders of ADSs, at March 4, 2025, 865,294 ordinary shares of €0.07 each were outstanding, representing 0.0143% of the ordinary share capital, held by 2951 holders of record registered with an address in the USA.

Listing information

	Euronext Amsterdam	London Stock Exchange	NYSE
Identifiers	Ordinary share	Ordinary share	ADS [A]
Market	Primary	Primary	Primary
Ticker symbol	SHELL	SHEL	SHEL
ISIN	GB00BP6MXD84	GB00BP6MXD84	US7802593050
SEDOL	BP6MXT4	BP6MXD8	BPK3CG3
CUSIP	G80827 101	G80827 101	780259 305
Index weight at December 31, 2024	AEX: 14.92%	FTSE: 7.60%	–

[A] Each ADS represents two ordinary shares of €0.07 each.

Share capital

Below we provide information on our share capital as at December 31, 2024.

Share capital as at December 31, 2024

The issued and fully paid share capital of the Company at December 31, 2024, was as follows:

	Issued and fully paid	
	Number	Nominal value
Ordinary shares of €0.07 each	6,115,031,158	€428,052,181

Share capital as at March 4, 2025

The issued and fully paid share capital of the Company at March 4, 2025, was as follows:

	Issued and fully paid	
	Number	Nominal value
Ordinary shares of €0.07 each	6,044,202,109	€423,094,148

The Directors may only allot new ordinary shares if they have authority from shareholders to do so. The Company seeks to renew this authority annually at its AGM. Under the resolution passed at the Company's 2024 AGM, the Directors were granted authority to allot ordinary shares up to an aggregate nominal amount equivalent to approximately one-third of the issued ordinary share capital of the Company (in line with the guidelines issued by institutional investors).

The following is a summary of the material terms of the Company's ordinary shares, including brief descriptions of the provisions contained in the Articles of Association (the Articles) and applicable laws of England and Wales in effect on the date of this document. This summary does not purport to include complete statements of these provisions:

- upon issuance, the ordinary shares are fully paid and free from all liens, equities, charges, encumbrances and other interest of the Company and not subject to calls of any kind;
- all ordinary shares rank equally for all dividends and distributions on ordinary share capital; and
- all ordinary shares are admitted to the Official List of the UK Financial Conduct Authority and to trading on the market for listed securities of the London Stock Exchange. Ordinary shares are also admitted to trading on Euronext Amsterdam. ADSs are listed on the New York Stock Exchange.

At December 31, 2024, trusts and trust-like entities holding shares for the benefit of employee share plans of Shell held (directly and indirectly) 31 million shares of the Company with an aggregate market value of $980 million and an aggregate nominal value of €2 million.

Significant shareholdings

The Company's ordinary shares have voting rights on all matters that are subject to shareholder approval, including the election of directors. The Company's major shareholders do not have different voting rights.

Notification of major shareholdings

The Company did not receive any notifications pursuant to Disclosure Guidance and Transparency Rule (DTR) 5 during the year and up to March 4, 2025, (being a date not more than one month prior to the date of the Company's Notice of Annual General Meeting).

Designation of the Netherlands as EU Home Member State for regulatory purposes

Following the exit of the UK from the EU and the end of the transition period, the Company announced that the EU Home Member State of the Company for the purposes of the EU Transparency Directive would be the Netherlands as from January 1, 2021. As a consequence, the Company files Transparency Directive and Market Abuse Regulation-related regulatory information with the Netherlands Authority for the Financial Markets (Autoriteit Financiële Markten, or AFM). Major shareholders are required to report substantial holdings in Shell to the AFM in accordance with applicable Dutch law, in addition to their ongoing disclosure obligations under the DTR.

Method of holding shares or an interest in shares

There are several ways in which Shell plc registered shares or an interest in these shares can be held, including:

- directly as registered shares either in uncertificated form or in certificated form in a shareholder's own name;
- indirectly through Euroclear Nederland (in respect of which the Dutch Securities Giro Act (Wet giraal effectenverkeer) is applicable);
- through the Shell Corporate Nominee Service;
- through another third-party nominee or intermediary company; and
- as a direct or indirect holder of either ADS with the Depositary.

American Depositary Shares

The Depositary is holding the shares underlying the ADSs and to the extent it is doing so directly via its UK nominee enjoys the rights of a shareholder under the Articles. Holders of ADSs will not have shareholder rights. The rights of the holder of an ADS are specified in the Deposit Agreement with the Depositary and are summarised below.

The Depositary will receive all cash dividends and other cash distributions made on the deposited shares underlying the ADSs and, where possible and on a reasonable basis, will distribute such dividends and distributions to holders of ADSs. Rights to purchase additional shares will also be made available to the Depositary who may make such rights available to holders of ADSs. All other distributions made on the Company's shares will be distributed by the Depositary in any means that the Depositary thinks is equitable and practical. The Depositary may deduct its fees and expenses and the amount of any taxes owed from any payments to holders and it may sell a holder's deposited shares to pay any taxes owed. The Depositary is not responsible if it decides that it is unlawful or impractical to make a distribution available to holders of ADSs.

The Depositary will notify holders of ADSs of shareholders' meetings of the Company and will arrange to deliver voting materials to such holders of ADSs if requested by the Company. Upon request by a holder, the Depositary will endeavour to appoint such holder as proxy in respect of such holder's deposited shares entitling such holder to attend and vote at shareholders' meetings. Holders of ADSs may also instruct the Depositary to vote their deposited securities and the Depositary will try, as far as practical and lawful, to vote deposited shares in accordance with such instructions. The Company cannot ensure that holders will receive voting materials or otherwise learn of an upcoming shareholders' meeting in time to ensure that holders can instruct the Depositary to vote their shares.

Upon payment of appropriate fees, expenses and taxes: (i) shareholders may deposit their shares with the Depositary and receive the corresponding class and amount of ADSs; and (ii) holders of ADSs may surrender their ADSs to the Depositary and have the corresponding class and amount of shares credited to their account.

Further, subject to certain limitations, holders may, at any time, cancel ADSs and withdraw their underlying shares or have the corresponding class and amount of shares credited to their account.

Fees paid by holders of ADSs

The Depositary collects its fees for delivery and surrender of ADSs directly from investors depositing shares or surrendering ADSs for the purpose of withdrawal or from intermediaries acting for them. The Depositary collects fees for making distributions to investors by deducting those fees from the amounts distributed or by selling a portion of distributable property to pay the fees. The Depositary may generally refuse to provide fee-attracting services until its fees for those services are paid. See page 444.

Payments by Depositary to the Company

J.P. Morgan Chase Bank, N.A., as Depositary, has agreed to share with the Company portions of certain fees collected, less ADS programme expenses paid by the Depositary. For example, these expenses include the Depositary's annual programme fees, transfer agency fees, custody fees, legal expenses, postage and envelopes for mailing annual and interim financial reports, printing and distributing dividend cheques, electronic filing of US federal tax information, mailing required tax forms, stationery, postage, facsimile and telephone calls and the standard out-of-pocket maintenance costs for the ADSs. From January 1, 2024, to December 31, 2024, the Company received $641,716.13 from the Depositary.

Persons depositing or withdrawing shares must pay:	For:
$5.00 or less per 100 ADSs (or portion of 100 ADSs)	◦ Issuance of ADSs, including those resulting from a distribution of shares, rights or other property. ◦ Cancellation of ADSs for the purpose of their withdrawal, including if the Deposit Agreement terminates. An additional transaction fee per cancellation request and any applicable delivery expenses may also be charged by the Depositary. ◦ Distribution of securities to holders of deposited securities by the Depositary to ADS registered holders.
Registration and transfer fees	◦ Registration and transfer of shares on the share register to or from the name of the Depositary or its agent when they deposit or withdraw shares.
Expenses of the Depositary	◦ Cable, telex and facsimile transmissions (when expressly provided in the Deposit agreement). ◦ Converting foreign currency into dollars.
Taxes and other governmental charges the Depositary or the custodian has to pay on any ADS or share underlying an ADS, for example, share transfer taxes, stamp duty or withholding taxes	◦ As necessary.

In addition to the above, the Depositary may charge: (i) a dividend fee of $5.00 or less per 100 ADSs (or portion of 100 ADSs) for cash dividends or issuance of ADSs resulting from share dividends and (ii) an administrative fee of $5.00 or less per 100 ADSs (or portion of 100 ADSs) per calendar year. The Company and Depositary have agreed not to charge these fees at this time.

Dividend Reinvestment Plan

Equiniti Financial Services Limited, part of the Equiniti group of companies, operates a Dividend Reinvestment Plan (DRIP) which enables Shell plc shareholders to elect to have their dividend payments used to purchase Shell plc ordinary shares. More information can be found at shareview.co.uk/info/drip or by contacting Equiniti, the Company's UK Registrar.

ABN AMRO Bank N.V. and JP Morgan Chase Bank N.A. also operate dividend reinvestment options. More information can be found by contacting the relevant provider.

Exchange controls and other limitations affecting security holders

Other than restrictions affecting those individuals, entities, government bodies, corporations, or activities that are targeted by European Union (EU) or UK sanctions for example, regarding Syria, Russia or North Korea, etc. and the general EU prohibition to transfer funds to and from for example, North Korea or Iran and the EU and UK financial restrictions affecting Russia or Belarus, we are not aware of any other legislative or other legal provision currently in force in the UK, the Netherlands, the EU or arising under the Articles restricting remittances to holders of the Company's ordinary shares who are non-residents of the UK, or affecting the import or export of capital.

Taxation

General

The Company is incorporated in England and Wales. The Company changed tax residence from the Netherlands to the UK on December 31, 2021.

UK stamp duty and stamp duty reserve tax

Sales or transfers of the Company's ordinary shares within a clearance service (such as Euroclear Nederland) or of the Company's ADSs within the ADS depositary receipts system will not give rise to a stamp duty reserve tax (SDRT) liability and should not in practice require the payment of UK stamp duty.

The transfer of the Company's ordinary shares to a clearance service (such as Euroclear Nederland) or to an issuer of depositary shares (such as ADSs) will generally give rise to a UK stamp duty or SDRT liability at the rate of 1.5% of consideration given or, if none, of the value of the shares. A sale of the Company's ordinary shares that are not held within a clearance service (for example, settled through the UK's CREST system of paperless transfers) will generally be subject to UK stamp duty or SDRT at the rate of 0.5% of the amount of the consideration, normally paid by the purchaser.

Capital gains tax

For the purposes of UK capital gains tax, the market values [A] of the shares of the former public parent companies of the Shell Group at the relevant dates were:

		£
	March 31, 1982	July 20, 2005
Royal Dutch Petroleum Company (N.V. Koninklijke Nederlandsche Petroleum Maatschappij) which ceased to exist on December 21, 2005	1.1349	17.6625
The "Shell" Transport and Trading Company, p.l.c. which delisted on July 19, 2005	1.4502	Not applicable

[A] Restated where applicable to reflect all capitalisation issues since the relevant date. This includes the change in the capital structure in 2005, when Shell plc (at the time known as Royal Dutch Shell plc) became the single parent company of Royal Dutch Petroleum Company and of The "Shell" Transport and Trading Company, p.l.c., now The Shell Transport and Trading Company Limited, and one share in Royal Dutch Petroleum Company was exchanged for two Royal Dutch Shell plc A shares and one share in The "Shell" Transport and Trading Company, p.l.c. was exchanged for 0.287333066 Royal Dutch Shell plc B shares.

Non-GAAP measures reconciliations

These non-GAAP measures, also known as alternative performance measures, are financial measures other than those defined in International Financial Reporting Standards, that Shell considers provide useful information.

Earnings on a current cost of supplies basis

Segment earnings are presented on a current cost of supplies basis (CCS earnings), which is the earnings measure used by the Chief Executive Officer for the purposes of making decisions about allocating resources and assessing performance. On this basis, the purchase price of volumes sold during the period is based on the current cost of supplies during the same period after making allowance for the tax effect. CCS earnings therefore exclude the effect of changes in the oil price on inventory carrying amounts. The current cost of supplies adjustment does not impact cash flow from operating activities in the "Consolidated Statement of Cash Flows". For "Reconciliation of CCS earnings to income for the period", please refer to Note 7 to the "Consolidated Financial Statements".

Adjusted Earnings per share

Adjusted Earnings per share is calculated as Adjusted Earnings (see below) divided by the weighted average number of shares used as the basis for basic earnings per share (see Note 31 to the "Consolidated Financial Statements"). Adjusted Earnings per share were 3.76 in 2024 (2024 Adjusted Earnings: $23,716 million; 2024 weighted average number of shares 6,299.6 million) and $4.20 in 2023 (2023 Adjusted Earnings $28,250 million; 2023 weighted average number of shares: 6,733.5 million).

Adjusted Earnings, Adjusted Earnings Before Interest, Taxes, Depreciation and Amortisation (EBITDA), and Cash flow from operating activities

The "Adjusted Earnings" measure is presented on a CCS basis and aims to facilitate a comparative understanding of Shell's financial performance from period to period by removing the effects of oil price changes on inventory carrying amounts and removing the effects of identified items adjusted for current cost of supplies. These items are in some cases driven by external factors and may, either individually or collectively, hinder the comparative understanding of Shell's financial results from period to period.

The "Adjusted EBITDA" measure is presented on a CCS basis and is used by management to evaluate Shell's performance in the period and over time. We define "Adjusted EBITDA" as "Income/(loss) for the period" adjusted for current cost of supplies; identified items; tax charge/(credit); depreciation, amortisation and depletion; exploration well write-offs; and net interest expense. All items include the non-controlling interest component.

Adjusted Earnings, Adjusted Earnings Before Interest, Taxes, Depreciation and Amortisation (EBITDA) and Cash flow from operating activities

2024

$ million

	Total	Integrated Gas	Upstream	Marketing	Chemicals and Products	Renewables and Energy Solutions	Corporate
CCS Earnings [A]	16,792	9,590	7,772	1,894	1,757	(1,229)	(2,992)
Less: Identified items	(7,347)	(1,800)	(623)	(1,991)	(1,177)	(732)	(1,024)
Less: CCS earnings attributable to non-controlling interest	441						
Add: Identified items attributable to non-controlling interest	18						
Adjusted Earnings	23,716						
Add: Non-controlling interest	424						
Adjusted Earnings plus non-controlling interest	24,139	11,390	8,395	3,885	2,934	(497)	(1,968)
Add: Taxation charge/(credit) excluding tax impact of identified items	15,013	3,520	9,865	1,305	364	87	(128)
Add: Depreciation, depletion and amortisation excluding impairments	22,703	5,594	10,971	2,235	3,495	383	25
Add: Exploration well write-offs	1,622	291	1,331				
Add: Interest expense excluding identified items	4,697	189	720	52	70	6	3,660
Less: Interest income	2,372	8	18	1	79	2	2,265
Adjusted EBITDA	65,803	20,978	31,264	7,476	6,783	(22)	(675)
Less: Current cost of supplies adjustment before taxation	363			254	109		
Joint ventures and associates (dividends received less profit)	(328)	(137)	(946)	262	304	190	–
Derivative financial instruments	1,472	(1,466)	24	59	219	3,012	(376)
Taxation paid	(12,002)	(2,955)	(7,851)	(562)	(146)	(457)	(31)
Other	(1,961)	23	(1,464)	(616)	(321)	152	264
(Increase)/decrease in working capital	2,062	467	216	998	524	923	(1,065)
Cash flow from operating activities	54,687	16,909	21,244	7,363	7,253	3,798	(1,882)

[A] See Note 7 to the Consolidated Financial Statements.

2023

$ million

	Total	Integrated Gas [B]	Upstream [B]	Marketing [B]	Chemicals and Products [B]	Renewables and Energy Solutions [B]	Corporate [B]
CCS Earnings [A]	20,281	7,057	8,540	3,057	1,482	3,089	(2,944)
Less: Identified items	(8,252)	(6,861)	(1,267)	(254)	(2,135)	2,333	(69)
Less: CCS earnings attributable to non-controlling interest	273						
Add: Identified items attributable to non-controlling interest	(11)						
Adjusted Earnings	28,250						
Add: Non-controlling interest	284						
Adjusted Earnings plus non-controlling interest	28,534	13,919	9,806	3,312	3,617	756	(2,875)
Add: Taxation charge/(credit) excluding tax impact of identified items	13,674	3,837	8,280	936	287	341	(8)
Add: Depreciation, depletion and amortisation excluding impairments	23,106	5,756	11,309	2,048	3,582	392	19
Add: Exploration well write-offs	867	121	746				
Add: Interest expense excluding identified items	4,669	146	507	50	60	4	3,902
Less: Interest income	2,313	6	27	9	57	12	2,201
Adjusted EBITDA	68,538	23,773	30,622	6,337	7,489	1,481	(1,164)
Less: Current cost of supplies adjustment before taxation	848			478	370		
Joint ventures and associates (dividends received less profit)	79	241	(692)	117	310	102	3
Derivative financial instruments	(6,142)	(4,668)	51	(14)	518	(1,988)	(41)
Taxation paid	(13,712)	(3,574)	(8,470)	(760)	(467)	(762)	322
Other [C]	(865)	(313)	(142)	(486)	(138)	450	(237)
(Increase)/decrease in working capital [C]	7,145	2,061	82	845	172	3,701	284
Cash flow from operating activities	54,191	17,520	21,450	5,561	7,513	2,984	(832)

[A] See Note 7 to the Consolidated Financial Statements.
[B] See Note 7 to the "Consolidated Financial Statements" which includes an explanation of the reporting segments changes applicable from 2024.
[C] See footnote [A] of Consolidated Statement of Cash Flows.

2022

$ million

	Total	Integrated Gas [B]	Upstream [B]	Marketing [B]	Chemicals and Products [B]	Renewables and Energy Solutions [B]	Corporate [B]
CCS Earnings [A]	41,562	22,221	16,258	2,292	4,380	(1,027)	(2,562)
Less: Identified items	1,259	6,075	(1,096)	(612)	(213)	(2,805)	(90)
Less: CCS earnings attributable to non-controlling interest	449						
Add: Identified items attributable to non-controlling interest	15						
Adjusted Earnings	39,870						
Add: Non-controlling interest	434						
Adjusted Earnings plus non-controlling interest	40,304	16,146	17,354	2,905	4,592	1,778	(2,472)
Add: Taxation charge/(credit) excluding tax impact of identified items	18,578	4,706	11,840	962	839	357	(126)
Add: Depreciation, depletion and amortisation excluding impairments	22,393	5,544	11,889	1,701	2,877	365	18
Add: Exploration well write-offs	881	142	738				–
Add: Interest expense excluding identified items	3,181	84	345	45	21	2	2,683
Less: Interest income	1,046	43	22	–	24	(2)	959
Adjusted EBITDA	84,289	26,581	42,144	5,613	8,305	2,503	(856)
Less: Current cost of supplies adjustment before taxation	(1,755)			(1,316)	(439)		
Joint ventures and associates (dividends received less profit)	(2,157)	(522)	(2,650)	223	704	85	4
Derivative financial instruments	624	6,104	(35)	(3)	(213)	(4,998)	(230)
Taxation paid	(13,120)	(2,824)	(9,423)	(524)	(257)	(27)	(64)
Other [C]	2,042	(250)	375	730	921	(248)	514
(Increase)/decrease in working capital [C]	(5,021)	(1,396)	(768)	(3,546)	1,574	(3,708)	2,824
Cash flow from operating activities	68,414	27,692	29,641	3,810	11,472	(6,394)	2,192

[A] See Note 7 to the Consolidated Financial Statements.
[B] See Note 7 to the "Consolidated Financial Statements" which includes an explanation of the reporting segments changes applicable from 2024.
[C] See footnote [A] of Consolidated Statement of Cash Flows.

Identified items

The objective of identified items is to remove material impacts on net income/loss arising from transactions which are generally uncontrollable and unusual (infrequent or non-recurring) in nature or giving rise to a mismatch of accounting and economic results, or certain transactions that are generally excluded from underlying results in the industry.

Identified items comprise: divestment gains and losses, impairments, redundancy and restructuring, provisions for onerous contracts, fair value accounting of commodity derivatives and certain gas contracts, and the impact of exchange rate movements on certain deferred tax balances, and other items. Identified items in the table below are presented on a net basis.

2024

$ million

	Total	Integrated Gas	Upstream	Marketing	Chemicals and Products	Renewables and Energy Solutions	Corporate
Identified items included in Income/(loss) before taxation							
Divestment gains/(losses)	(288)	(100)	89	(400)	6	119	(3)
Impairment reversals/(impairments)	(5,051)	(555)	(362)	(1,747)	(1,205)	(1,181)	(1)
Redundancy and restructuring	(1,012)	(106)	(320)	(296)	(195)	(97)	2
Provisions for onerous contracts	(24)	(3)	(14)	(7)	–	–	–
Fair value accounting of commodity derivatives and certain gas contracts	(1,012)	(1,286)	(58)	49	(117)	399	–
Other	(1,481)	(126)	(436)	(1)	146	39	(1,103)
Total identified items included in Income/(loss) before taxation	(8,867)	(2,176)	(1,100)	(2,402)	(1,364)	(720)	(1,105)
Less: total identified items included in Taxation charge/(credit)	(1,521)	(376)	(477)	(411)	(187)	12	(81)
Identified items included in Income/(loss) for the period							
Divestment gains/(losses)	(319)	(96)	67	(386)	4	94	(2)
Impairment reversals/(impairments)	(4,371)	(363)	(323)	(1,423)	(1,176)	(1,085)	(1)
Redundancy and restructuring	(712)	(71)	(214)	(215)	(142)	(71)	1
Provisions for onerous contracts	(19)	(3)	(11)	(5)	–	–	–
Fair value accounting of commodity derivatives and certain gas contracts	(849)	(1,088)	(14)	40	(86)	300	–
Impact of exchange rate movements and inflationary adjustments on tax balances	363	(49)	313	–	–	–	99
Other [A]	(1,440)	(130)	(440)	(1)	223	30	(1,122)
Impact on CCS earnings	(7,347)	(1,800)	(623)	(1,991)	(1,177)	(732)	(1,024)
Impact on CCS earnings attributable to non-controlling interest	18	–	–	–	18	–	–
Impact on CCS earnings attributable to Shell plc shareholders	(7,365)	(1,800)	(623)	(1,991)	(1,195)	(732)	(1,024)

[A] Corporate includes reclassifications from equity to profit and loss of cumulative currency translation differences related to funding structures resulting in unfavourable movements of $1,122 million. These cu rrency translation differences were previously recognised in other comprehensive income and accumulated in equity as part of accumulated other comprehensive income.

2023

$ million

	Total	Integrated Gas [A]	Upstream [A]	Marketing [A]	Chemicals and Products [A]	Renewables and Energy Solutions [A]	Corporate [A]
Identified items included in Income/(loss) before taxation							
Divestment gains/(losses)	257	(22)	209	1	(46)	109	5
Impairment reversals/(impairments)	(8,300)	(3,147)	(1,187)	(509)	(2,690)	(767)	–
Redundancy and restructuring	(329)	(1)	(21)	(150)	(106)	(32)	(18)
Provisions for onerous contracts	(24)				(24)		
Fair value accounting of commodity derivatives and certain gas contracts	(419)	(4,755)	447	20	276	3,593	
Other	82	32	(615)	300	(43)	408	
Total identified items included in Income/(loss) before taxation	(8,732)	(7,892)	(1,166)	(339)	(2,632)	3,311	(14)
Less: total identified items included in Taxation charge/(credit)	(481)	(1,031)	100	(85)	(497)	978	55
Identified items included in Income/(loss) for the period							
Divestment gains/(losses)	277	(14)	208	1	(35)	113	3
Impairment reversals/(impairments)	(6,219)	(2,247)	(642)	(466)	(2,195)	(669)	–
Redundancy and restructuring	(241)	–	(9)	(113)	(82)	(24)	(12)
Provisions for onerous contracts	(18)				(18)		
Fair value accounting of commodity derivatives and certain gas contracts	(1,284)	(4,407)	127	26	214	2,756	
Impact of exchange rate movements and inflationary adjustments on tax balances	(355)	–	(295)				(60)
Other	(412)	(193)	(656)	298	(19)	158	
Impact on CCS earnings	(8,252)	(6,861)	(1,267)	(254)	(2,135)	2,333	(69)
Impact on CCS earnings attributable to non-controlling interest	(11)			(11)			
Impact on CCS earnings attributable to Shell plc shareholders	(8,240)	(6,861)	(1,267)	(242)	(2,135)	2,333	(69)

[A] See Note 7 to the "Consolidated Financial Statements" which includes an explanation of the reporting segments changes applicable from 2024.

2022

$ million

	Total	Integrated Gas [A]	Upstream [A]	Marketing [A]	Chemicals and Products [A]	Renewables and Energy Solutions [A]	Corporate [A]
Identified items included in Income/(loss) before taxation							
Divestment gains/(losses)	657	101	437	(154)	265	7	–
Impairment reversals/(impairments)	2,260	1,780	1,515	(338)	(285)	(412)	–
Redundancy and restructuring	44	(26)	(50)	(1)	130	(7)	–
Provisions for onerous contracts	(508)	(415)	(35)	(62)	4		
Fair value accounting of commodity derivatives and certain gas contracts	3,244	6,711	(218)	(46)	(161)	(3,041)	
Other	(1,519)	(882)	(506)	(56)	(76)		
Total identified items included in Income/(loss) before taxation	4,178	7,269	1,143	(657)	(123)	(3,454)	–
Less: total identified items included in Taxation charge/(credit)	2,919	1,195	2,238	(45)	90	(649)	90
Identified items included in Income/(loss) for the period							
Divestment gains/(losses)	418	95	231	(122)	210	5	–
Impairment reversals/(impairments)	725	779	853	(321)	(226)	(361)	–
Redundancy and restructuring	43	(26)	(27)	(1)	103	(5)	–
Provisions for onerous contracts	(487)	(387)	(35)	(62)	(2)		
Fair value accounting of commodity derivatives and certain gas contracts	3,421	6,273	(225)	(42)	(142)	(2,443)	
Impact of exchange rate movements and inflationary adjustments on tax balances	(57)	(51)	84				(90)
Other	(2,804)	(608)	(1,976)	(64)	(156)		
Impact on CCS earnings	1,259	6,075	(1,096)	(612)	(213)	(2,805)	(90)
Impact on CCS earnings attributable to non-controlling interest	15				15		
Impact on CCS earnings attributable to Shell plc shareholders	1,243	6,075	(1,096)	(612)	(228)	(2,805)	(90)

[A] See Note 7 to the "Consolidated Financial Statements" which includes an explanation of the reporting segments changes applicable from 2024.

The identified items categories above may include after-tax impacts of identified items of joint ventures and associates which are fully reported within "Share of profit of joint ventures and associates" in the Consolidated Statement of Income, and fully reported as identified items included in Income/(loss) before taxation in the table above. Identified items related to subsidiaries are consolidated and reported across appropriate lines of the Consolidated Statement of Income. Only pre-tax identified items reported by subsidiaries are taken into account in the calculation of underlying operating expenses.

Provisions for onerous contracts: Provisions for onerous contracts that relate to businesses that Shell has exited or to redundant assets or assets that cannot be used.

Fair value accounting of commodity derivatives and certain gas contracts: In the ordinary course of business, Shell enters into contracts to supply or purchase oil and gas products, power and environmental products. Shell also enters into contracts for tolling, pipeline and storage capacity. Derivative contracts are entered into for mitigation of resulting economic exposures (generally price exposure) and these derivative contracts are carried at period-end market price (fair value), with movements in fair value recognised in income for the period. Supply and purchase contracts entered into for operational purposes, as well as contracts for tolling, pipeline and storage capacity, are, by contrast, recognised when the transaction occurs; furthermore, inventory is carried at historical cost or net realisable value, whichever is lower. As a consequence, accounting mismatches occur because: (a) the supply or purchase transaction is recognised in a different period, or (b) the inventory is measured on a different basis. In addition, certain contracts are, due to pricing or delivery conditions, deemed to contain embedded derivatives or written options and are also required to be carried at fair value even though they are entered into for operational purposes. The accounting impacts are reported as identified items.

Impacts of exchange rate movements on tax balances represent the impact on tax balances of exchange rate movements arising on (a) the conversion to dollars of the local currency tax base of non-monetary assets and liabilities, as well as losses (this primarily impacts the Upstream and Integrated Gas segments) and (b) the conversion of dollar-denominated inter-segment loans to local currency, leading to taxable exchange rate gains or losses (this primarily impacts the Corporate segment).

Other identified items represent other credits or charges that based on Shell management's assessment hinder the comparative understanding of Shell's financial results from period to period.

Cash capital expenditure

Cash capital expenditure monitors investing activities on a cash basis, excluding items such as lease additions which do not necessarily result in cash outflows in the period. The measure comprises the following lines from the Consolidated Statement of Cash Flows: Capital expenditure, Investments in joint ventures and associates and Investments in equity securities. The reconciliation of "Capital expenditure" to "Cash capital expenditure" is presented in Note 7 to the "Consolidated Financial Statements".

Operating expenses and underlying operating expenses

Operating expenses is a measure of Shell's cost management performance, comprising the following items from the "Consolidated Statement of Income": production and manufacturing expenses; selling, distribution and administrative expenses; and research and development expenses.See Note 7 to the "Consolidated Financial Statements" for reconciliation of total operating expenses.

Underlying operating expenses is a measure aimed at facilitating a comparative understanding of performance from period to period by removing the effects of identified items, which, either individually or collectively, can cause volatility, in some cases driven by external factors.

Operating expenses and underlying operating expenses

$ million

	2024	2023	2022
Operating expenses, of which:	36,917	39,960	39,476
Production and manufacturing expenses	23,379	25,240	25,518
Selling, distribution and administrative expenses	12,439	13,433	12,883
Research and development expenses	1,099	1,287	1,075
Of which identified items:			
Redundancy and restructuring (charges)/reversal	(1,009)	(325)	46
(Provisions)/reversal	(454)	(434)	77
Other	252	–	(143)
Identified items	(1,210)	(758)	(21)
Underlying operating expenses	35,707	39,201	39,456

Total spend on goods and services

Total spend on goods and services represents the amounts paid to our suppliers globally and is comprised of both Capital Expenditure and Operating Expenditure. Employee costs are excluded from Operating costs as these do not relate to third-party spend.

The total spend on goods and services is used to demonstrate the company's societal contribution towards suppliers, contractors and communities where Shell operates.

The calculation of Total spend on goods and services was changed in 2023, with data published in previous years being limited to spend for Operated assets that has been contracted with the support of the Contracting and Procurement team, calculated on a cash payments basis.

Total spend on goods and services

$ million

	2024	2023	2022
Capital Expenditure	19,601	22,993	22,600
Add: Underlying Operating Expenditure [A]	35,707	39,201	39,456
Less: Employee costs [B]	13,452	13,629	13,971
Total spend on goods and services	41,856	48,565	48,085

[A] See the "Operating expenses and underlying operating expenses" table above.
[B] See Note 33 to the "Consolidated Financial Statements".

Structural cost reduction

The structural cost reduction target is used for the purpose of demonstrating how management drives cost discipline across the entire organisation, simplifying our processes and portfolio, and streamlining the way we work.

Structural cost reduction describes the decrease in underlying operating expenses as a result of operational efficiencies, divestments, workforce reductions and other cost-saving measures that are expected to be sustainable compared with 2022 levels.

The total change between periods in underlying operating expenses will reflect both structural cost reductions and other changes in spend, including market factors, such as inflation and foreign exchange impacts, as well as changes in activity levels and costs associated with new operations.

Estimates of cumulative annual structural cost reduction may be revised depending on whether cost reductions realised in prior periods are determined to be sustainable compared with 2022 levels. Structural cost reductions are stewarded internally to support management's oversight of spending over time. The 2025 target reflects annualised saving achieved by end-2025.

Structural cost reduction

			$ million
	2024	2023	Total [A]
Underlying Operating expenses current year	35,707	39,201	
Underlying Operating expenses previous year	39,201	39,456	
Total decrease in Underlying operating expenses	(3,494)	(255)	(3,749)
Of which:			
Structural cost reduction	(2,132)	(987)	(3,119)
Increase (decrease) in underlying operating expenses except structural cost reduction	(1,362)	732	(630)

[A] Structural cost reductions up to 2024 compared to 2022.

Capital Employed

Effective from 2024, the definition of capital employed has been amended to reflect the deduction of cash and cash equivalents.

Management believes that the updated methodology better reflects Shell's approach to managing capital employed, including the management of cash and cash equivalents alongside total debt and equity as part of the financial framework. Comparative information has been revised to reflect the updated definition.

Capital Employed

			$ million
	2024	2023	2022
Current debt	9,931	9,001	8,218
Non-current debt	71,610	74,794	80,868
Total equity	188,362	192,597	175,326
Less: Cash and cash equivalents	(38,774)	(40,246)	(36,970)
Capital employed – opening	231,128	236,146	227,442
Current debt	11,630	9,931	9,001
Non-current debt	65,448	71,610	74,794
Total equity	180,168	188,362	192,597
Less: Cash and cash equivalents	(39,110)	(38,774)	(40,246)
Capital employed – closing	218,134	231,128	236,146
Capital employed – average	224,630	233,637	231,794

Return on average capital employed

Return on average capital employed ("ROACE") measures the efficiency of Shell's utilisation of the capital that it employs. Shell uses two ROACE measures: ROACE on an Adjusted Earnings plus Non-controlling interest (NCI) basis and LTIP ROACE.

ROACE on an Adjusted Earnings plus NCI basis relies on earnings on an Adjusted Earnings plus NCI basis excluding identified items adjusted for after-tax interest expense and after-tax interest income and is considered to be comparable with Shell's IFRS peers, who tend to adjust for similar items when calculating ROACE. The measure refers to Capital employed which consists of Total equity, current debt, and non-current debt, reduced by cash and cash equivalents.

In addition, the numerator applied to ROACE on an Adjusted Earnings plus NCI basis has been amended to remove interest on cash and cash equivalents for consistency with the revised capital employed definition.

LTIP (Long-Term Incentive Plan vesting) ROACE is a performance measure that is used for Long-Term Incentive Plan performance ranking and is defined as net income for the period as a percentage of the average capital employed for the period. The Capital Employed that is applied is different to the ROACE on an Adjusted earnings plus NCI basis in that it is not adjusted for Cash and cash equivalents.

ROACE on a Net Income basis has been discontinued, as this measure is no longer routinely used by management in assessing the efficiency of capital employed.

ROACE on an Adjusted Earnings plus Non-controlling interest (NCI) basis

			$ million
	2024	2023	2022
Adjusted Earnings	23,716	28,250	39,870
Add: Income/(loss) attributable to Non-controlling interest	427	277	565
Add: Current cost of supplies adjustment attributable to Non-controlling interest	14	(5)	(116)
Less: Identified items attributable to Non-controlling interest	18	(11)	15
Adjusted Earnings plus Non-controlling interest excluding identified items	24,139	28,534	40,304
Add: Interest expense after tax	2,701	2,728	1,931
Less: Interest income after tax on cash and cash equivalents	1,389	1,287	457
Adjusted Earnings plus Non-controlling interest excluding identified items before interest expense and interest income	25,452	29,975	41,777
Capital employed - average	224,630	233,637	231,794
ROACE on an Adjusted Earnings plus Non-controlling interest basis	11.3%	12.8%	18.0%

LTIP ROACE

			$ million
	2024	2023	2022
Income for the period	16,521	19,636	42,874
Capital Employed - opening including cash and cash equivalents	269,902	276,392	264,413
Capital employed - closing including cash and cash equivalents	257,242	269,902	276,392
Capital Employed including cash and cash equivalents - average	263,572	273,147	270,402
Net Income ROACE	6.3%	7.2%	15.9%

Furthermore an additional measure of Price normalised ROACE on an Adjusted Earnings plus NCI basis, was introduced during Capital Market Day 2025 for purposes of tracking improvement in underlying

performance in the utilisation of the capital that the company employs. The exclusion of the impact of price effects provides a more comparable reflection of the underlying business performance.

This new measure will be calculated in the same manner as ROACE on an Adjusted Earnings plus NCI basis, with the only difference being the price-normalisation of Adjusted Earnings.

Price-normalisation refers to the process of removing the impact of macroeconomic price movements, so as to determine a more comparable basis for calculating the ROACE year on year. Shell believes this is a more meaningful basis for investors to be able to assess the Company's performance over time.

The normalised Adjusted Earnings will be determined by price-normalising the adjusted earnings using a price set as published in Quarterly Databook for Brent, Henry Hub on a real term 2024 basis (and related gas markers) and Refining and Chemicals Margin to a price set as communicated during Capital Market Day 2025.

Net debt, Net debt excluding lease liabilities and gearing

Net debt is defined as the sum of current and non-current debt, less cash and cash equivalents, adjusted for the fair value of derivative financial instruments used to hedge foreign exchange and interest rate risk relating to debt, and associated collateral balances. Management considers this adjustment useful because it reduces the volatility of net debt caused by fluctuations in foreign exchange and interest rates, and eliminates the potential impact of related collateral payments or receipts. Debt-related derivative financial instruments are a subset of the derivative financial instrument assets and liabilities presented on the balance sheet. Collateral balances are reported under "Trade and other receivables" or "Trade and other payables" as appropriate. See also Note 20 to the "Consolidated Financial Statements".

Net debt excluding lease liabilities is calculated by subtracting lease liabilities from Net Debt.

Lease Liabilities are frequently long-term operational necessities rather than discretionary financing choices. Management believes that using Net debt excluding lease liabilities alongside Net debt gives better insight to the financial position by reflecting debt directly tied to financing activities, and improving comparability against peers with different asset ownership strategies or following different accounting standards.

Gearing is a measure of Shell's capital structure and is defined as net debt as a percentage of total capital (net debt plus total equity).

Net debt, Net Debt excluding Lease Liabilities and Gearing

$ million

	2024	2023	2022
Current debt	11,630	9,931	9,001
Non-current debt	65,448	71,610	74,794
Total debt	77,078	81,541	83,795
Of which lease liabilities	28,702	27,709	27,643
Add: Debt-related derivative financial instruments: net liability / (asset)	2,469	1,835	3,071
Add: Collateral on debt-related derivatives: net liability / (asset)	(1,628)	(1,060)	(1,783)
Less: Cash and cash equivalents	(39,110)	(38,774)	(40,246)
Net Debt	38,809	43,542	44,837
Of which Net Debt excluding lease liabilities	10,107	15,833	17,194
Add: Total equity	180,168	188,362	192,597
Total capital	218,974	231,902	237,434
Gearing	17.7%	18.8%	18.9%

Cash flow from operating activities excluding working capital movements

Working capital movements are defined as the sum of the following items in the Statement of Cash Flows: (increase) or decrease in inventories, (increase) or decrease in current receivables, and increase or (decrease) in current payables.

Cash flow from operating activities excluding working capital movements is a measure used by Shell to analyse its operating cash generation over time excluding the timing effects of changes in inventories and operating receivables and payables from period to period.

Cash flow from operating activities excluding working capital movements

$ million

	2024	2023	2022
Cash flow from operating activities	54,687	54,191	68,414
(Increase)/decrease in inventories	1,273	6,325	(8,360)
(Increase)/decrease in current receivables	6,578	12,401	(8,989)
Increase/(decrease) in current payables [A]	(5,789)	(11,581)	12,329
(Increase)/decrease in working capital [A]	2,062	7,145	(5,021)
Cash flow from operating activities excluding working capital movements [A]	52,625	47,046	73,434

[A] To further enhance consistency between working capital and the Balance Sheet and the Statement of Cash Flows, from January 1, 2024, onwards movements in current other provisions are recognised in 'Decommissioning and other provisions' instead of 'Increase/(decrease) in current payables'. Comparatives for 2023 and 2022 have been reclassified accordingly to conform with current period presentation.

Shareholder distribution and Shareholder distribution as percentage of CFFO

Shareholder distribution is used to evaluate the level of cash distribution to shareholders. It is defined as the sum of Cash dividends paid to Shell plc shareholders and Repurchases of shares. Both are reported in the Consolidated Statement of Cash Flows.

Shareholder distribution as a percentage of CFFO is used to measure the company's progress on increasing returns to shareholders. This measure is calculated by dividing the Shareholder distribution by the annual CFFO as presented in the Consolidated Statement of Cash Flows.

Shareholder distribution and Shareholder distribution as percentage of CFFO

$ million

	2024	2023	2022
Cash dividends paid to Shell plc shareholders	8,668	8,393	7,405
Repurchases of shares	13,898	14,617	18,437
Shareholder distribution	22,566	23,010	25,842
CFFO	54,687	54,191	68,414
Shareholder distribution as % CFFO	41%	42%	38%

Divestment proceeds

Divestment proceeds represent cash received from divestment activities in the period. Management regularly monitors this measure as a key lever to deliver sustainable cash flow.

Divestment proceeds

$ million

	2024	2023	2022
Proceeds from sale of property, plant and equipment and businesses	1,621	2,565	1,431
Proceeds from joint ventures and associates from sale, capital reduction and repayment of long-term loans	590	474	511
Proceeds from sale of equity securities	582	51	117
Divestment proceeds	2,793	3,091	2,059

Free cash flow and organic free cash flow

Free cash flow is used to evaluate cash available for financing activities, including shareholder distributions and debt servicing, after investment in maintaining and growing our business.

Organic free cash flow is defined as Free cash flow excluding the cash flows from acquisition and divestment activities. It is a measure used by management to evaluate generation of cash flow without these activities.

Free cash flow and Organic free cash flow

$ million

	2024	2023	2022
Cash flow from operating activities	54,687	54,191	68,414
Cash flow from investing activities	(15,155)	(17,734)	(22,448)
Free cash flow	39,533	36,457	45,965
Less: Divestment proceeds [A]	2,793	3,091	2,059
Add: Tax paid on divestments (reported under "Other investing cash outflows")	1	–	17
Add: Cash outflows related to inorganic capital expenditure [B]	776	2,522	4,205
Organic free cash flow	37,517	35,888	48,128

[A] See "Divestment Proceeds" on page 451.
[B] Cash outflows related to inorganic capital expenditure includes portfolio actions which expand Shell's activities through acquisitions and restructuring activities as reported in capital expenditure lines in the "Consolidated Statement of Cash Flows".

Price-normalised free cash flow growth and Price-normalised free cash flow growth per share

Price-normalised free cash flow growth (of 6% average growth over the 2022-2030 period) and Price-normalised free cash flow growth per share (of 10% average per annum over the 2022 - 2025 period) are business targets introduced during Capital Markets Day (CMD23) in 2023 for the purposes of demonstrating progress in value creation towards achieving our strategy, reported on an annual basis.

Price-normalisation refers to the process of removing the impact of macroeconomic price movements, so as to determine a more comparable basis for calculating the growth in free cash flow year on year. Shell believes this is a more meaningful basis for investors to be able to assess the Company's performance over time.

Price-normalised cash flow from operating activities (CFFO) is determined by normalising the actual cash flow for the period by applying the price set communicated during CMD23 of: Brent, Henry Hub and related gas markers on a real-term 2022 basis, based on Operating Plan 2022 long-term price guidance until 2030 and, historical average Refining Margin $4-$6 per tonne (nominal) and historical average Chemicals Margin $150-$250 per tonne (nominal). The Price-normalised CFFO is added to Cash flow from Investments to achieve the Price-normalised free cash flow.

The Price-normalised free cash flow growth is determined by comparing the Price-normalised free cash flow of the current year to the previous year.

The Price-normalised free cash flow growth per share is calculated by first dividing the Price-normalised free cash flow for the year by the number of shares outstanding at the end of the period (the number of shares excludes shares held in trust), then comparing the current year Price-normalised free cash flow growth per share to the previous year.

Price-normalised free cash flow growth

$ million

	2024	2023	2022
Cash flow from operating activities	54,687	54,191	68,414
Cash flow from investing activities	(15,155)	(17,734)	(22,448)
Free cash flow	39,533	36,457	45,965
Price-normalisation [A]	(7,500)	(11,500)	(26,000)
Price-normalised free cash flow	32,033	24,957	19,965
Price-normalised free cash flow growth	7,076	4,992	
Price-normalised free cash flow growth %	28%	25%	

[A] Rounded to the nearest half billion. See below for explanation of how the Price-normalisation impact is calculated.

Price-normalised free cash flow growth per share

	2024	2023	2022
Price-normalised free cash flow ($ million)	32,033	24,957	19,965
Shares outstanding (million)	6,084	6,486	6,971
Price-normalised free cash flow per share ($)	5.26	3.85	2.86
Price-normalised free cash flow growth per share	37%	34%	

Shares outstanding

number of shares (million)

Number of shares outstanding as at December 31	2024	2023	2022
Ordinary shares [A]	6,115	6,524	7,004
Less: Shares held in trust [B]	(31)	(38)	(33)
Shares outstanding	6,084	6,486	6,971

[A] See Note 27 to the "Consolidated Financial Statements".
[B] See Note 28 to the "Consolidated Financial Statements". Each ADS represents two ordinary shares.

Calculation of the price-normalisation
For each of the price markers shown in the table below, a comparison is made between the average prices for the period (published on our website Shell.com) against the price set shown below, which is based on the prices published at CMD23.

The price sensitivities shown in the table following, indicate the estimated impact in CFFO for the change in each price marker. The price sensitivities are applied to the price variance of each price marker to determine the impact on CFFO.

No price adjustments are made for Marketing and Renewables and Energy Solutions.

Price set applied

	2024	2023	2022
Brent [A]	$67.6/bbl	$66.3/bbl	$65/bbl
Henry Hub [A]	$4.2/MMBtu	$4.1/MMBtu	$4/MMBtu
EU TTF [A]	$7.8/MMBtu	$7.7/MMBtu	$7.5/MMBtu
JCC - 3 months [A]	$66/bbl	$64.7/bbl	$63.5/bbl
Indicative chemical earnings margin [B]	$200 per tonne	$200 per tonne	$200 per tonne
Indicative refining earnings margin [B]	$5 per tonne	$5 per tonne	$5 per tonne

[A] Real-term 2022, as per the Group Operating Plan 2022 long-term price guidance until 2030.
[B] Mid-point of CMD23 guidance.

Price sensitivities applied

$ million

	2024	2023	2022
Upstream			
$10/bbl Brent	2,600	2,600	3,000
$1/MMbtu Henry Hub	160	150	325
$1/MMbtu EU TTF	80	110	150
Integrated Gas			
$10/bbl Brent	1,300	1,300	1,000
$10/bbl JCC - 3 months	1,200	1,400	1,200
Chemicals and Products			
$30/tonne indicative chemical earnings margin	700	750	700
$1/bbl indicative refining earnings margin	400	400	425

Normalised free cash flow growth per share
Normalised free cash flow growth per share is a new business target introduced during Capital Markets Day in 2025 for purposes of demonstrating progress in value creation towards achieving our strategy, reported on an annual basis.

As from 2025 this new measure will replace the previous measures of Price-normalised free cash flow growth and Price-normalised free cash flow growth per share and will apply Organic free cash flow as the basis instead of Free cash flow, and also exclude the volatility of working capital and derivatives.

Price-normalised free cash flow will be determined by price-normalising the organic free cash flow using a price set as published in the Quarterly Databook for Brent, Henry Hub on a real term 2024 basis (and related gas markers) and Refining and Chemicals Margin to a price set as communicated during Capital Market Day 2025. This Price-normalised organic free cash flow is then adjusted for the impact of working capital and derivatives.

Price-normalisation refers to the process of removing the impact of macroeconomic price movements, so as to determine a more comparable basis for calculating the growth in organic free cash flow year on year. Shell believes this is a more meaningful basis for investors to be able to assess the Company's performance over time.

The Normalised free cash flow per share is calculated by dividing the Normalised free cash flow (see above) by the number of shares outstanding at the end of the period (the number of shares excludes shares held in trust).

The Normalised free cash flow growth per share is determined by comparing the Normalised free cash flow per share of the current year to the previous year.

Taxes paid
Taxes paid represents the taxes paid to governments and comprises Corporate income tax and government royalties.

This measure differs to prior years reporting in that taxes of excise duties, sales taxes and similar levies on our fuel and products that are collected on behalf of the governments are no longer included. The removal of taxes collected which are not directly sourced from our systems is in line with our strategic simplification approach.

Taxes paid

$ million

	2024	2023	2022
Corporate income tax [A]	12,459	14,134	13,411
Royalties [B]	5,737	6,073	8,189
Taxes paid	18,196	20,207	21,600

[A] We paid $12 billion in corporate income taxes and accrued $0.5 billion of withholding taxes. Income taxes come from Tax paid in the Consolidated Statement of Cash Flows and withholding tax is part of "Other" of $1.5 billion in the Consolidated Statement of Cash Flows.
[B] Includes Production Taxes. Part of Purchases of $188.1 billion as included in the Consolidate Statement of Income.

Significant subsidiaries and other related undertakings (audited)

Significant subsidiaries and other related undertakings at December 31, 2024, are set out below. These are included in the "Consolidated Financial Statements" on pages 241-312. Shell's percentage of share capital is shown to the nearest whole number. Subsidiaries are disclosed separately from all other undertakings. Subsidiaries directly held by the Company are marked with the annotation [a]. A number of the entities listed are dormant or not yet operational. Entities that are proportionately consolidated are identified by the annotation [b]. Shell-owned shares are ordinary shares unless identified with one of the following annotations against the company name: [c] Membership interest; [d] Partnership capital; [e] Non-redeemable; [f] Ordinary, Partnership capital; [g] Ordinary, Redeemable; [h] Ordinary, Redeemable, Non-redeemable; and [i] Redeemable, Non-redeemable; and [k] Deferred shares. Percentages reflect the Group Ownership Interest which represents the Shell Group's stake in an entity, regardless of the voting and non-voting shares.

Subsidiaries including Shell plc Direct Holdings

Company by country and address of incorporation	%
ARGENTINA	
AVENIDA PTE. ROQUE SÁENZ PENA 788, 2ND FLOOR, CIUDAD DE BUENOS AIRES, 1035	
Shell Argentina S.A.	100
AUSTRALIA	
LIONSGATE BUSINESS PARK, LEVEL 3, MAIN ADMINISTRATION BUILDING, 180 PHILIP HIGHWAY, ELIZABETH SOUTH, SA 5112	
Sonnen Australia Pty Limited	100
275 GEORGE STREET, BRISBANE, 4000	
PENRITH SMART BATTERY HOLDCO PTY LIMITED	100
Penrith Smart Battery Pty Limited	100
275 GEORGE STREET, BRISBANE, 4000	
BC 789 Holdings Pty Ltd	100
BNG (SURAT) PTY. LTD.	100
Condamine 1 Pty Ltd	100
Condamine 2 Pty Ltd	100
Condamine 3 Pty Ltd	100
Condamine 4 Pty Ltd	100
Condamine Power Station Pty Ltd	100
E.R.M. Oakey Power Pty Ltd	100
ERM Employee Share Plan Administrator Pty Ltd	100
ERM Energy Solutions Holdings Pty Ltd	100
ERM Financial Services Pty Ltd	100
ERM Holdings Pty Ltd	100
ERM Land Holdings Pty Ltd	100
ERM Neerabup Power Pty Ltd	100
ERM Power International Pty Ltd	100
ERM Power Investments Pty Ltd	100
ERM Power Utility Systems Pty Ltd	100
Gangarri Solar Farm Pty Ltd	100
Greensense Pty Ltd	100
Lumaled Pty Ltd	100
NATURE BASED SOLUTIONS PTY LTD	100
New South Oil Pty Ltd	100
Oakey Power Holdings Pty Ltd	100
Petroleum Resources (Thailand) Pty. Limited	100
Powermetric Metering Pty Ltd	100
Powershop Australia Pty Ltd	100
Pure Energy Resources Pty Limited	100
QCLNG Operating Company Pty Ltd [g]	75
QCLNG Pty Ltd	100
QGC (Infrastructure) Pty Ltd	100
QGC Common Facilities Company Pty Ltd	100
QGC Holdings 2 Pty Ltd	100
QGC Holdings 3 Pty Ltd	100
QGC Midstream Holdings Pty Ltd	100
QGC Midstream Investments Pty Ltd	100
QGC Midstream Land Pty Ltd	100

Company by country and address of incorporation	%
QGC Midstream Limited Partnership	100
QGC Midstream Services Pty Ltd	100
QGC Northern Forestry Pty Ltd	100
QGC Pty Limited	100
QGC Sales Qld Pty Ltd	100
QGC Train 1 Pty Ltd	100
QGC Train 1 Tolling Pty Ltd	100
QGC Train 1 UJV Manager Pty Ltd	100
QGC Train 2 Pty Ltd	100
QGC Train 2 Tolling No.2 Pty Ltd	100
QGC Train 2 Tolling Pty Ltd	100
QGC Train 2 UJV Manager Pty Ltd	100
QGC Upstream Holdings Pty Ltd	100
QGC Upstream Investments Pty Ltd	100
QGC Upstream Limited Partnership	100
QUEENSLAND GAS COMPANY PTY LIMITED	100
Richmond Valley Solar Thermal Pty Ltd	100
Roma Petroleum Pty Limited	100
Select Carbon Pty Ltd	100
SGA (QUEENSLAND) PTY LIMITED	100
Shell Energy Australia Pty Ltd	100
Shell Energy Neerabup Pty Ltd	100
Shell Energy Oakey Power Holdings Pty Ltd	100
SHELL ENERGY OPERATIONS NO. 2 HOLDINGS PTY LTD	100
Shell Energy Operations No. 2 Pty Ltd	100
Shell Energy Operations Pty Ltd	100
Shell Energy Power Generation Pty Ltd	100
Shell Energy Retail Finance Pty Ltd	100
Shell Energy Retail Pty Ltd	100
Shell Energy Wallerawang 9 BESS Pty Ltd	100
Shell New Energies Australia Pty Ltd	100
Shell QGC Pty Ltd	100
Starzap Pty Ltd	100
Sunshine 685 Pty Limited	100
Walloons Coal Seam Gas Company Pty Limited [g]	75
275 GEORGE STREET, BRISBANE, QLD 4000	
QUEENSLAND ELECTRICITY INVESTORS PTY. LTD.	100
275 GEORGE STREET, LEVEL 30, BRISBANE, 4000	
ERM Wellington 1 Holdings Pty Ltd	100
LEVEL 30, 275 GEORGE STREET, BRISBANE, 4000	
Shell Energy Retail Markets Pty Ltd	100
LEVEL 30, 275 GEORGE STREET, BRISBANE, QLD 4000	
OME RESOURCES AUSTRALIA PTY. LTD.	100
QGC LIMITED, LEVEL 30, 275 GEORGE STREET, BRISBANE, 4000	
CCM Energy Solutions Pty Ltd	100
ERM Braemar 3 Power Pty Ltd	100
ERM Braemar 3 Pty Ltd	100

Company by country and address of incorporation	%
AUSTRALIA continued	
ERM Innovation Labs Pty Ltd	100
ERM Power Services Pty Ltd	100
Shell Energy BESS 1 Pty Ltd	100
Shell Energy Certificate Trading Pty Ltd	100
Shell Energy Engineering Pty Ltd	100
Shell Energy Environmental Products Australia Pty Ltd	100
Shell Energy Power Developments Pty Ltd	100
Shell Energy Projects Pty Ltd	100
SHELL HOUSE, 562 WELLINGTON STREET, PERTH, 6000	
North West Shelf LNG Pty Ltd	100
Shell Australia FLNG Pty Ltd	100
Shell Australia Pty Ltd	100
Shell Australia Services Company Pty Ltd	100
Shell Development (PSC19) Pty Ltd	100
Shell Development (PSC20) Pty Ltd	100
Shell Energy Holdings Australia Limited	100
Shell Global Solutions Australia Pty Ltd	100
Shell Tankers Australia Pty Ltd	100
Trident LNG Shipping Services Pty Ltd	100
AUSTRIA	
FRANZ-JOSEFS-KAI 27, VIENNA, 1010	
Next Kraftwerke AT GmbH	100
SCHULHOF 6/1. STOCK, VIENNA, 1010	
Shell China Holding GmbH	100
TECH GATE, DONAU-CITY-STR, 1 VIENNA, 1220	
Rheinland Kraftstoff Österreich GmbH	100
TECH GATE, DONAU-CITY-STR. 1, VIENNA, 1220	
Shell Austria Gesellschaft m.b.H.	100
BAHAMAS	
2 BAYSIDE EXECUTIVE PARK, WEST BAY STREET & BLAKE ROAD, NASSAU	
Shell Bahamas Power Company Inc.	100
Shell Western Supply and Trading Limited	100
BARBADOS	
THE FINANCIAL SERVICES CENTRE, BISHOP'S COURT HILL, ST. MICHAEL, BB14004	
Shell Trinidad and Tobago Resources SRL	100
BELGIUM	
BORSBEEKSEBRUG 34/1, 2600 ANTWERPEN	
Shell EV Charging Solutions Belgium	100
CANTERSTEEN 47, BRUSSELS, 1000	
Belgian Shell	100
PANTSERSCHIPSTRAAT 331, GENT, 9000	
Shell Catalysts & Technologies Belgium	100
AVENUE DU ROI 107, BRUSSELS, 1190	
Next Kraftwerke Belgium BV	100
BERMUDA	
3RD FLOOR CONTINENTAL BUILDING, 25 CHURCH STREET, HAMILTON, HM 12	
Gas Investments & Services Company Limited	85
Qatar Shell GTL Limited	100
Shell Holdings (Bermuda) Limited	100
Shell Oman Trading Limited	100
Shell Petroleum (Malaysia) Ltd	100
Shell Saudi Arabia (Refining) Limited	100
Shell Trust (Bermuda) Limited	100
Solen Life Insurance Limited	100
BRAZIL	
AV. REPBLICA DO CHILE, NO 330, BLOCK 2, ROOM 2401, CENTRO, RIO DE JANEIRO, 20031-170	
DRACO HOLDING LTDA	100

Company by country and address of incorporation	%
3.311 AVENIDA BRIGADEIRO FARIA LIMA, ITAIM BIBI, SAO PAULO, 04538-133	
Shell Trading Brasil Ltda.	100
330 AVENIDA REPÚBLICA DO CHILE, RIO DE JANEIRO, 20.031-170	
SHELL BRASIL PETROLEO LTDA.	100
Shell Energy do Brasil Gás Ltda.	100
340 CONJ 182, LETRA B, 18 ANDAR, RUA CINCINATO BRAGA, SÃO PAULO, 01333-010	
Ativa Energia E Participacoes Societarias Ltda	100
Exata Energia Consultoria e Comercio Ltda.	100
Facite Participacoes Societarias Ltda.	100
Prex Participacoes Societarias Ltda.	100
Prime Energy Comercializadora de Gas Ltda.	100
Prime Energy Consultoria e Comercio de Energia Ltda.	100
Prime Energy Comercializadora de Energia Ltda.	100
340 CONJ 182, LETRA C, 18 ANDAR, RUA CINCINATO BRAGA, SÃO PAULO, 01333-010	
Exata Energia Comercializadora Ltda	100
340, CONJ 181, LETRA C, 18 ANDAR, RUA CINCINATO BRAGA, SÃO PAULO, 01333-010	
Ativa Operacao, Manutencao e Consultoria Ltda	100
340, CONJ 181, LETRA D, 18 ANDAR, RUA CINCINATO BRAGA, SÃO PAULO, 01333-010	
MLE Comercializadora Varejista de Energia Ltda	100
340, CONJ 182, RUA CINCINATO BRAGA, SÃO PAULO, 01333-010	
Ativa Esco Servicos de Eficiencia Energetica Ltda.	100
711, RUA DOUTOR JOAO PINHEIRO, JUIZ DE FORA, 36015-040	
Arion Otimizacao Em Energia Ltda.	100
ÁREA RURAL DE JANAÚBA, S/Nº, CITY OF JANAÚBA PROPERTIES, 39.448-899	
BRENERGY GERACAO SOLAR JANAUBA SPE II LTDA.	100
BRENERGY GERACAO SOLAR JANAUBA SPE III LTDA.	100
BRENERGY GERACAO SOLAR JANAUBA SPE IV LTDA.	100
BRENERGY GERACAO SOLAR JANAUBA SPE IX LTDA.	100
BRENERGY GERACAO SOLAR JANAUBA SPE LTDA.	100
BRENERGY GERACAO SOLAR JANAUBA SPE V LTDA.	100
BRENERGY GERACAO SOLAR JANAUBA SPE VI LTDA.	100
BRENERGY GERACAO SOLAR JANAUBA SPE VII LTDA.	100
BRENERGY GERACAO SOLAR JANAUBA SPE VIII LTDA.	100
BRENERGY GERACAO SOLAR JANAUBA SPE X LTDA.	100
BRENERGY GERACAO SOLAR JANAUBA SPE XI LTDA.	100
BRENERGY GERACAO SOLAR JANAUBA SPE XII LTDA.	100
BRENERGY GERACAO SOLAR JANAUBA SPE XIII LTDA.	100
AV BRIG FARIA LIMA, NO 3311, CJ 81 PART, SÃO PAULO/SP, 04538-133	
Fundacao VIVA	100
AV REPUBLICA DO CHILE 330, BLC 2 SAL 3201, RIO DE JANEIRO, 20031-170	
COMSHELL SOCIEDADE DE PREVIDENCIA PRIVADA	100
Shell Brasil Renewables & Energy Solutions Ltda	100
AV REPUBLICA DO CHILE, 330 BLC 2 SAL 2401, RIO DE JANEIRO, 20.031-170	
Seapos Ltda.	100
AV REPUBLICA DO CHILE, 330, BLC 2 SAL 2301, RIO DE JANEIRO, 20.031-170	
Pecten Do Brasil Servicos De Petroleo, LTDA.	100
AV. REPUBLICA DO CHILE, NO 330, 23O ANDAR PARTE, TORRE 2 - CENTRO, RIO DE JANEIRO, 20.031-170	
BG PETROLEO & GAS BRASIL LTDA	100
AV. REPUBLICA DO CHILE, NO 330, 23O ANDAR, TORRE 2 - CENTRO, RIO DE JANEIRO, 20.031-170	
BG Comercio e Importacao Ltda.	100
AVENIDA BRIGADEIRO FARIA LIMA, 3311, CONJUNTO 82, ITAIM BIBI, SAO PAULO, 04538-133	
Shell Energy do Brasil Ltda.	100
AVENIDA REPÚBLICA DO CHILE, 330, BLC 2, SAL 2401, RIO DE JANEIRO, 20031-170	
Heze Holding II LTDA.	100
GLEBA DO TRONCO, S/N, PARCELA 470 RODOVIA MG 408 LAT 17 4, 54.45 S LONG 46 0 23.31 O - FAZENDA CRUZETA, BRASILANDIA DE MINAS	
SPE AQUARII III LTDA	100

Company by country and address of incorporation	%
BRAZIL continued	
GLEBA DO TRONCO, S/N, PARCELAS 469 E 470 RODOVIA, MG 408 LAT 17 4 47.58 S LONG, 46 0 35.90 O FAZENDA, CRUZETA, BRASILANDIA DE MINAS, 38.779-000	
SPE AQUARII II LTDA	100
GLEBA DO TRONCO, S/N, PARCELAS 469 E 470, RODOVIA MG 408, LAT 17 4 38.59 S LONG, 46 0 53.43 O - FAZENDA CRUZETA, BRASILANDIA DE MINAS, 38.779-000	
SPE AQUARII I LTDA	100
NO 330, ROOM 2301,AVENIDA REPÚBLICA DO CHILE, BUILDING 2, RIO DE JANEIRO, 20031-170	
HEZE I HOLDING S.A.	100
BRUNEI	
C/O BSP HEAD OFFICE, NDCO BLOCK, GROUND FLOOR, JALAN UTARA, PANAGA SERIA, KB 3534	
Shell Borneo Sendirian Berhad	100
BULGARIA	
48, SITNYAKOVO BLVD., SERDIKA OFFICES, 8TH FLOOR, SOFIA, 1505	
Shell Bulgaria Ead	100
CANADA	
2100-855 2 ST SW, CALGARY, T2P 4J8	
1745844 Alberta Ltd.	50
400 BOUL DE MAISONNEUVE OUEST, MONTREAL	
Shell Quebec Limitee	100
5005 LAPINIÈRE BOULEVARD, BROSSARD, J4Z 0N5	
Nature Energy Construction Canada Inc	100
5005 LAPINIÈRE BOULEVARD, BROSSARD, J4Z 0N5	
Nature Energy Canada Inc.	100
Nature Energy Farnham Inc.	100
900-1000 RUE DE LA GAUCHETIERE O, MONTREAL (QUEBEC), H3B4W5	
Volta Canada Inc.	100
SUITE 4000, 500 CENTRE STREET SE, ALBERTA, CALGARY, T2G 1A6	
10084751 Canada Limited	100
7026609 Canada Inc.	100
7645929 Canada Limited	100
Canadian Mobility Services Limited	100
Cansolv Technologies Inc.	100
Coral Cibola Canada Inc.	100
SCL Pipeline Inc.	100
Shell Americas Funding (Canada) Limited	100
Shell Canada BROS Inc.	100
Shell Canada Energy [d]	100
Shell Canada Limited	100
Shell Canada OP Inc.	100
Shell Canada Products [d]	100
Shell Canada Services Limited	100
Shell Catalysts & Technologies Canada Inc.	100
Shell Chemicals Canada [d]	100
Shell Energy North America (Canada) Inc.	100
Shell Global Solutions Canada Inc.	100
Shell Trading Canada [d]	100
Zeco Systems (Canada) Inc.	100
5005 LAPINIÈRE BOULEVARD, 0, 0, BROSSARD, J4Z 0N5	
Nature Energy Canada New Ventures 2 Inc	100
CAYMAN ISLANDS	
FLOOR 4, WILLOW HOUSE, CRICKET SQUARE, PO BOX 268, GEORGE TOWN, KY1-1104	
BG EGYPT SA	100
OCORIAN TRUST (CAYMAN), LIMITED OF WINDWARD 3, REGATTA OFFICE PARK, PO BOX 1350, GRAND CAYMAN, KY1-1108	
Beryl North Sea Limited	100
BG Exploration and Production India Limited	100
Schiehallion Oil & Gas Limited	100
Shell Bolivia Corporation	100
Shell North Sea Holdings Limited	100

Company by country and address of incorporation	%
CHILE	
C/O CAREY Y CIA ABOGADOS, MIRAFLORES 222, PISO 28, SANTIAGO	
Shell Chile S.A.	100
CHINA	
3302, BUILDING A, RENHENG MENGCHUANG PLAZA, HUILONGPU COMMUNITY, LONGCHENG STREET, SHENZHEN, 518172	
Shell (Shenzhen) New Energy and Technology CO. Ltd	80
NO. 3, SOUTHERN RING ROAD, ZHENJIANG DISTRICT, SHAOGUAN CITY	
SHAOGUAN SHELL YADI CHARGING TECHNOLOGY CO., LTD	80
186, NO.1, 16TH FLOOR, DONGHUA BUILDING, NO. 5, DONGCHENG EAST ROAD, GANGBEI COMMUNITY, DONGCHENG STREET, DONGGUAN CITY	
DONGGUAN SHELL YADI CHARGING TECHNOLOGY CO., LTD	80
198 TIMES CITY, 263 HONGMING ROAD, LILIAN STREET, HUANGPU DISTRICT, GUANGZHOU	
GUANGZHOU SHELL YADI NEW ENERGY CO., LTD	80
30/F, CHINA WORLD TOWER B, NO.1 JIAN GUO MEN WAI AVENUE, BEIJING, 100004	
Shell (China) Limited	100
401 FLOOR 4, BUILDING 1, YARD 1, ZHONGHE ROAD, BEIJING, 100000	
Beijing Shell Information Technology Co., Ltd.	100
50 DONGHAI WEST ROAD, QINGDAO	
Qingdao Shell Oil Co., Ltd.	100
8/F, BUILDING 1, NO. 818 SHENCHANG ROAD, MINHANG DISTRICT, SHANGHAI, 201106	
Shell Management and Consulting Company Limited	100
Shell Ventures Company Limited	100
8TH FLOOR, NO. 1 BUILDING, NO. 818 OF SHENCHANG ROAD, MINHANG DISTRICT, SHANGHAI, 201100	
Shell (Shanghai) Petroleum Company Limited	100
BUILDING 4, JIN CHUANG BUILDING, NO. 4560, JIN KE ROAD, PILOT FREE TRADE ZONE, SHANGHAI	
Shell (Shanghai) Technology Limited	100
F7, NO. 1 BUILDING, HEADQUARTER PARK, CAIJIA FREE TRADE ZONE, NO. 60 SHENGHE ROAD, CHONGQING CITY	
Chongqing Shell Energy Company Limited	100
FLOOR 23, CHINA LIFE INSURANCE ANHUI FINANCIAL CENTER, LUZHOU AVENUE, BAOBINHU NEW AREA, HEFEI CITY	
Anhui Shell Energy Company Limited	100
FLOOR 27, BUILDING A, SHANDONG CHAMBER OF COMMERCE BUILDING, NO.51, WEI SECOND ROAD, SHIZHONG DISTRICT, JINAN CITY, 250001	
Shandong Shell Oil Co., Ltd.	100
FLOOR 56 AND 57, PHASE 1 OF XIN DI CENTER, NO. 188, LUSHAN ROAD, JIANYE DISTRICT, NANJING CITY, 210019	
Jiangsu Shell Energy Company Limited	100
LONGSHAN SEVENTH ROAD, WEST DAYA BAY, HUIZHOU	
HUIZHOU SHELL YADI CHARGING TECHNOLOGY CO., LTD	80
NANJIN WAN, GAOLAN DAO, ZHUHAI, 519050	
Shell (Zhuhai) Lubricants Company Limited	100
NO. 1 WANGJIABA, XINMIAOZHI VILLAGE, PUYUAN TOWN, TONGXIANG, JIAXING, ZHEJIANG, 314502	
Shell (Zhejiang) Petroleum Trading Limited	100
NO. 286 NANSAN ROAD, TIANJIN HARBOUR NANJIANG DEV. ZONE, TIANJIN, 300452	
Shell (Tianjin) Oil and Petrochemical Company Limited	100
NO. 304-5, 3RD FLOOR, BUILDING B AND OTHER 3 INNER PODIUMS, NUMBER A2, WORKERS STADIUM NORTH ROAD, CHAOYANG DISTRICT, BEIJING, 100000	
Shell (Beijing) New Energy Technology Co., Ltd	100
NO. 4, 5, 12/F, UNIT A, OCEANWIDE INTERNATIONAL CENTER OFFICE, WUHAN, 430000	
Hubei Shell Energy Company Limited	100
NO.19 OF DAGANG HANQIAO ROAD, ZHENJIANG NEW DISTRICT, JIANGSU, 212132	
Shell Road Solutions (Zhenjiang) Co. Ltd	100
NO.723, BUILDING A1, CHUANGGU INDUSTRIAL PARK, 568 QUEYUAN ROAD, TIANXIN DISTRICT, CHANGSHA CITY	
CHANGSHA SHELL YADI NEW ENERGY CO., LTD	80

Company by country and address of incorporation	%
CHINA continued	
NORTH TO GANG BEI ROAD & EAST TO HAI GANG ROAD, NANGANG INDUSTRIAL ZONE, TIANJIN ECONOMIC-TECHNOLOGICAL DEVELOPMENT AREA, TIANJIN, 300280	
Shell (Tianjin) Lubricants Company Limited	100
RM 1503, BUILDING 2, PLAZA OF ZBA, NO. 939 MINHE ROAD, NINGWEI STREET, XIAOSHAN, HANGZHOU, ZHEJIANG, 311215	
Zhejiang Shell Energy Development Company Limited	100
ROOM 2407-2409, BUILDING 15, FANGMAOYUAN (PHASE II), CHANGSHA, 410006	
Hunan Shell Energy Company Limited	100
ROOM 327, OFFICE BUILDING NO. 2, YADI ROAD, NEW INDUSTRIAL PARK, XILIU STREET, HIGH-TECH ZONE, XI 'AN, SHAANXI	
XI'AN SHELL YADI CHARGING TECHNOLOGY CO., LTD	80
ROOM 530, 5TH FLOOR, BUILDING 1, NO. 239 GANG'AO ROAD, SHANGHAI, 200137	
Shell Energy (China) Limited	100
ROOM 611,6TH FLOOR, BUILDING B, VITALITY BUSINESS SQUARE, SUZHOU, 215100	
Suzhou Yiwei NewEnergy Technology Company Limited	100
ROOM A1503-1504, INNOVATION PLAZA, LIULIAN COMMUNITY, PINGSHAN SUB-DISTRICT, PINGSHAN DISTRICT, SHENZHEN, 518118	
Shenzhen Shell and BYD Electric Vehicle Investment Company Limited	80
RUNXIANG BUSINESS CENTER A707D, ZHELU STREET, JINGHU DISTRICT, WUHU, 241000	
Wuhu Shell Energy Company Limited	100
THE PORT OF ZHAPU, JIAXING MUNICIPALITY, ZHEJIANG, 314201	
Zhejiang Shell Oil and Petrochemical Company Limited	100
UNIT 01-08, LEVEL 31, NO. 16 BUILDING, NO. 1 JIAN GUO MEN WAI AVENUE, BEIJING, 100004	
Shell (China) Projects & Technology Limited	100
UNIT 1502 BUILDING A, ZHONGCHU PLAZA, XINHUA DISTRICT, SHIJIAZHUANG, 050051	
Hebei Shell Oil Sales Co., Ltd.	100
COLOMBIA	
CL 90 NO. 19 - 41 OF 702, EDIFICIO QUANTUM, BOGOTÁ D.C., 110221	
Shell Colombia S.A.S.	100
CZECH REPUBLIC	
ANTALA STAŠKA 2027/77, PRAGUE, 140 00	
Shell Czech Republic a.s.	100
DENMARK	
260 ØRBÆKVEJ, ODENSE, 5220	
Nature Energy Agerskov ApS	100
Nature Energy Køng A/S	100
ØRBÆKVEJ 260, 5220 ODENSE SØ, ODENSE	
Nature Energy Green Transport A/S	100
Nature Energy Hemmet ApS	100
Nature Energy International A/S	100
Nature Energy Kværs A/S	100
Nature Energy Lolland ApS	100
Nature Energy Sdr. Vium ApS	100
ØRBÆKVEJ 260, 5220 ODENSE SØ, ODENSE, 5220	
Nature Energy Bånlev A/S	100
Nature Energy Bånlev Transport A/S	90
Nature Energy Falster ApS	100
Nature Energy Korskro A/S	100
ØRBÆKVEJ 260, ODENSE, 5220	
Nature Energy Biogas A/S	100
Nature Energy Construction A/S	100
Nature Energy Glansager A/S	100
Nature Energy Green Gas Sales A/S	100
Nature Energy Green Hydrogen A/S	100
Nature Energy Holsted A/S	71
Nature Energy Løgumkloster ApS	100
Nature Energy Månsson A/S	51

Company by country and address of incorporation	%
Nature Energy Midtfyn A/S	100
Nature Energy Nordfyn A/S	88
Nature Energy Vaarst A/S	100
Nature Energy Videbæk A/S	100
NGF Denmark Holding ApS	100
Nordliq A/S	67
EGYPT	
BUILDING 79, ROAD 90 SOUTH, FIFTH SETTLEMENT- NEW CAIRO, CAIRO, 11835	
Shell Egypt Trading	100
Shell Lubricants Egypt	100
EL SALVADOR	
BLVD.LOS PROCERES FRENTEA REPARTO, LOS HEROES, E/S SHELL MONUMENTAL, SAN SALVADOR, SV	
Shell Química de El Salvador S.A.	100
FINLAND	
TEKNOBULEVARDI 3-5, VANTAA, 01530	
Shell Aviation Finland Oy	100
FRANCE	
4 BOULEVARD DE BEAUREGARD, LONGVIC, 21600	
Sécalia Chatillonais	50
4 RUE DE MARIVAUX, PARIS, 75002	
Volta France SARL	100
75 AVENUE PARMENTIER, PARIS, 75544	
Centrales Next S.A.S	100
TERRA INNOVA 1, BUREAU 102 ETAGE 1, 10 ALLÉE GEORGES NOÉ, SAINT AIGNAN GRANDLIEU, 44860	
Nature Energy Construction France SAS	100
Nature Energy France SAS	100
6 PLACE DES DEGRES TOUR LANDSCAPE, Puteaux, 92800	
Avitair SAS	100
TOUR LANDSCAPE, 22 ROUTE DE LA DEMI-LUNE/6 PLACE DES DEGRÉS, PUTEAUX, 92800	
Shell EV Charging Solutions France SAS	100
Shell France SAS	100
Shell Retraites SAS	100
Société de Gestion Mobilière et Immobilière SAS	100
GERMANY	
ALTER KIRCHENWEG 83, HANDEWITT, 24983	
Nature Energy Germany GmbH	100
AM HAUPTTOR, GEBÄUDE 8322, LEUNA, 06237	
CRI Deutschland GmbH	100
Shell Catalysts & Technologies Leuna GmbH	100
AM RIEDBACH 1, WILDPOLDSRIED, 87499	
Sonnen eServices Deutschland GmbH	100
Sonnen eServices GmbH	100
Sonnen GmbH	100
Sonnen Holding GmbH	100
AUF DEM SCHOLLBRUCH 24-26, GELSENKIRCHEN, 45899	
Rheinland Kraftstoff Gesellschaft mit beschraenkter Haftung	100
BREUNINGER STRAßE 10/3, SACHSENHEIM, 74343	
enersol GmbH	100
CHRISTOPH-PROBST-WEG 29, HAMBURG, 20251	
CARISSA GmbH	100
EUREF-CAMPUS 7-8, BERLIN, 10829	
Ubimeter GmbH	100
Ubitricity Gesellschaft für verteilte Energiesysteme mbH	100
HOHE-SCHAAR-STRASSE 36, HAMBURG, 21107	
Shell Global Solutions (Deutschland) GmbH	100
HÜNXER STRAßE 149, DINSLAKEN, 46537	
SBRS GmbH	100

Company by country and address of incorporation	%
GERMANY continued	
IM GEWERBEPARK 24, OBERKRÄMER OT VEHLEFANZ, 16727	
Energieinsel GmbH	100
KOPERNIKUSSTRAßE 35, BERLIN, 10243	
Shell EV Charging Solutions Germany GmbH	100
LANGENSTRASSE 12, TWISTRINGEN, 27239	
Buschmann Energietechnik GmbH	100
LICHTSTRAßE 43G, KOELN, 50825	
Next Kraftwerke GmbH	100
ST-LEONHARD-STRAßE 26, BALZHAUSEN, 86483	
Energeticum Energiesysteme GmbH	100
SUHRENKAMP 71-77, D-22335, HAMBURG, 22335	
Carissa Verwaltungsgesellschaft mbH	100
Deutsche Shell Holding GmbH	100
euroShell Deutschland GmbH & Co. KG [d]	100
euroShell Deutschland Verwaltungsgesellschaft mbH	100
Shell Deutschland Additive GmbH	100
Shell Deutschland GmbH	100
Shell Deutschland RES GmbH	100
Shell Energy Deutschland GmbH	100
Shell Erdgas Beteiligungsgesellschaft mbH	100
Shell Exploration and Production Colombia GmbH	100
Shell Exploration and Production Libya GmbH	100
Shell Exploration New Ventures One GmbH	100
Shell Hydrogen Deutschland GmbH	100
Shell Tunisia Offshore GmbH	100
Shell Verwaltungsgesellschaft für Erdgasbeteiligungen mbH	100
Volta Charging Germany GmbH	100
Shell Erdgas Marketing GmbH & Co. KG [d]	50
ZUR SALZLEITE 2, LICHTENAU, 91586	
Franke Elektrotechnik GmbH	100
SoviSol GmbH	100
GHANA	
8TH FLOOR, ONE AIRPORT SQUARE, AIRPORT BYPASS ROAD, AIRPORT, ACCRA, 23301	
Shell Energy Ghana Limited	100
BLOCK 13, SECTION 103, TEMA MOTORWAY INDUSTRIAL AREA EXTENSION, ACCRA, 6217	
Daystar Power Group Ltd (Ghana)	100
GUAM	
643 CHALAN SAN ANTONIO, SUITE 100, TAMUNING, GU 96911	
Shell Guam, Inc.	100
HONG KONG	
35/F AIA KOWLOON TOWER, LANDMARK EAST, KWUN TONG, KOWLOON	
Fulmart Limited	100
Ocean Century Tf Limited [g]	100
Shell Developments (HK) Limited [g]	100
Shell Hong Kong Limited	100
Shell Korea Limited	100
Shell Macau Limited	100
HUNGARY	
BOCSKAI ÚT 134-146., BUDAPEST, 1113	
Shell Hungary Zrt.	100
INDIA	
301 WORLD TRADE TOWER, BARAKHAMBA LANE, NEW DELHI, 110001	
BG India Energy Private Limited	100
BG India Energy Services Private Limited	100
BG India Energy Solutions Private Limited	100
BG LNG Regas India Private Limited	100

Company by country and address of incorporation	%
7, BANGALORE HARDWARE PARK, DEVANAHALLI INDUSTRIAL PARK, BANGALORE, 562149	
Shell Pahal Social Welfare Association	100
COMMERZONE, BLOCK II, NO.2, 200 FEET RADIAL ROAD, PALLIKARANAI, CHENNAI, 600100	
Shell India Markets Private Limited	100
Sprng Energy Private Limited	100
Sprng Energy Projects Private Limited	100
OFFICE NO 2008, WESTGATE - D BLOCK, NR YMCA CLUB, AHMEDABAD, GUJARAT, 380051	
Hazira Port Private Limited	100
Shell Energy India Private Limited	100
OMAXE SQUARE, PLOT NO.14, JASOLA DISTRICT CENTRE, NEW DELHI, 110025	
Sprng Renewable Energy Private Limited	100
OMAXE SQUARE, PLOT NO.14, JASOLA DISTRICT CENTRE, NEW DELHI, 110025	
Sprng Akshaya Urja Private Limited	100
Sprng Ujjvala Energy Private Limited	100
Sprng Wind Energy Private Limited	100
PLATINA TOWER MG ROAD, NEAR SIKANDARPUR METRO STATION, SECTION, GURUGRAM, 122001	
SHELL EV CHARGING SOLUTION ASIA LLP	100
UNIT NO 811, 8TH FLOOR, LOGIX CITY CENTRE, SECTOR 2, GAUTAM BUDDH NAGAR, NOID, P.201301	
MIDEL & MIVOLT Fluids India Private Limited	100
UNIT NO FF-48 A, FIRST FLOOR OMAXE SQUARE, PLOT NO.14, JASOLA DISTRICT CENTRE, NEW DELHI, 110025	
Arinsun Clean Energy Private Limited	100
Sprng Green Energy Eight Private Limited	100
Sprng Green Energy Private Limited	100
Sprng Green Energy 2 Private Limited	100
Sprng Green Energy 3 Private Limited	100
Sprng Green Energy 4 Private Limited	100
Sprng Green Energy 5 Private Limited	100
Sprng Green Power Private Limited	100
Sprng Soura Kiran Vidyut Private Limited	100
UNIT NO FF-48 A, FIRST FLOOR OMAXE SQUARE, PLOT NO.14, JASOLA DISTRICT CENTRE, NEW DELHI, 110025	
Sprng Green Energy Seven Private Limited	100
Sprng Green Energy Six Private Limited	100
UNIT NO FF-48 A, FIRST FLOOR, OMAXE SQUARE, PLOT NO.14, JASOLA DISTRICT CENTRE, INDIA, NEW DELHI, 110025	
Sprng Alt Energy Private Limited	100
Sprng Vayu Kiran Private Limited	100
Sprng Vayu Vidyut Private Limited	100
UNIT NO FF-48 A, FIRST FLOOR, OMAXE SQUARE, PLOT NO.14, JASOLA DISTRICT CENTRE, NEW DELHI, 110025	
Sprng Powerinfra Private Limited	100
UNIT NO FF-48A, FIRST FLOOR, OMAXE SQUARE, PLOT NO.14, JASOLA DISTRICT CENTRE, NEW DELHI, 110025	
Sprng Power Private Limited	100
Sprng Renewable Resources Private Limited	100
Sprng Solar India Private Limited	100
Sprng Solar Plus Private Limited	100
Sprng Urja Private Limited	100
UNIT NO FF-48A, FIRST FLOOR, OMAXE SQUARE, PLOT NO.14, JASOLA DISTRICT CENTRE, NEW DELHI, 110025	
Sprng Natural Power Source Private Limited	100
Sprng Ojas Private Limited	100
Sprng Pavana Urja Private Limited	100
Sprng Power Earth Private Limited	100
Sprng Solar Energy Private Limited	100
Sprng Solren Private Limited	100
Sprng Vaayu Urja Private Limited	100

Company by country and address of incorporation	%
INDIA continued	
UNIT NO FF-48 A, FIRST FLOOR OMAXE SQUARE, PLOT NO.14, JASOLA DISTRICT CENTRE, NEW DELHI, 110025	
Sprng Transform Sun Energy Private Limited	100
UNIT NO FF-48 A, FIRST FLOOR OMAXE SQUARE, PLOT NO.14, JASOLA DISTRICT CENTRE, NEW DELHI, 110025	
Sprng Suryoday Energy Private Limited	100
UNIT NO FF-48 A, FIRST FLOOR OMAXE SQUARE, PLOT NO.14, JASOLA DISTRICT CENTRE, NEW DELHI, 110025	
Sprng Photovoltaic Private Limited	100
UNIT NOS. 401 TO 1401, BLOCK 2 COMMERZONE PALLIKARANAI, NO.2, 200 FEET RADIAL ROAD, PALLIKARANAI, CHENNAI, 600100	
Shell Energy Marketing and Trading India Private Limited	100
UNIT NO FF-48 A, FIRST FLOOR OMAXE SQUARE, PLOT NO.14, JASOLA DISTRICT CENTRE, NEW DELHI, 110025	
Sprng Agnitra Private Limited	100
INDONESIA	
TALAVERA OFFICE PARK 22-26TH FLOOR, JL. LETJEN. TB SIMATUPANG KAV. 22-26, JAKARTA, 12430	
PT Shell LNG Indonesia	100
PT. Gresik Distribution Terminal	100
PT. Shell Indonesia	100
PT. Shell Manufacturing Indonesia	100
WISMA GKBI, 39TH FLOOR, JL. JENDERAL SUDIRMAN KAV. 28, BENDUNGAN HILIR, TANAH ABANG, CENTRAL JAKARTA	
PT EcoOils Jaya Indonesia	100
IRELAND	
1ST FLOOR, TEMPLE HALL, TEMPLE ROAD, BLACKROCK, DUBLIN, A94 K3K0	
Asiatic Petroleum Company (Dublin) Limited	100
ISLE OF MAN	
FIRST NAMES HOUSE, VICTORIA ROAD, DOUGLAS, IM2 4DF	
Petrolon International Limited	100
FORT ANNE, DOUGLAS, IM1 5PD	
Petrolon Europe Limited	100
SECOND FLOOR, EURO MANX HOUSE, FREEPORT, BALLASALLA, IM9 2AP	
Shell Marine Personnel (I.O.M.) Limited	100
Shell Ship Management Limited	100
ITALY	
137 VIA VITTORIO VENETO, ROVIGO, 45100	
Elios Energy S.r.l.	100
55 VIA GIOVANNI GIOLITTI, TORINO, 10123	
MSTS Consorzio [c]	100
GENOVA (GE) VIA FELICE ROMANI 9/5, GENOVA, 16122	
Ego Data S.r.l	100
Ego Energy S.r.l	100
PIAZZA SAN SILVESTRO 8, ROME, 00187	
Shell Italia E&P S.p.A.	100
VIA AUTOSTRADA 32, BERGAMO, 24126	
Sonnen eServices Italia S.R.L.	100
Sonnen S.R.L.	100
VIA SUSA 40, TORINO, 10138	
Shell Fleet Solutions Consorzio	100
VIA TORTONA, 25, 20144 MILANO	
BG Italia Power S.r.l	100
VIA VITTOR PISANI 16, MILANO (MI), 20124	
Adria Solar S.r.l.	100
Alle S.R.L.	100
Aquila S.p.A.	100
Civita Solar S.r.l.	100
Cumiana Solar S.r.l.	100
Development S.R.L.	100
Marco Polo Solar 2 S.R.L.	100

Company by country and address of incorporation	%
Marco Polo Solar S.R.L.	100
Ramacca Solar S.R.L	100
Sardinia Solar Energy S.R.L.	100
Shell Energy Italia S.R.L.	100
Shell Italia Holding S.p.A.	100
Shell Italia Oil Products S.R.L.	100
Shell Mobility Italia S.r.l.	100
Suncore 5 Amaranto 1 S.r.l.	100
Suncore 5 Amaranto 3 S.r.l.	100
VIALE AMEDEO DUCA D'AOSTA 51, BOLZANO, 39100	
Anagni S.r.l.	100
Barberio S.r.l.	100
Baroni S.r.l.	100
Baroninuovi S.r.l	100
Bonacaro S.r.l.	100
Carlucci S.r.l.	100
Colangelo S.r.l.	100
Depalma S.r.l.	100
Dimassa S.r.l.	100
Guarini S.r.l.	100
Mesagne S.r.l.	100
Natuzzi S.r.l.	100
Ottobiano S.r.l.	100
Paliano S.r.l.	100
Ricchiuti S.r.l.	100
Rotello S.r.l.	100
Sanfrancesco S.r.l.	100
Sasso S.r.l.	100
Serracapriola S.r.l.	100
Sicilia S.r.l.	100
Teodoro S.r.l.	100
Tuturano S.r.l.	100
Vulci S.r.l.	100
Zamboni S.r.l.	100
JAPAN	
1-1-1 MARUNOUCHI, CHIYODA-KU, TOKYO	
Nagaoka Power Generation Limited	100
12F PACIFIC CENTURY PLACE MARUNOUCHI, 1-11-1, MARUNOUCHI, CHIYODA-KU, TOKYO, 100-6212	
Shell Japan Limited	100
Shell Lubricants Japan K.K.	100
Sonnen Japan Kabushiki Kaisha	100
13F FUKOKU SEIMEI BUILDING, 2-2-2 UCHISAIWAI-CHO, CHIYODA-KU, TOKYO, 100-0011	
K.K. Red and Yellow	100
2-1-13 MOTOAZABU, MINATO-KU, TOKYO, 106-0046	
Fukuoka Offshore Wind Power No. 1 K.K	80
4052-2 NAKATSU, AIKAWA-CHO, KANAGAWA, 243-0303	
K.K. SVC Tokyo	100
PACIFIC CENTURY PLACE MARUNOUCHI, 1-11-1 MARUNOUCHI, CHIYODA-KU, TOKYO, 100-6216	
Shell Solar Japan G.K.	100
JERSEY	
13 CASTLE STREET, ST HELIER, JERSEY, JE1 1ES	
Shell Service Station Properties Limited	100
KENYA	
SHELL & BP HOUSE, HARAMBEE AVENUE, P.O. BOX 45005, NAIROBI	
Shell Chemicals East Africa Limited	100

Company by country and address of incorporation	%
KOREA (THE REPUBLIC OF)	
NO. 250, SINSUN-RO, NAM-GU, BUSAN, 48561	
Hankook Shell Oil Co., Ltd	54
LUXEMBOURG	
7, RUE DE L'INDUSTRIE, BERTRANGE, LUXEMBOURG, L-8005	
Shell Luxembourgeoise Sarl	100
MACAO	
876 AVENIDA DA AMIZADE, EDIFICIO MARINA GARDENS, SALA 310, 3 ANDAR, MACAU	
Shell Macau Petroleum Company Limited	100
MALAYSIA	
LEVEL 11, MENARA TH 1 SENTRAL, JALAN RAKYAT, KUALA LUMPUR SENTRAL, WILAYAH PERSEKUTUAN, 50470	
Pertini Vista Sdn. Bhd.	100
Shell Business Service Centre Sdn. Bhd.	100
LEVEL 11, MENARA TH 1 SENTRAL, JALAN RAKYAT, KUALA LUMPUR SENTRAL, WILAYAH PERSEKUTUAN, 50470	
Shell Sabah Selatan Sendirian Berhad	100
LEVEL 11, MENARA TH 1 SENTRAL, JALAN RAKYAT, KUALA LUMPUR SENTRAL, WILAYAH PERSEKUTUAN, 50470	
EcoOils (Negeri Sembilan) Sdn. Bhd.	100
KENSINGTON GARDENS, NO. U1317, LOT 7616, JALAN JUMIDAR BUYONG, LABUAN, 87000	
Shell Treasury Malaysia (L) Limited	100
LEVEL 11, MENARA TH 1 SENTRAL, JALAN RAKYAT, KUALA LUMPUR SENTRAL, KUALA LUMPUR, WILAYAH PERSEKUTUAN, 50470	
EcoOils Sdn. Bhd.	100
LEVEL 11, MENARA TH 1 SENTRAL, JALAN RAKYAT, KUALA LUMPUR SENTRAL, WILAYAH PERSEKUTUAN, 50470	
EcoInnovation Sdn. Bhd.	100
Shell Malaysia Trading Sdn Bhd	100
Shell People Services Asia Sdn. Bhd.	100
LEVEL 11, MENARA TH 1 SENTRAL, JALAN RAKYAT, KUALA LUMPUR SENTRAL, KUALA LUMPUR, WILAYAH PERSEKUTUAN, 50470	
Pixelbyte Sdn Bhd	100
Shell MDS (Malaysia) Sendirian Berhad	72
LEVEL 11, MENARA TH 1 SENTRAL, JALAN RAKYAT, KUALA LUMPUR SENTRAL, WILAYAH PERSEKUTUAN, 50470	
Provista Ventures Sdn. Bhd.	100
Sarawak Shell Berhad	100
Shell Brunei Operations Sdn Bhd.	100
Shell Global Solutions (Malaysia) Sdn. Bhd.	100
Shell New Ventures Malaysia Sdn. Bhd. [g]	100
Shell Timur Sdn. Bhd.	70
MAURITIUS	
33 EDITH CAVELL STREET, PORT LOUIS, 11324	
Pennzoil Products International Company	100
LES CASCADES EDITH CAVELL STREET, PORT LOUIS	
Solenergi Power Private Limited	100
C/O IMARA TRUST COMPANY (MAURITIUS) LIMITED, 9TH FLOOR NEXSKY BUILDING, CYBERCITY, EBENE, 72201	
Daystar Power Group	100
Daystar Power Mauritius	100
OCORIAN CORPORATE SERVICES (MAURITIUS) LIMITED, 6TH FLOOR, TOWER A, 1 EXCHANGE SQUARE, WALL STREET, EBENE, 72201	
BG Mauritius LNG Holdings Ltd	100
BG Mumbai Holdings Limited	100
MEXICO	
AV. PASEO DE LAS PALMAS 340, 1ST FLOOR, COLONIA LOMAS DE CHAPULTEPEC, DELEGACIÓN MIGUEL HIDALGO, CIUDAD DE MÉXICO, 11000	
Shell Servicios México, S.A. de C.V.	100
AV. PASEO DE LAS PALMAS 340, 1ST FLOOR, COLONIA LOMAS DE CHAPULTEPEC, DELEGACIÓN MIGUEL HIDALGO, CIUDAD DE MÉXICO, 11000	
Shell Exploracion y Extraccion de Mexico, S.A. de C.V.	100
Shell México Gas Natural, S. de R.L. de C.V.	100
Shell México, S.A. de C.V.	100
Shell Solutions Mexico S.A. de C.V.	100
AVENIDA EJÉRCITO NACIONAL NO. 125, AHUEHUETES ANÁHUAC, MIGUEL HIDALGO, MEXICO CITY, 11450	
GPDC Estaciones de Servicio, S.A. de C.V.	100
BOULEVARD JOSE MARIA MORELOS 3702, CAÑADA DE ALFARO, LEON, GUANAJUATO, 37238	
Operadora de Combustibles NMG, S.A. de C.V.	100
NETHERLANDS	
601, VONDELINGENWEG, VONDELINGENPLAAT ROTTERDAM, 3196 KK	
Shell MSPO 2 Holding B.V.	100
CAREL VAN BYLANDTLAAN 16, THE HAGUE, 2596 HR	
Shell International Exploration and Production B.V.	100
CAREL VAN BYLANDTLAAN 30, THE HAGUE, 2596 HR	
KE STP Company B.V.	100
Shell New Energies Holding Europe B.V.	100
Solar Power Emmen B.V.	100
Solar Power Heerenveen B.V.	100
Solar Power Moerdijk B.V.	100
Solar Power Sas van Gent-Zuid B.V.	100
CAREL VAN BYLANDTLAAN 30, THE HAGUE, 2596HR	
[*] Shell International Finance B.V. [a]	100
[*] Shell Petroleum B.V.	100
Aramis CCS B.V.	100
Aramis S1 B.V.	100
Attiki Gas B.V.	100
B.V. Dordtsche Petroleum Maatschappij	100
B.V. Petroleum Assurantie Maatschappij	100
BG Gas Brazil E&P 12 B.V.	100
BG Gas Brazil Holdings B.V.	100
BG GAS INTERNATIONAL HOLDINGS BV	100
BG Gas Netherlands Holdings B.V.	100
BG Gas Sao Paulo Investments B.V.	100
BJSA Exploration and Production B.V.	100
Chosun Shell B.V.	100
Energiepark Pottendijk B.V.	100
HKN LP 1 B.V.	100
HKN LP 2 B.V.	100
HKN LP 3 B.V.	100
HKN LP 4 B.V.	100
HKN LP 5 B.V.	100
HKN LP 6 B.V.	100
Jordan Oil Shale Company B.V.	100
KE Suriname B.V.	100
LNG Shipping Operation Services Netherlands B.V.	100
Netherlands ANg Holding Company B.V.	100
NoordzeeWind B.V.	100
NoordzeeWind C.V. [d]	100
Portfolio Holdings B.V.	100
Pottendijk Wind B.V.	100
Pottendijk Zon B.V.	100
POWER LINE UTILISING GRID B.V.	100
PTC Kampen B.V.	100
RESCO B.V.	100
Rotterdam Hydrogen Company B.V.	100
Shell Abu Dhabi B.V.	100
Shell Additives Holdings (I) B.V.	100
Shell Additives Holdings (II) B.V.	100
Shell Albania Block 4 B.V.	100
Shell Brazil Holding B.V.	100

Company by country and address of incorporation	%
NETHERLANDS continued	
Shell Business Development Central Asia B.V.	100
Shell Caspian B.V.	100
Shell Caspian Pipeline Holdings B.V.	100
Shell China B.V.	100
Shell China Holdings B.V.	100
Shell Deepwater Borneo B.V.	100
Shell Deepwater Tanzania B.V.	100
Shell Development Iran B.V.	100
Shell E and P Offshore Services B.V.	100
Shell Egypt N.V. [e]	100
Shell Energy Europe B.V.	100
Shell EP Holdings (EE&ME) B.V.	100
Shell EP Middle East Holdings B.V.	100
Shell EP Oman B.V.	100
Shell EP Russia Investments (III) B.V.	100
Shell EP Russia Investments (V) B.V.	100
Shell EP Wells Equipment Services B.V.	100
Shell Exploration and Production (100) B.V.	100
Shell Exploration and Production (101) B.V.	100
Shell Exploration and Production (102) B.V.	100
Shell Exploration and Production (103) B.V.	100
Shell Exploration and Production (107) B.V.	100
Shell Exploration and Production (82) B.V.	100
Shell Exploration and Production (84) B.V.	100
Shell Exploration and Production (89) B.V.	100
Shell Exploration and Production (92) B.V.	100
Shell Exploration and Production (93) B.V.	100
Shell Exploration and Production (94) B.V.	100
Shell Exploration and Production (96) B.V.	100
Shell Exploration and Production (99) B.V.	100
Shell Exploration and Production (LVIII) B.V.	100
Shell Exploration and Production (LXI) B.V.	100
Shell Exploration and Production (LXII) B.V.	100
Shell Exploration and Production (LXV) B.V.	100
Shell Exploration and Production (LXVI) B.V.	100
Shell Exploration and Production (LXXI) B.V.	100
Shell Exploration and Production (LXXV) B.V.	100
Shell Exploration and Production Brunei B.V.	100
Shell Exploration and Production Holdings B.V.	100
Shell Exploration and Production Investments B.V.	100
Shell Exploration and Production Mauritania (C10) B.V.	100
Shell Exploration and Production Services (RF) B.V.	100
Shell Exploration and Production South Africa B.V.	100
Shell Exploration and Production Ukraine Investments (II) B.V.	100
Shell Exploration B.V.	100
Shell Exploration Company (East) B.V.	100
Shell Exploration Company (West) B.V.	100
Shell Exploration Company B.V.	100
Shell Exploration Venture Services B.V.	100
Shell Finance (Netherlands) B.V.	100
Shell Gas & Power Developments B.V.	100
Shell Gas (LPG) Holdings B.V.	100
Shell Gas B.V.	100
Shell Gas Iraq B.V.	100
Shell Gas Nigeria B.V.	100
Shell Gas Venezuela B.V.	100
Shell Generating (Holding) B.V.	100
Shell Geothermal B.V.	100

Company by country and address of incorporation	%
Shell Global Solutions International B.V.	100
Shell Global Solutions Services B.V.	100
Shell HKW-A LP 1 B.V.	100
Shell HKW-A LP 2 B.V.	100
Shell HKW-A LP 3 B.V.	100
Shell HKW-A LP 4 B.V.	100
Shell HKW-A LP 5 B.V.	100
Shell HKW-A LP 6 B.V.	100
Shell HKW-A LP 7 B.V.	100
Shell HKW-B B.V.	100
Shell HKW-B LP 1 B.V.	100
Shell HKW-B LP 2 B.V.	100
Shell HKW-B LP 3 B.V.	100
Shell HKW-B LP 4 B.V.	100
Shell HKW-B LP 5 B.V.	100
Shell HKW-B LP 6 B.V.	100
Shell HKW-B LP 7 B.V.	100
Shell Hydrogen Operations & Production B.V	100
Shell Information Technology International B.V.	100
Shell Integrated Gas Oman B.V.	100
Shell International B.V.	100
Shell Internationale Research Maatschappij B.V.	100
Shell Internet Ventures B.V.	100
Shell Iraq Petroleum Development B.V.	100
Shell Iraq Services B.V.	100
Shell Kazakhstan B.V.	100
Shell Kazakhstan Development B.V.	100
Shell Kuwait Exploration and Production B.V.	100
Shell LNG Bunkering B.V.	100
Shell LNG Port Spain B.V.	100
Shell Low Carbon Fuels B.V.	100
Shell Manufacturing Services B.V.	100
Shell Mozambique B.V.	100
Shell Namibia Upstream B.V.	100
Shell Nanhai B.V.	100
Shell Nederland B.V.	100
Shell Netherlands Canada Financing B.V.	100
Shell New Energies NL B.V.	100
Shell Offshore (Personnel) Services B.V.	100
Shell Offshore Services B.V.	100
Shell Offshore Upstream South Africa B.V.	100
Shell OKLNG Holdings B.V.	100
Shell Olie OG Gas Holding B.V. [i]	100
Shell Oman Exploration and Production B.V.	100
Shell Overseas Holdings (Oman) B.V.	100
Shell Overseas Investments B.V.	100
Shell Project Development (VIII) B.V.	100
Shell RDS Holding B.V.	75
Shell Renewables and Energy Solutions Europe B.V.	100
Shell Sakhalin Holdings B.V.	100
Shell Sakhalin Services B.V.	100
Shell Salym Development B.V.	100
Shell Sao Tome and Principe B.V.	100
Shell Services Oman B.V.	100
Shell Shared Services (Asia) B.V.	100
Shell South Syria Exploration B.V.	100
Shell Trademark Management B.V.	100
Shell Trading Russia B.V.	100
Shell Upstream Albania B.V.	100

Company by country and address of incorporation	%
NETHERLANDS continued	
Shell Upstream Development B.V.	100
Shell Upstream Indonesia Services B.V.	100
Shell Upstream Turkey B.V.	100
SHELL VENTURES B.V.	100
Shell Ventures Investments B.V.	100
Shell Western LNG B.V.	100
Shell Windenergy Netherlands B.V.	100
Shell Windenergy NZW I B.V.	100
Solar-EP I B.V.	100
Solar-EP II B.V.	100
Syria Shell Petroleum Development B.V. [h]	65
NAM MANAGEMENT B.V.	100
CHEMIEWEG 25, MOERDIJK, 4782 SJ	
Shell Nederland Chemie B.V. [g]	100
HAMEIWEG 5, ALMERE, 1332 CB	
Groen Gas Almere B.V.	100
RIGAKADE 20, 1013 BC AMSTERDAM, AMSTERDAM, 1013 BC	
Shell EV Charging Solutions B.V.	100
SHELL DOWNSTREAM ROTTERDAM, PO BOX 1222, ROTTERDAM, 3000 BE	
MS Europe B.V.	100
TAURO OFFICE, KONINGINNEGRACHT 19, 1.02 / 1.06, DEN HAAG, 2514AB	
Nature Energy Coevorden B.V.	100
Nature Energy Netherlands B.V	100
Nature Energy NL New Ventures 1 B.V.	100
VONDELINGENWEG 601, VONDELINGENPLAAT, VONDELINGENPLAAT ROTTERDAM, 3196 KK	
Shell Nederland Raffinaderij B.V.	100
WEENA 505, ROTTERDAM, 3013 AL	
Euroshell Cards B.V.	100
Shell Chemicals Europe B.V.	100
Shell Downstream Services International B.V.	100
Shell Energy Retail B.V.	100
Shell Lubricants Supply Company B.V.	100
Shell Nederland Verkoopmaatschappij B.V. [c]	100
Shell TapUp B.V.	100
Shell Trading Rotterdam B.V.	100
Snijders Olie B.V.	100
UTRECHTSWEG 310, BUILDING B46, UNI 1.02, ARNHEM, 6812 AR	
Next Kraftwerke Benelux B.V.	100
NEW ZEALAND	
C/O BAKER TILLY STAPLES RODWAY TARANAKI, 109-113 POWDERHAM STREET, P.O. BOX 146, NEW PLYMOUTH, 4340	
Energy Finance NZ Limited	100
Shell (Petroleum Mining) Company Limited	100
Shell Energy Asia Limited	100
Shell Investments NZ Limited	100
MERCER (N.Z.) LIMITED, FLOOR 2, 20 CUSTOMHOUSE QUAY, WELLINGTON, 6011	
Shell New Zealand Pensions Limited	100
NIGERIA	
FREEMAN HOUSE, 21/22 MARINA, P.M.B. 2418, LAGOS, P.M.B. 2418	
Ren-Gas Energy Onshore Nigeria Limited	100
FREEMAN HOUSE, 21/22 MARINA, P.M.B. 2418, LAGOS, P.M.B. 2418	
Renaissance Gas SWO Limited	100
FREEMAN HOUSE, 21/22 MARINA, LAGOS	
BG Exploration and Production Nigeria Limited	100
BG Upstream A Nigeria Limited	100
FREEMAN HOUSE, 21/22 MARINA, LAGOS, P.M.B. 2418	
Shell Nigeria Infrastructure Development Limited	100

Company by country and address of incorporation	%
Shell Nigeria Upstream Ventures Limited	100
FREEMAN HOUSE, 21/22 MARINA, LAGOS, P.M.B.2418	
SHELL NIGERIA SUPPORT SERVICES LTD	100
FREEMAN HOUSE, 21/22 MARINA, P.M.B. 2418, LAGOS	
Shell Nigeria Business Operations Limited	100
Shell Nigeria Exploration and Production Company Ltd	100
Shell Nigeria Gas Ltd (SNG)	100
Shell Nigeria Oil Products Limited (SNOP)	100
Shell Nigeria Ultra Deep Limited	100
FREEMAN HOUSE, 21/22 MARINA, P.M.B. 2418, LAGOS, P.M.B. 2418	
Delta Business Development Limited	100
Shell Exploration and Production Africa Limited	100
Shell Nigeria Exploration Properties Charlie Limited	100
FREEMAN HOUSE, NO 21/22 MARINA, LAGOS	
All on Partnerships for Energy Access Limited by Guarantee	100
SHELL INDUSTRIAL AREA, P.O. BOX 263, RIVERS STATE, PORT HARCOURT, 500272	
The Shell Petroleum Development Company of Nigeria Limited [A]	100
33B MOBOLAJI JOHNSON AVENUE, ALAUSA, IKEJA. LAGOS MAINLAND, LAGOS	
Daybreak Power Solutions Limited	100
NORWAY	
LØKKEVEIEN 103, STAVANGER, 4007	
A/S Norske Shell	100
OMAN	
P O BOX 38, MINA AL FAHAL, MINA AL FAHAL, 116	
Shell Oman Marketing Company SAOG	49
P.O. BOX 398, SOHAR FREE ZONE, NORTH AL BATINAH GOVERNORATE, SOHAR, 322	
Sohar Solar Qabas (FZC) LLC	100
P.O. BOX 74, MINA AL FAHAL, MUSCAT, P.C. 116	
Shell Development Oman LLC	100
PAKISTAN	
SHELL HOUSE, 6 CH. KHALIQUZZAMAN ROAD, KARACHI, 75530	
Shell Energy Pakistan (Private) Limited	100
PERU	
CALLE DEAN VALDIVIA 111, OFICINA 802, SAN ISIDRO, LIMA, 27	
Shell GNL Peru S.A.C.	100
Shell Operaciones Peru S.A.C.	100
PHILIPPINES	
41ST FLOOR, THE FINANCE CENTER, 26TH STREET CORNER 9TH AVENUE, BONIFACIO GLOBAL CITY, TAGUIG, MANILA, 1635	
Shell Gas and Energy Philippines Corporation	100
41ST FLOOR, THE FINANCE CENTER, 26TH STREET CORNER 9TH AVENUE, BONIFACIO GLOBAL CITY, TAGUIG, MANILA, 1635	
Shell Chemicals Philippines, Inc.	100
Shell Energy Philippines Inc	100
Shell Pilipinas Corporation	55
SUBIC BAY FREE PORT ZONE, OLANGAPO CITY, 2200	
Shell Gas Trading (Asia Pacific), Inc.	100
POLAND	
AL. JEROZOLIMSKIE 181B, WARSAW, 02-222	
Shell Mobility Polska Sp. z o.o.	100
Shell Polska Sp. z o.o.	100
ASTORIA, PRZESKOK 2, WARSAW, 00-032	
Next Kraftwerke Sp. z o.o.	100
PUERTO RICO	
P.O. BOX 186, YABUCOA, PR 00767-0186	
Station Managers of Puerto Rico, Inc.	100

[A] As detailed elsewhere in this report, on March 13, 2025, Shell completed the sale of SPDC to Renaissance.

Company by country and address of incorporation	%
QATAR	
QATAR SCIENCE & TECHNOLOGY PARK TECH1, OFFICE 101, DOHA	
Qatar Shell Research & Technology Centre QSTP-LLC	100
TOWER 121, 6TH FLOOR, ZONE NO. 66, STREET NO. 100, BUILDING NO. 121, DOHA, P.O. BOX 3747	
Qatar Shell Service Company W.L.L.	100
ROMANIA	
BUILDING A, FLOOR 8, A AREA, GLOBALWORTH CAMPUS, ING. GEORGE CONSTANTINESCU STREET NO. 4B AND, GEORGE CONSTANTINESCU STREET NO. 2-4 PLOT 1, DISTRICT 2, BUCHAREST, 020337	
Shell Romania S.R.L.	100
RUSSIAN FEDERATION (THE)	
LETNIKOVSKAYA ST. 2, BLD. 1, MOSCOW, 115114	
Limited Liability Company "Shell Neftegaz Development (V)"	100
LLC Shell NefteGaz Development	100
SAINT KITTS AND NEVIS	
TRIDENT TRUST COMPANY (NEVIS) LIMITED, MAIN STREET, SUITE 556, HUNKINS WATERFRONT PLAZA, CHARLESTOWN, KN0802	
Shell Oil & Gas (Malaysia) LLC	90
SAINT LUCIA	
MERCURY COURT, CHOC ESTATES, CASTRIES	
BG Atlantic 2/3 Holdings Limited	100
SENEGAL	
SUITE 302-IMMEUBLE ALIOUNE DIOP, HANN-MARISTE, DAKAR, 0	
Daystar Power Senegal SUARL	100
SINGAPORE	
9 NORTH BUONA VISTA DRIVE, #02-01, THE METROPOLIS	
Zeco Systems Pte. Ltd.	100
9 NORTH BUONA VISTA DRIVE, 07-01, THE METROPOLIS, SINGAPORE, 138588	
Aster Chemicals and Energy Pte. Ltd.	100
EcoOils Pte. Ltd.	100
Shell Gas Marketing Pte. Ltd.	100
9 NORTH BUONA VISTA DRIVE, THE METROPOLIS, SINGAPORE, 138588	
BG Asia Pacific Services Pte. Ltd.	100
9 NORTH BUONA, VISTA DRIVE, THE METROPOLIS, SINGAPORE, 138588	
BG INSURANCE COMPANY (SINGAPORE) PTE. LTD.	100
THE METROPOLIS TOWER 1, 9 NORTH BUONA VISTA DRIVE, #07-01, #07-01, SINGAPORE, 138588	
Shell Catalysts & Technologies Pte. Ltd.	100
Shell Chemicals Seraya Pte. Ltd.	100
Shell Integrated Gas Thailand Pte. Limited	100
Shell International Shipping Services (Pte) Ltd	100
Shell Myanmar Energy Pte. Ltd.	100
SHELL SINGAPORE PTE. LTD. [g]	100
Shell Tankers (Singapore) Private Limited	100
Shell Treasury Centre East (Pte) Ltd	100
Shell Eastern Trading (Pte) Ltd [g]	100
THE METROPOLIS, 9 NORTH BUONA VISTA DRIVE, #07-01, SINGAPORE, 138588	
BG Asia Pacific Holdings Pte. Limited	100
BG Exploration & Production Myanmar Pte. Ltd.	100
BG Myanmar Pte. Ltd.	100
SLOVAKIA	
EINSTEINOVA 23, BRATISLAVA, 851 01	
SHELL Slovakia s.r.o.	100
SLOVENIA	
BRAVNICARJEVA ULICA 13, LJUBLJANA, 1000	
Shell Adria d.o.o.	100
SOUTH AFRICA	
57 SLOANE STREET, TWICKENHAM BUILDING, THE CAMPUS, BRYANSTON, JOHANNESBURG, 2021	
Daystar Power South Africa (PTY) LTD	100
K2022822444 (SOUTH AFRICA)	72
Shell Downstream South Africa (Pty) Ltd	72
Shell South Africa Energy (Pty) Ltd	100
Shell South Africa Exploration (Pty) Limited	100
Shell South Africa Holdings (Pty) Ltd	100
TWICKENHAM, THE CAMPUS, 57 SLOANE STREET, EPSOM DOWNS, BRYANSTON, 2021	
MIDEL and MIVOLT Fluids SOUTH AFRICA (PTY) LTD	100
STISA (Pty) Limited	72
SPAIN	
6TH FLOOR, PASEO DE LA CASTELLANA 257, MADRID, 28046	
BG ENERGY IBERIAN HOLDINGS S.L.	100
SHELL DESARROLLO 1, S.L.U.	100
SHELL DESARROLLO 10, S.L.U.	100
SHELL DESARROLLO 11, S.L.U.	100
SHELL DESARROLLO 12, S.L.U.	100
SHELL DESARROLLO 14, S.L.U.	100
SHELL DESARROLLO 2, S.L.U.	100
SHELL DESARROLLO 3, S.L.U.	100
SHELL DESARROLLO 4, S.L.U.	100
SHELL DESARROLLO 5, S.L.U.	100
SHELL DESARROLLO 7, S.L.U.	100
Shell Dev 15 S.L.	100
Shell Dev 16 S.L.	100
Shell Dev 17 S.L.	100
Shell Dev 18 S.L.	100
Shell Dev 19 S.L.	100
Shell Dev 20 S.L.	100
Shell Dev 21 S.L.	100
Shell Dev 22 S.L.	100
Shell Dev 23 S.L.	100
Shell Dev 24 S.L.	100
Shell Dev 25 S.L.	100
Shell Dev 26 S.L.	100
Shell Dev 27, S.L.U.	100
Shell Development Company, S.L.U.	100
Shell España, S.A.	100
Shell Spain LNG, S.A.U.	100
Shell Dev 28, S.L.U.	100
AVENIDA DE GIRONA 2, 17800 OLOT, GIRONA	
SONNEN IBÉRICA, S.L.	100
SECOND FLOOR, 11 ESCLUSA, SEVILLA, 41011	
Exanergia, S.L.U.	100
SWEDEN	
28 VASAGATAN, STOCKHOLM, 111 20	
Shell Aviation Sweden AB	100
ADVOKATFIRMA DLA PIPER SWEDEN KB, SVEAVÄGEN 4, BOX 7315, STOCKHOLM, 103 90	
Nature Energy Sweden AB	100
SWITZERLAND	
BAARERMATTE, BAAR, 6340	
Shell (Switzerland) AG	100
Shell Brands International AG	100
Shell Trading Switzerland AG	100
Solen Versicherungen AG	100
Evpass AG	100
BLASIMUHLE 2-6, MADETSWIL, 8322	
Panolin Distribution AG	100
Panolin New Holding AG	100
STEIGERHUBELSTRASSE 8, BERN, 3008	
Shell Lubricants Switzerland AG	100

Company by country and address of incorporation	%
TAIWAN (PROVINCE OF CHINA)	
333 KEELUNG ROAD SECTION 1, 20TH FLOOR, TAIPEI, 110	
Shell Taiwan Limited	100
TANZANIA	
1ST FLOOR KILWA HOUSE, PLOT 369, TOURE DRIVE, OYSTER BAY, PO BOX 105833, DAR ES SALAAM	
Tanzania LNG Limited	100
PLOT NO 193, 14112 MIKOCHENI, KINONDONI DISTRICT, DAR ES SALAAM	
Daystar Power Tanzania Limited	100
MJINI MAGHARIBI, UNGUJA, URBAN, NEARBY A'RAHMA HOSPITAL, KILIMANI, 0	
Daystar Power Zanzibar Limited	100
THAILAND	
10 SOONTHORNKOSA ROAD, KLONGTOEY, KLONGTOEY, 10110	
Pattanadhorn Company Limited	42
Sahapanichkijphun Company Limited	42
Shell Global Solutions (Thailand) Limited	100
Shell Global Solutions Holdings (Thailand) Limited	100
Shell Global Solutions Service (Thailand) Company Limited	100
Unitas Company Limited	42
SHELL HOUSE, 10 SOONTHORNKOSA ROAD, KLONGTOEY, BANGKOK, 10110	
Thai Energy Company Limited	100
TOGO	
27 RUE KHRA, 06 B.P., QUARTIER DES ETOILES, LOME, 62210	
Daystar Power Group SARL U	100
TRINIDAD AND TOBAGO	
5 ST CLAIR AVENUE, PORT OF SPAIN	
SHELL RENEWABLES CARIBBEAN LIMITED	100
5 ST SAINT CLAIR AVENUE, PORT OF SPAIN	
Shell Gas Supply Trinidad Limited	100
Shell LNG T&T Ltd	100
Shell Manatee Limited	100
Shell Trinidad Central Block Limited	100
Shell Trinidad North Coast Limited	100
5 ST. CLAIR AVENUE, PORT OF SPAIN	
Shell T&T Investments Limited	100
TRINLING Limited	100
SHELL ENERGY HOUSE, 5 ST. CLAIR AVENUE, PORT OF SPAIN	
Shell Trinidad Limited	100
TUNISIA	
MOVENPICK HOTEL, RUE DU LAC HURON LES BERGES DU LAC, TUNIS, 1053	
Shell Tunisia LPG S.A.	100
Tunisian Processing S.A.	100
TÜRKIYE	
B, 18 KARAMANCILAR IS MERKEZI, SALIH TOZAN SK, ŞIŞLI/İSTANBUL, 34394	
Shell Petrol A.S.	70
GULBAHAR MAH.SALIH TOZAN SOK., KARAMANCILAR IS MERKEZI B BLOK NO:18, ESENTEPE, SISLI, ISTANBUL, 34394	
Shell & Turcas Petrol A.S.	70
Shell Enerji A.S.	100
UK	
1 ALTENS FARM ROAD, NIGG, ABERDEEN, AB12 3FY	
Shell Trustee Solutions Limited	100
10 YORK ROAD, LONDON, SE1 7ND	
Shell EV Charging Solutions UK Limited	100
16 GREAT QUEEN STREET, LONDON, WC2B 5AH	
SONNEN UK LIMITED	100
30 FINSBURY SQUARE, LONDON, EC2A 1AG	
Glossop Limited	100
30 FINSBURY SQUARE, LONDON, EC2A 1AG	
BG EQUATORIAL GUINEA LIMITED	100

Company by country and address of incorporation	%
Limejump Intermediate 1 Limited	100
Limejump Virtual 10 Limited	100
Limejump Virtual 11 Limited	100
Limejump Virtual 13 Limited	100
Limejump Virtual 3 Limited	100
Limejump Virtual 4 Limited	100
Limejump Virtual 5 Limited	100
Limejump Virtual 6 Limited	100
Limejump Virtual 7 Limited	100
Limejump Virtual 8 Limited	100
Limejump Virtual 9 Limited	100
SHELL COMPANY (HELLAS) LIMITED	100
Shell Hasdrubal Limited	100
Shell Marine Products Limited	100
The Shell Company of Hong Kong Limited	100
823 SALISBURY HOUSE, 29 FINSBURY CIRCUS, LONDON, EC2M 5QQ	
Nature Energy UK Ltd	100
HIBERNIA WAY, TRAFFORD PARK, MANCHESTER, M32 0ZD	
Dielectric Fluids Holdings Ltd.	100
MIDEL & MIVOLT Fluids Limited	100
SHELL CENTRE, LONDON, SE1 7NA	
Shell Energy Europe Limited	100
[*] Shell Treasury Centre Limited	100
Shell Treasury Dollar Company Limited	100
Asiatic Petroleum Company Limited (The)	100
BG Cyprus Limited	100
BG Delta Limited	100
BG Energy Capital Plc	100
BG Energy Marketing Limited	100
BG Gas Services Limited	100
BG General Holdings Limited	100
BG Great Britain Limited	100
BG Group Pension Trustees Limited	100
BG Group Trustees Limited	100
BG Intellectual Property Limited	100
BG International Limited	100
BG Karachaganak Limited	100
BG Kenya L10B Limited	100
BG LNG Investments Limited	100
BG Mongolia Holdings Limited	100
BG North Sea Holdings Limited	100
BG OKLNG Limited	100
BG Overseas Holdings Limited	100
BG Overseas Limited	100
BG Rosetta Limited	100
BG South East Asia Limited	100
BG Tanzania Holdings Limited	100
BG UK Holdings Limited	100
Brazil Shipping I Limited	100
CRI Catalyst Company Europe Limited	100
Derivatives Trading Atlantic Limited	100
Enterprise Oil Limited	100
Enterprise Oil Middle East Limited	100
Enterprise Oil Norge Limited	100
Enterprise Oil U.K. Limited	100
First Telecommunications Limited	100
Gainrace Limited	100
GOGB Limited	100
Impello Limited	100

Company by country and address of incorporation	%
UK continued	
Limejump Energy Limited	100
Limejump Virtual 1 Limited	100
Limejump Virtual 14 Limited	100
Limejump Virtual 15 Limited	100
Limejump Virtual 2 Limited	100
Methane Services Limited	100
Murphy Schiehallion Limited	100
Sabah Shell Petroleum Company Limited	100
Saxon Oil Limited	100
Saxon Oil Miller Limited	100
SELAP LIMITED	100
SHELL AIRCRAFT LIMITED	100
Shell Aviation Limited	100
Shell Business Development Middle East Limited	100
Shell Caribbean Investments Limited	100
Shell Catalysts & Technologies Limited	100
Shell Chemical Company of Eastern Africa Limited	100
Shell Chemicals Limited	100
Shell Chemicals U.K. Limited	100
Shell China Exploration and Production Company Limited	100
Shell Clair UK Limited	100
Shell Club Corringham Limited	100
Shell Company (Pacific Islands) Limited	100
SHELL COMPANY OF TÜRKIYE LIMITED	100
Shell Corporate Director Limited	100
Shell Corporate Secretary Limited	100
Shell Distributor (Holdings) Limited	100
Shell Employee Benefits Trustee Limited	100
Shell Energy Investments Limited	100
Shell EP Offshore Ventures Limited	100
SHELL EXPLORATION AND PRODUCTION LIMITED	100
Shell Exploration and Production Tanzania Limited	100
Shell Finance GB Limited	100
Shell Gas Holdings (Malaysia) Limited	100
Shell Gas Marketing U.K Limited	100
Shell Global LNG Limited	100
Shell Holdings (U.K.) Limited	100
Shell Information Technology International Limited	100
Shell International Gas Limited	100
Shell International Limited	100
Shell International Petroleum Company Limited	100
Shell International Trading and Shipping Company Limited	100
Shell Malaysia Limited	100
Shell New Energies Holding Limited	100
Shell Overseas Services Limited	100
Shell Pension Reserve Company (SIPF) Limited	100
Shell Pension Reserve Company (SOCPF) Limited	100
Shell Pension Reserve Company (UK) Limited	100
Shell Pensions Trust Limited	100
Shell Property Company Limited	100
Shell QGC Midstream 1 Limited [g]	100
Shell QGC Midstream 2 Limited	100
Shell QGC Upstream 1 Limited	100
Shell QGC Upstream 2 Limited	100
Shell Research Limited	100
Shell Response Limited	100
Shell South Asia LNG Limited	100
Shell Supplementary Pension Plan Trustees Limited	100
Shell Tankers (U.K.) Limited	100
Shell Trading International Limited	100
Shell Treasury UK Limited	100
Shell Trinidad 5(A) Limited	100
Shell Trinidad and Tobago Limited	100
Shell Trinidad Block 22 Limited	100
Shell Trinidad Block E Limited	100
Shell Tunisia Upstream Limited	100
Shell U.K. Limited	100
Shell U.K. North Atlantic Limited	100
Shell U.K. Oil Products Limited	100
Shell Ventures New Zealand Limited	100
Shell Ventures U.K. Limited	100
STT (Das Beneficiary) Limited [a]	100
Synthetic Chemicals (Northern) Limited	100
Telegraph Service Stations Limited	100
The Mexican Eagle Oil Company Limited	100
The Shell Company (W.I.) Limited	100
The Shell Company of Nigeria Limited	100
The Shell Company of Thailand Limited	100
The Shell Company of The Philippines Limited	75
The Shell Marketing Company of Borneo Limited	100
Thermocomfort Limited	100
Ubitricity Distributed Energy Systems UK Limited	100
UK Shell Pension Plan Trust Limited	100
Winterton Solar Limited	100
[*] BG Energy Holdings Limited	100
Shell QGC Holdings Limited [g]	100
SHELL OVERSEAS HOLDINGS LIMITED	100
[*] Shell Group Holding Limited [a]	100
[*] BG GROUP LIMITED	100
SHELL CENTRE, YORK ROAD, LONDON, SE1 7NA	
[*] The Shell Petroleum Company Limited	100
CSE23 Limited	100
First Utility Limited	100
Iddenshall Solar Limited	100
Limejump Virtual 12 Limited	100
Onegas West Limited	100
Shell Energy UK Limited	100
Shell Group Limited	100
Shell New Energies UK Ltd	100
Shell Upstream Overseas Services (I) Limited	100
The Anglo-Saxon Petroleum Company Limited	100
SHELL CENTRE, LONDON, SE1 7NA	
Limejump Ltd	100
UKRAINE	
100 CHERVONOARMIYSKA STR, 8TH FLOOR, KYIV, 03150	
Shell Energy Ukraine LLC	100
MYKOLY HRINCHENKA STR, 4-B, KYIV, 03038	
Shell Oil Products Ukraine [c]	100
UNITED ARAB EMIRATES	
LB10032, JEBEL ALI FREEZONE, DUBAI, P.O. BOX: 11677	
Shell International Trading Middle East Limited FZE	100
LB192702WS23 JEBEL ALI FREEZONE, DUBAI	
Shell Markets Middle East Limited FZE	100
URUGUAY	
LA CUMPARSITA, 1373 4TH FLOOR, MONTEVIDEO	
BG (Uruguay) S.A.	100

Company by country and address of incorporation	%
USA	
CORPORATION SERVICE COMPANY, 251 LITTLE FALLS DRIVE, WILMINGTON, 19808	
Sonoma Reliability Project LLC [c]	100
Ventura Reliability Project LLC [c]	100
1209 ORANGE STREET, COUNTY OF NEWCASTLE, WILMINGTON, 19801	
Nature Energy US LLC	100
126 HYDE STREET, SAN FRANCISCO, 94102	
Thermotest, Inc.	100
2048, WEEMS ROAD, TUCKER, 30084	
Sonnen Inc.	100
210 S. WEST STREET, LEBANON, 45036	
Allied Reliability Inc.	100
3202 MERCER, HOUSTON	
T. F. Hudgins, Incorporated	100
C T CORPORATION SYSTEM, 1999 BRYAN STREET, SUITE 900, DALLAS, TX 75201	
DGSP2 LLC [c]	100
Distributed Generation Solutions LLC [c]	100
MIDEL & MIVOLT Fluids Inc.	100
MP2 Energy LLC [c]	100
MP2 Energy NE LLC [c]	100
MP2 Energy Retail Holdings LLC [c]	100
MP2 Energy Texas LLC [c]	100
MP2 Mesquite Creek Wind LLC [c]	100
Noble Assurance Company	100
Oryx Caspian Pipeline L.L.C. [c]	100
Shell Legacy Holdings LLC [c]	100
SWEPI LLC [c]	100
C/O ALLIED SERVICES GROUP, 6730 ROOSEVELT BLVD., FRANKLIN, 45005	
Allied Services Group LLC [c]	100
CORPORATE SERVICE COMPANY, 2711 CENTERVILLE ROAD, SUITE 400, WILMINGTON, 19808	
Allied Reliability Group, Inc.	100
CORPORATION SERVICE COMPANY, 251 LITTLE FALLS DRIVE, WILMINGTON, 19808	
Blue Quartz Energy Center, LLC [c]	100
CORPORATION SERVICE COMPANY, 1160 DUBLIN ROAD STE 400, COLUMBUS, 43215	
Marion County Land Holdings, LLC [c]	100
CORPORATION SERVICE COMPANY, 251 LITTLE FALLS DRIVE, WILMINGTON, 19808	
ACADIAN SUN ENERGY CENTER, LLC [c]	100
ADAMS BROOK ENERGY CENTER, LLC [c]	100
Adams Creek Solar Project, LLC [c]	100
ADMIRAL BLVD LAND GROUP, LLC [c]	100
ANABRANCH ENERGY CENTER, LLC [c]	100
ANGEL CITY ENERGY CENTER, LLC [c]	100
Apricot Sun Energy Center, LLC [c]	100
ATHENS CREEK ENERGY CENTER, LLC [c]	100
Babbling Brook Energy Center, LLC [c]	100
BADGER PAW ENERGY CENTER, LLC [c]	100
Bankson Solar Project, LLC [c]	100
BEAVER BAY ENERGY CENTER, LLC [c]	100
BELL BRANCH SOLAR PROJECT, LLC [c]	100
Between The Rows, LLC [c]	100
Black Hawk Solar Project, LLC [c]	100
Blackjack Plains Solar Project, LLC [c]	100
BLUE FROST ENERGY CENTER, LLC [c]	100
Bluegrass Plains Solar Project, LLC [c]	100
Bogalusa West Pv i, LLC [c]	100
Bronx Shores Energy Storage, LLC [c]	100
Bronze Sky Energy Center, LLC [c]	100
Buchanan County Solar Project, LLC [c]	100

Company by country and address of incorporation	%
BUCK HOLLOW ENERGY CENTER, LLC [c]	100
BUFFALO GRASS ENERGY CENTER, LLC [c]	100
BUFFALO MEADOW ENERGY CENTER, LLC [c]	100
BUFFALO PRAIRIE ENERGY CENTER, LLC [c]	100
Bunyan Energy Center, LLC [c]	100
Cactus Condor Energy Center, LLC [c]	100
CALLOWAY ENERGY CENTER, LLC [c]	100
CANADIAN COUNTY SOLAR PROJECT, LLC [c]	100
Cane Flats Solar Project, LLC [c]	100
CATTLE STAR ENERGY CENTER, LLC [c]	100
Centerville Pike Solar Project, LLC [c]	100
Choctaw County Solar Project, LLC [c]	100
Choctaw Fields Solar Project, LLC [c]	100
CLEAR MOUNTAIN ENERGY CENTER, LLC [c]	100
Coastal Breeze Energy Center, LLC [c]	100
Coastal Falls East Energy Center, LLC [c]	100
Coastal Falls West Energy Center, LLC [c]	100
Cobalt Tide Energy Center, LLC [c]	100
COYOTE DEN ENERGY CENTER, LLC [c]	100
COYOTE FLATS ENERGY CENTER, LLC [c]	100
COYOTE RUN ENERGY CENTER, LLC [c]	100
Crab Run Solar Project, LLC [c]	100
Crane Brook Solar Project, LLC [c]	100
CRAY FIELDS ENERGY CENTER, LLC [c]	100
Crescent Moon Energy Center, LLC [c]	100
Cumberland Road North Solar Project, LLC [c]	100
DAKOTA PRAIRIE ENERGY CENTER, LLC [c]	100
Dale County Solar Project, LLC [c]	100
DEEP LAKE ENERGY CENTER, LLC [c]	100
DESERT SENNA ENERGY CENTER, LLC [c]	100
DIABLO CAMPO ENERGY CENTER, LLC [c]	100
Dove Run Solar Project, LLC [c]	100
DOVE WING ENERGY CENTER, LLC [c]	100
East Setauket Energy Storage, LLC [c]	100
EASTSIDE PLAINS ENERGY CENTER, LLC [c]	100
Elkhart County Solar Project, LLC [c]	100
Elkhart Energy Storage, LLC [c]	100
Ellwood Land Holdings, LLC [c]	100
EMERGENT VALLEY SOLAR PROJECT, LLC [c]	100
Energy Pastures Solar Project, LLC [c]	100
Escambia County Solar Project, LLC [c]	100
FALCON PALM ENERGY CENTER, LLC [c]	100
FALKIRK FIELDS ENERGY CENTER, LLC [c]	100
Farm Bell Energy Center, LLC [c]	100
Farnham Solar Project, LLC [c]	100
Fentress Energy Storage, LLC [c]	100
Firefly Fields Energy Center, LLC [c]	100
Five Oaks Solar Project, LLC [c]	100
Flickertail Solar Project, LLC [c]	100
FOGHORN ENERGY CENTER, LLC [c]	100
Free State Solar Project, LLC [c]	100
Gold Harvest Solar Project, LLC [c]	100
Golden Cactus Developments, LLC [c]	100
GOLDEN SPIRIT ENERGY CENTER, LLC [c]	100
Goose Creek Solar Project, LLC [c]	100
GOOSE QUILL ENERGY CENTER, LLC [c]	100
GRID BALANCE ENERGY CENTER, LLC [c]	100
Gsd Farming Co. LLC [c]	100
Gunlock Solar Project, LLC [c]	100

Company by country and address of incorporation	%
USA continued	
Hancock County Solar Project, LLC [c]	100
Harmony Ridge Energy Center, LLC [c]	100
Haycraft Solar Project, LLC [c]	100
Headland-Wiregrass Solar Project, LLC [c]	100
HERRINGTON SOLAR PROJECT, LLC [c]	100
High Oasis II Solar Project, LLC [c]	100
Holbrook Energy Storage, LLC [c]	100
Holtsville Energy Storage, LLC [c]	100
Huckleberry Line Solar Project, LLC [c]	100
Hyder Energy Center, LLC [c]	100
Irwin Solar I, LLC [c]	100
JUMPING CACTUS ENERGY CENTER, LLC [c]	100
K RIVER ENERGY CENTER, LLC [c]	100
Kcr Rto Da, LLC [c]	100
Kings Fork Solar Project, LLC [c]	100
Kiowa County Solar Holdings, LLC [c]	100
Kiowa County Solar Project, LLC [c]	100
Lake County Solar Project, LLC [c]	100
Lawrence County Solar Project, LLC [c]	100
Levy Solar I, LLC [c]	100
Liberty Creek Energy Center, LLC [c]	100
LITTLEJOHNS ENERGY CENTER, LLC [c]	100
LIZARD SPIN ENERGY CENTER, LLC [c]	100
LOPEZ CANYON ENERGY CENTER, LLC [c]	100
Lynn Bark Energy Center, LLC [c]	100
Macon Parkway Solar Project, LLC [c]	100
Madison County Solar Project, LLC [c]	100
Manor River Energy Storage, LLC [c]	100
Maple Pv I, LLC [c]	100
Marion County Solar Project, LLC [c]	100
Marquette County Solar Project, LLC [c]	100
Martin County II Solar Project, LLC [c]	100
Martin County Solar Holdings, LLC [c]	100
Martin County Solar Project, LLC [c]	100
MASAVA ENERGY CENTER, LLC [c]	100
May Valley Solar Project, LLC [c]	100
Mchenry County Solar Project, LLC [c]	100
MCI WESTLAKE ENERGY CENTER, LLC [c]	100
Meadow Light Energy Center, LLC [c]	100
Mercer County II Solar Project, LLC [c]	100
Mercer County III Solar Project, LLC [c]	100
Mercer County Solar Project, LLC [c]	100
MICHAELS CREEK ENERGY CENTER, LLC [c]	100
MIDLAND VALLEY SOLAR PROJECT, LLC [c]	100
MOONLIT BAYOU ENERGY CENTER, LLC [c]	100
Muscatine County Solar Project, LLC [c]	100
Mustang Country Solar Project, LLC [c]	100
NEW MOON ENERGY CENTER, LLC [c]	100
NEW SHEPHERD ENERGY CENTER, LLC [c]	100
Nicholas County Solar Project, LLC [c]	100
NORTH ALMOND ENERGY CENTER, LLC [c]	100
North Hill Land Holdings, LLC [c]	100
North Seneca Solar Project, LLC [c]	100
Northern Glow Energy Center, LLC [c]	100
Oak Ridge Solar Project, LLC [c]	100
Oak Run Solar Project, LLC [c]	100
Orangeburg South Solar Project, LLC [c]	100
Orangeburg West Solar Project, LLC [c]	100

Company by country and address of incorporation	%
ORCHARD GROVE ENERGY CENTER, LLC [c]	100
ORCHARD STAND ENERGY CENTER, LLC [c]	100
OXBOW ENERGY CENTER, LLC [c]	100
OZARK PRAIRIE ENERGY CENTER, LLC [c]	100
Page Street Development, LLC [c]	100
Painted Rock Solar Project, LLC [c]	100
Persimmon Energy Center, LLC [c]	100
Pike County Solar Project, LLC [c]	100
Pilot Range Energy Center, LLC [c]	100
Pine Barrens Energy Center, LLC [c]	100
Pine Flats Solar Project, LLC [c]	100
PLANO SKIES ENERGY CENTER, LLC [c]	100
Porchlight Solar Project, LLC [c]	100
Port Jefferson Energy Storage, LLC [c]	100
POWERS BUTTE ENERGY CENTER, LLC [c]	100
Prairie Canyon Solar Project, LLC [c]	100
PRAIRIE NOON ENERGY CENTER, LLC [c]	100
Qmb 1 Energy Storage, LLC [c]	100
Qmb 2 Energy Storage, LLC [c]	100
Queen Flats Solar Project, LLC [c]	100
Quogue Energy Storage, LLC [c]	100
Randolph County Solar Project, LLC [c]	100
RANEGRAS PLAINS ENERGY CENTER, LLC [c]	100
RED BATON ENERGY CENTER, LLC [c]	100
RED BRANCH ENERGY CENTER, LLC [c]	100
Red Clover Solar Project, LLC [c]	100
RED CYPRESS ENERGY CENTER, LLC [c]	100
RIVER DUNE ENERGY CENTER, LLC [c]	100
RIVER TURN ENERGY CENTER, LLC [c]	100
ROLLING BLUFF ENERGY CENTER, LLC [c]	100
SAGE MEADOW ENERGY CENTER, LLC [c]	100
Sand Flat Energy Center, LLC [c]	100
Sandy Loam Energy Center, LLC [c]	100
Sapphire Sun Energy Center, LLC [c]	100
SARAH LAKE SOLAR PROJECT, LLC [c]	100
Savannah Oaks Solar Project, LLC [c]	100
Savion Chesapeake Solar Project, LLC [c]	100
SAVION CONSTRUCTION HOLDCO, LLC [c]	100
Savion Construction Management, LLC [c]	100
SAVION EQUITY, LLC [c]	100
Savion Solar Equipment, LLC [c]	100
Savion, LLC [c]	100
Scarlet Oak Energy Center, LLC [c]	100
Setauket Energy Storage, LLC [c]	100
Shining Valley Energy Center, LLC [c]	100
SHIPBUILDER ENERGY CENTER, LLC [c]	100
SILVER THUNDER ENERGY CENTER, LLC [c]	100
SILVERBELL ENERGY CENTER, LLC [c]	100
SOLSTICE SUN ENERGY CENTER, LLC [c]	100
SOSA ENERGY CENTER, LLC [c]	100
SOUTH HILL SOLAR PROJECT, LLC [c]	100
South Peak Land Holdings, LLC [c]	100
South Suffolk Energy Storage, LLC [c]	100
Southern Plains Solar Project, LLC [c]	100
Southwest Michigan Solar Project, LLC [c]	100
Spinning Reel Energy Center, LLC [c]	100
Stable Sands Energy Center, LLC [c]	100
Starlit Pasture Energy Center, LLC [c]	100
STEADY GRID ENERGY CENTER, LLC [c]	100

Company by country and address of incorporation	%
USA continued	
Steel Branch Solar Project, LLC [c]	100
STEEL RAIL ENERGY CENTER, LLC [c]	100
STILLY WAY ENERGY CENTER, LLC [c]	100
STOCKGROWER ENERGY CENTER, LLC [c]	100
Stony Landing Energy Storage, LLC [c]	100
Stony Run Solar Project, LLC [c]	100
STORING ENERGY CENTER, LLC [c]	100
STRAWBERRY ACRES ENERGY CENTER, LLC [c]	100
Sturgeon Solar Project, LLC [c]	100
Su Ranch Solar Project, LLC [c]	100
Suffolk County Energy Storage II, LLC [c]	100
Suffolk County Energy Storage, LLC [c]	100
Sugar Plains Energy Center, LLC [c]	100
Sugar Tree Solar Project, LLC [c]	100
Sun Cactus Solar Project, LLC [c]	100
SUN FLATS ENERGY CENTER, LLC [c]	100
Sun Park Solar, LLC [c]	100
Sunflower I Energy Storage, LLC [c]	100
Sunflower II Energy Storage, LLC [c]	100
Sunflower Sky Solar Project, LLC [c]	100
Sunflower Solar Project, LLC [c]	100
Sunny Plains Energy Center, LLC [c]	100
Sunrise Fields Energy Center, LLC [c]	100
SUNSET PRAIRIE SOLAR PROJECT, LLC [c]	100
Superior Solar Project, LLC [c]	100
SWEET VALLEY ENERGY CENTER, LLC [c]	100
TANNIN VINE ENERGY CENTER, LLC [c]	100
The Bootheel Solar Project, LLC [c]	100
The Panhandle Solar Project, LLC [c]	100
Thibodaux Solar Project, LLC [c]	100
Threeforks Energy Storage, LLC [c]	100
THREEFORKS LAND HOLDINGS, LLC [c]	100
TONTOGANY PLAINS SOLAR PROJECT, LLC [c]	100
Tri-State II Solar Project, LLC [c]	100
Tri-State Solar Project, LLC [c]	100
Turtle Rock Energy Center, LLC [c]	100
TWENTY-SIX MILE ENERGY CENTER, LLC [c]	100
VALERIA ENERGY CENTER, LLC [c]	100
Washington Vines Solar Project, LLC [c]	100
Water Lily Energy Center, LLC [c]	100
West Babylon Energy Storage, LLC [c]	100
White Moon Solar Project, LLC [c]	100
Wild Paw Energy Center, LLC [c]	100
WILD PEACH ENERGY CENTER, LLC [c]	100
WILD PLUM ENERGY CENTER, LLC [c]	100
Wild Rose Solar Project, LLC [c]	100
Wild Rye Energy Center, LLC [c]	100
WILD VIOLET ENERGY CENTER, LLC [c]	100
Wind Breaker Energy Center, LLC [c]	100
Windhams Creek Energy Center, LLC [c]	100
Yaphank Energy Storage, LLC [c]	100
YELLOW FEATHER ENERGY CENTER, LLC [c]	100
YELLOW ROSEBUSH ENERGY CENTER, LLC [c]	100
CT CORPORATION SYSTEM, 1200 SOUTH PINE ISLAND ROAD, PLANTATION, 33324	
Shell MS Fuel Card, LLC [c]	100
CT CORPORATION SYSTEM, 701 S. CARSON ST., SUITE 200, CARSON CITY, 89701	
Pennzoil-Quaker State Nominee Company	100
CT CORPORATION SYSTEM, 7700 E ARAPAHOE RD, STE 220, CENTENNIAL, 80112-1268	
Positive Energies, LLC [c]	100
THE CORPORATION TRUST COMPANY, CORPORATION TRUST CENTER, 1209 ORANGE STREET, WILMINGTON, 19801	
TFH Buyer, Inc.	100
THE CORPORATION TRUST COMPANY, 1209 ORANGE STREET, CORPORATION TRUST CENTER, WILMINGTON, 19801	
[*] Shell Petroleum Inc.	100
[*] Shell USA, Inc.	100
BG Brasilia, LLC [c]	100
BG Energy Merchants, LLC [c]	100
BG Gulf Coast LNG, LLC [c]	100
BG LNG Services, LLC [c]	100
BG North America, LLC [c]	100
BG US Services, Inc.	100
Concha Chemical Pipeline LLC [c]	100
CRI Sales and Services Inc.	100
CRI Zeolites Inc.	100
Enterprise Oil North America Inc.	100
Inspire Digital Services California, LLC [c]	100
Inspire Digital Services PJM, LLC [c]	100
Inspire Digital Services USA, LLC [c]	100
Inspire Energy Capital, LLC	100
Inspire Energy Holdings, LLC [c]	100
Inspire Energy Technologies, LLC [c]	100
Jiffy Lube International, Inc.	100
Odyssey Pipeline L.L.C. [c]	71
Pecten Brazil Exploration Company	100
Pecten Midstream LLC [c]	100
Pecten Orient Company	100
Pecten Orient Company LLC [c]	100
Pecten Producing Company	100
Pecten Trading Company	100
Pecten Victoria Company	100
Pecten Yemen Masila Company	100
Pennzoil-Quaker State Company	100
Pennzoil-Quaker State International Corporation	100
Power Limited Partnership [d]	100
PR Microgrids LLC [c]	100
Premium Velocity Auto LLC [c]	100
Pulse Power, LLC [c]	100
Quaker State Investment Corporation	100
RK Caspian Shipping Company, LLC [c]	100
S T Exchange, Inc.	100
Sand Dollar Pipeline LLC [c]	100
SCOGI GP [d]	100
Shell (US) Gas & Power M&T Holdings, Inc.	100
Shell California Pipeline Company LLC [c]	100
Shell Catalysts & Technologies Americas LP [d]	100
Shell Catalysts & Technologies Company	100
Shell Catalysts & Technologies Holdings Inc.	100
Shell Catalysts & Technologies LP [d]	100
Shell Catalysts & Technologies US LP [d]	100
Shell Catalysts Ventures Inc.	100
Shell Chemical Appalachia LLC [c]	100
Shell Chemical LP [d]	100
Shell Chemicals Arabia L.L.C. [c]	100
Shell Communications, Inc.	100
Shell Deepwater Royalties Inc.	100

Company by country and address of incorporation	%
USA continued	
Shell Downstream Inc.	100
Shell Energy Company	100
Shell Energy Holding GP LLC [c]	100
Shell Energy North America (US), L.P. [d]	100
Shell Energy Resources Company	100
Shell Enterprises LLC [c]	100
Shell EP Holdings Inc.	100
Shell Expatriate Employment US Inc.	100
Shell Exploration & Production Company	100
Shell Exploration Company Inc.	100
Shell Frontier Oil & Gas Inc.	100
Shell Global Solutions (US) Inc.	100
Shell GOM Pipeline Company LLC [c]	100
Shell Gulf of Mexico Inc.	100
Shell Information Technology International Inc.	100
Shell International Exploration and Production Inc.	100
Shell Lake Charles Operations, LLC [c]	100
Shell Leasing Company	100
Shell Marine Products (US) Company	100
Shell Midstream LP Holdings LLC [c]	100
Shell Midstream Operating LLC [c]	100
Shell Midstream Partners GP LLC [c]	100
Shell Midstream Partners, L.P. [d]	100
Shell Mobility & Convenience US LLC [c]	100
Shell NA Gas & Power Holding Company	100
Shell NA LNG LLC [c]	100
Shell New Energies US LLC [c]	100
Shell North America Gas & Power Services Company	100
Shell Offshore and Chemical Investments Inc.	100
Shell Offshore Inc.	100
Shell Offshore Response Company LLC [c]	100
Shell Oil Company Investments Inc.	100
Shell Oil Products Company LLC [c]	100
Shell Pipeline Company LP [d]	100
Shell Pipeline GP LLC [c]	100
Shell Retail and Convenience Operations LLC [c]	100
Shell RSC Company	100
Shell Trademark Management Inc.	100
Shell Trading (US) Company	100
Shell Trading North America Company	100
Shell Trading Risk Management, LLC [c]	100
Shell Trading Services Company	100
Shell Transportation Holdings LLC [c]	100
Shell Treasury Center (West) Inc.	100
Shell US E&P Investments LLC [c]	100
Shell US Gas & Power LLC [c]	100
Shell US Hosting Company	100
Shell US LNG, LLC [c]	100
Shell Ventures LLC [c]	100
Shell WindEnergy Inc.	100
Shell WindEnergy Services Inc.	100
SOI Finance Inc.	100
SOPC Holdings East LLC [c]	100
SOPC Holdings West LLC [c]	100
SOPC Southeast Inc. (f/k/a Motiva Company)	100
Tejas Coral GP, LLC [c]	100
Tejas Coral Holding, LLC [c]	100
Tejas Power Generation, LLC [c]	100
Texas Petroleum Group, LLC [c]	100
Texas-New Mexico Pipe Line Company	100
TFH Reliability Group, LLC [c]	100
The Valley Camp Coal Company	100
ThinkOnward LLC [c]	100
TMR Company LLC [c]	100
Triton Diagnostics Inc.	100
Triton Terminaling LLC [c]	100
Triton West LLC [c]	100
Zeco Holdings, Inc.	100
Zeco Systems, Inc.	100
Zydeco Pipeline Company LLC [c]	100
THE CORPORATION TRUST COMPANY, CORPORATION TRUST CENTER, 1209 ORANGE STREET, WILMINGTON, 19801	
PQS Recycled Lubes LLC [c]	100
THE CORPORATION TRUST COMPANY, CORPORATION TRUST CENTER, 1209 ORANGE STREET, WILMINGTON, 19801	
Allied Reliability Group Intermediate Holdings, Inc.	100
ARG Acquisition Company, Inc.	100
Equilon Enterprises LLC [c]	100
Impact Recon, LLC [c]	100
New Mexico Company Operations LLC [c]	100
Shell Finance US Inc.	100
Shell Gas Gathering Corp. #2	100
Shell Mobility Company Operations LLC [c]	100
TFH Reliability, LLC [c]	100
TFH TopCo, Inc.	100
Volta Charging Industries, LLC [c]	100
Volta Charging Services LLC [c]	100
THE CORPORATION TRUST COMPANY, CORPORATION TRUST CENTRE, 1209 ORANGE STREET, WILMINGTON, 19801	
BG LNG Trading, LLC	100
Shell Thailand E&P Inc.	100
VENEZUELA	
AV. ORINOCO, EDIF.CENTRO EMPRESARIAL, PREMIUM PISO 2 OFICINA 2-B, URBANIZACIÓN LAS MERCEDES, CARACAS, 1060	
Shell Venezuela Productos, C.A.	100
Shell Venezuela, S.A.	100
VIETNAM	
GO DAU INDUSTRIAL ZONE, PHUOC THAI COMMUNE, LONG THANH DISTRICT, DONG NAI PROVINCE	
Shell Vietnam Ltd	100

Other related undertakings

Company by country and address of incorporation	%
ARGENTINA	
DON BOSCO 3672, 6TH FLOOR, CIUDAD AUTONOMA DE BUENOS AIRES	
Gas Link S.A.	26
AUSTRALIA	
275 GEORGE STREET, BRISBANE, 4000	
NewGen Neerabup Pty Ltd [b]	50
NewGen Power Neerabup Pty Ltd [b]	50
C/- FORESIGHT AUSTRALIA FUNDS MANAGEMENT, SUITE 3, LEVEL 5, 20 HUNTER STREET, SYDNEY, 2000	
Kondinin Renewables Holdings Pty Ltd ATF Kondinin Renewables Holdings Trust	50
C/O JEFFERY ZIVIN, UNIT 4, 4 GEORGE STREET, CAMBERWELL, VIC 3124	
Solpod Pty Ltd	24
LEVEL 16, 25 BLIGH STREET, SYDNEY, NSW 2000	
Corporate Carbon Group Pty Ltd	25
LEVEL 39, 111 EAGLE STREET, BRISBANE, QLD 4000	
Arrow Energy Holdings Pty Ltd	50
LEVEL 4, 459 LITTLE COLLINS STREET, MELBOURNE, VIC 3000	
1st Energy Pty Ltd	30
OFFICE 4, 17 GOODE STREET, GISBORNE, VIC 3437	
WestWind Energy Development Pty Ltd	49
SHELL ENERGY BESS 1 PTY LTD, LEVEL 30, 275 GEORGE STREET, BRISBANE, QLD, 4000	
Cranbourne Bess Fin Co Pty Limited [b]	45
Cranbourne Bess Hold Co Pty Limited [b]	45
Cranbourne Bess Project Co Pty Limited [b]	45
AUSTRIA	
KIENBURG 11, MATREI IN OSTTIROL, 9971	
Transalpine Ölleitung in Österreich GmbH	15
RETTENLACKSTRASSE 3, SALZBURG, 5020	
TBG Tanklager Betriebsgesellschaft m.b.H.	50
BERMUDA	
CLARENDON HOUSE, 2 CHURCH STREET, HAMILTON HM 11, HAMILTON	
Egypt LNG Shipping Limited	25
MELBOURNE HOUSE, 3RD FLOOR, 11 PARLIAMENT STREET, HAMILTON, HM11	
Sakhalin Energy Investment Company Ltd	28
BRAZIL	
AV IBIRAPUERA 2907, CONJ 109 PARTE, INDIANOPOLIS, SÃO PAULO, 04029-200	
CARBONEXT HOLDING S.A	19
AVENIDA DAS ALMIRANTE BARROSO, Nº 81, 36º ANDAR, SALA 36A104, RIO DE JANEIRO, 20031-004	
Raizen S.A.	44
AVENIDA PAULISTA, 1274, 8º ANDAR, CONJUNTO 23, SALA B, BELA VISTA, SÃO PAULO, 01310-100	
Marlim Azul Energia S.A.	30
BRUNEI	
BRUNEI LNG SDN BHD, LUMUT, KUALA BELAIT, KC2935	
Brunei LNG Sendirian Berhad	25
JALAN UTARA, PANAGA, SERIA, KB3534, BRUNEI DARUSSALAM, SERIA, KB3534	
Brunei Shell Petroleum Company Sendirian Berhad	50
GROUND & 12TH FLOOR, PGGMB BUILDING, JALAN KIANGGEH, BS8111, BANDAR SERI BEGAWAN, BANDAR SERI BEGAWAN, BS8111	
Brunei Shell Marketing Company Sendirian Berhad	50
CANADA	
1400, HOLLIS STREET, HALIFAX, NOVA SCOTIA, B3J 3M8	
Sable Offshore Energy Inc.	33
199 BAY STREET, 5300 COMMERCE COURT WEST, COMMERCE COURT WEST, TORONTO, M5L 1B9	
SFJ Inc.	50
400 4TH AVENUE S.W., CALGARY, T2P 0J4	
FP Solutions Corporation	33
5305 MCCALL WAY N.E., CALGARY, ALBERTA, T2E 7N7	
Alberta Products Pipe Line Ltd.	20
830 HIGHWAY NO. 6 NORTH, FLAMBOROUGH, ONTARIO, L0R 2H0	
Sun-Canadian Pipe Line Company Limited	45
SUIT 4000, 500 CENTRE STREET SE, CALGARY, ALBERTA, T2G 1A6	
LNG Canada Development Inc.	40
SUITE 4000, 500 CENTRE STREET SE, ALBERTA, CALGARY, T2G 1A6	
Atlas CCS Limited Partnership [b] [c]	50
VOGEL ROAD, RICHMOND HILL, ONTARIO, RICHMOND HILL, ONTARIO, L4B 3P6	
Trans-Northern Pipelines Inc.	33
CHINA	
18TH FLOOR, TOWER 1, YONGLI INTERNATIONAL FINANCE CENTRE, JINYE NO. 1 ROAD, HIGH-TECH DISTRICT, XI'AN, 710075	
Yanchang and Shell Petroleum Company Limited	45
23F, YANLORD SQUARE, SECTION 2, RENMIN SOUTH ROAD, CHENGDU, SICHUAN, 610016	
Yanchang and Shell (Sichuan) Petroleum Company Limited	45
39TH FLOOR, LEATOP PLAZA, NO. 32 EAST ZHUJIANG ROAD, ZHUJIANG NEW TOWN, TIANHE DISTRICT, GUANGDONG, 510623	
Yanchang and Shell (Guangdong) Petroleum Co., Ltd.	49
BAISHA, HEKOU, SANSHUI DISTRICT, FOSHAN, GUANGDONG, 528133	
Shell Road Solutions Xinyue (Foshan) Co. Ltd.	60
BLOCK 10, NO.860 XINYANG ROAD, LINGANG SPECIAL AREA, PILOT FREE TRADE ZONE, SHANGHAI, 201413	
Shanghai Shenergy and Shell New Energy Company Limited	50
DAYAWAN PETROCHEMICAL INDUSTRIAL PARK, HUIZHOU, GUANGDONG, 516086	
CNOOC and Shell Petrochemicals Company Limited	50
NO. 1 DONGXIN ROAD, JIANGSU YANGTZE RIVER INTERNATIONAL CHEMICAL INDUSTRY PARK, ZHANGJIAGANG, JIANGSU, 215600	
Infineum (China) Co. Ltd.	50
NO. 100, XINGANG DADAO, NANJING ECONOMIC AND TECHNOLOGICAL DEVELOPMENT ZONE, NANJING, JIANGSU, 210000	
Sinopec and Shell (Jiangsu) Petroleum Marketing Company Limited	40
NO. 358 ZHUHUI ROAD, SUZHOU, 215000	
Suzhou Liyuan Retail Site Management Co., Ltd.	50
ROOM 2103, NORTH TOWER, YEFENG MODERN CENTER, NO. 161, SHAOXING ROAD, XIACHENG DISTRICT, HANGZHOU, ZHEJIANG, 310004	
Zhejiang Shell Fuels Company Limited	49
ROOM 518, 5TH FLOOR, OFFICE BUILDING, TIANJIN FOOD GROUP COMPANY LTD, NO. 96, QIXIANGTAI ROAD, HEXI DISTRICT, TIANJIN, 300074	
Shell Huabei Petroleum Group Co., Ltd.	49
UNIT 1101-1104, LEVEL 11, BUILDING 1, NO. 19 CHAOYANG PARK ROAD, CHAOYANG DISTRICT, BEIJING, 100125	
Beijing Shell Petroleum Company Ltd.	49
UNIT 604, 6/F, BUILDING C, NO. 3 YUNAN FOURTH ROAD, FTPZ XIAMEN SUB-ZONE (TARIFF-FREE ZONE), XIAMEN, 361000	
Fujian Xiangyu and Shell Petroleum Company Limited	49
CÔTE D'IVOIRE	
14, BLVD CARDE, IMM. LES HEVEAS, PLATEAU, ABIDJAN, BP V 194	
Cote d'Ivoire GNL	15
CYPRUS	
METOCHIOU STR, 37, AGIOS ANDREAS, NICOSIA, CY-1101	
Rosneft-Shell Caspian Ventures Limited	49
DENMARK	
BREDGADE 30, KØBENHAVN K, 1260	
TetraSpar Demonstrator ApS	46
NÆRUM HOVEDGADE 8, NAERUM, 2850	
DCC & Shell Aviation Denmark A/S	49

Company by country and address of incorporation	%
EGYPT	
28 ROAD 270, MAADI, CAIRO	
Burullus Gas Company S.A.E. [b]	25
38 STREET NO. 270, MAADI, CAIRO	
Rashid Petroleum Company S.A.E. [b]	50
CITY OF RASHID, EL BEHERA GOVERNORATE	
El Behera Natural Gas Liquefaction Company S.A.E.	36
IDKU Natural Gas Liquefaction Company S.A.E.	38
The Egyptian LNG Company S.A.E.	36
THE EGYPTIAN OPERATING COMPANY FOR NATURAL GAS LIQUEFACTION PROJECTS S.A.E.	36
FRANCE	
10 PLACE DE CATALOGNE, PARIS, 75014	
Eurus Offshore France	10
135, BD BINEAU, NEUILLY SUR SEINE, 92200	
Soc. de. Part. Dans "SPITP" Sarl	53
3 RUE DES VIGNES, A, TREMBLAY EN FRANCE, 93290	
Societe Immobilière Petroliere de Gestion	13
40 LA VERGNIERE, COUCUÉ SUR LOGNE, 44650	
Metha Herbauges Corcoué	49
AÉROPORT ROISSY CHARLES DE GAULLE, ZONE DE FRÊT 1, 3 RUE DES VIGNES, TREMBLAY-EN-FRANCE, 93290	
Groupement Pétrolier Aviation SNC	20
CHEMIN DE LIVRY, CHENNEVIÈRES-LES-LOUVRES, 95380	
Societe De Manutention De Carburants Aviation (S.A.)	17
CHEMIN DEPARTMENTAL 54, 13130, BERRE L'ETANG, 13130	
Infineum France	50
ORLY SUD NO. 144 - BAT. 438, ORLY AEROGARES, 94541	
Service Aviation Paris SNC	33
ROUTE D'ARLES, LA FENOUILLÈRE, FOS-SUR-MER, 13270	
Ste du Pipeline Sud Européen S.A.	21
TOUR LANDSCAPE, 22 ROUTE DE LA DEMI-LUNE/6 PLACE DES DEGRÉS, PUTEAUX, 92800	
Ferme Eolienne Flottante de Groix & Belle-Ile	30
GERMANY	
BROOK 2, BLOCK H, HAMBURG, 20457	
OLF Deutschland GmbH	50
BRUEHLER STR. 95, WESSELING, 50389	
Wasserbeschaffungsverband Wesseling-Hersel	35
CAFFAMACHERREIHE 5, HAMBURG, 20335	
BEB Holding GmbH [b]	50
DEA-SCHOLVEN-STR., KARLSRUHE, 76187	
Mineraloelraffinerie Oberrhein Verwaltungs GmbH	32
Oberrheinische Mineraloelwerke GmbH [b]	42
EUREF-CAMPUS 10-11, BERLIN, 10829	
H2 Mobility Deutschland GmbH and Co. KG	17
FRANZÖSISCHE STRAßE 33 A-C, BERLIN, 10117	
Toll4Europe GmbH	15
GODORFER HAUPTSTRASSE 186, KÖLN, 50997	
Rhein-Main-Rohrleitungstransportgesellschaft mbH [b]	63
NEUSSER LANDSTRAßE 16, KÖLN, 50735	
Deutsche Infineum GmbH & Co. KG	50
Infineum Deutschland Verwaltungsgesellschaft mbH	50
PASSOWER CHAUSSEE 111, SCHWEDT/ODER, 16303	
PCK Raffinerie GmbH [b]	38
PAUL WASSERMANN STR. 3, MUNICH, 81829	
Deutsche Transalpine Oelleitung GmbH	19
VAHRENWALDER STRASSE 238, HANNOVER, 30179	
BEB Erdgas und Erdoel GmbH & Co. KG [b]	50
Erdoel-Raffinerie Deurag-Nerag GmbH	50

Company by country and address of incorporation	%
ZUM OELHAFEN 207, WILHELMSHAVEN, 26384	
Nord-West Oelleitung GmbH [b]	20
GIBRALTAR	
57/63 LINE WALL ROAD, GIBRALTAR	
Shell LNG Gibraltar Limited	51
GREECE	
151 KIFISIAS AVE., MAROUSI, ATHENS, 15124	
Shell & MOH Aviation Fuels A.E.	51
HONG KONG	
3 SCENIC ROAD, CHEK LAP KOK, LANTAU	
AFSC Operations Limited	11
AFSC Refuelling Limited	11
ESSO TSING YI TERMINAL, LOT 46 TSING YI ROAD, TSING YI ISLAND, NEW TERRITORIES	
Hong Kong Response Limited	25
INDIA	
102, PRESTIGE SIGMA, VITTAL MALLYA ROAD, BANGALORE, 560001	
Shell MRPL Aviation Fuels and Services Limited	50
ENKING EMBASSY, PLOT 48, SCHEME 78 PART-2, VIJAY NAGAR, INDORE, 452010	
Amrut Nature Solutions Private Limited	49
TIKI TAR INDUSTRIES VILLAGE ROAD, NEAR BHANDUP VILLAGE, BHANDUP WEST MUMBAI, MUMBAI, MH 400078	
Tiki Tar and Shell India Private Limited	50
IRAQ	
KHOR AL ZUBAIR, BASRAH	
Basrah Gas Company	44
IRELAND	
SUITE 7 NORTHWOOD HOUSE, NORTHWOOD BUSINESS PARK, SANTRY, DUBLIN, 9	
Shell and Topaz Aviation Ireland Limited	50
ITALY	
STRADA DI SCORRIMENTO 2, VADO LIGURE, SAVONA, 17047	
Infineum Italia S.R.L.	50
VIA ANTONIO MALFANTE 73, ROMA, 00147	
Bloomfleet S.p.A.	40
VIA GIORGIO RIBOTTA 51, ROME, 00144	
Societa' Oleodotti Meridionali S.p.A.	30
VIA MUGGIA #1, SAN DORLIGO DELLA VALLE, TRIESTE, 34147	
Societa Italiana per l'Oleodotto Transalpino S.p.A.	19
JAPAN	
1-1-5 WAKAMIYA-CHO, SUMA-KU, KOBE-SHI, HYOGO, 654-0049	
Y.K. Nishi-Kobe Bosai Center	33
72-34, HORIKAWA-CHO, SAIWAI-KU, KAWASAKI, KAWASAKI, 212-8585	
Next Kraftwerke Toshiba Corporation	20
7F KOKURYU SHIBA KOEN BUILDING 2-6-1-5, SHIBA KOEN, MINATO-KU, TOKYO, 105-0011	
CO2-free Hydrogen Energy Supply-chain TRA	33
KAZAKHSTAN	
PROMZONA, BURLINSKI DISTRICT, AKSAI TOWN, WEST KAZAKHSTAN OBLAST	
Karachaganak Petroleum Marketing, LLP	29
KOREA (THE REPUBLIC OF)	
#704-3, TOWER B,HYUNDAI KNOWLEDGE INDUSTRIAL CENTER, 70 DUSAN-RO, GEUMCHEON-GU, SEOUL, 08584	
Korea Impact Carbon Corporation	40
640-6, DAEJUK-RI, DAESAN-EUP, SEOSAN-SHI, CHUNGCHONGNAM-DO, 356-713	
Hyundai and Shell Base Oil Co., Ltd	40
LUXEMBOURG	
412F, ROUTE D'ESCH, LUXEMBOURG, L-2086	
Denham International Power SCSp [d]	32

Company by country and address of incorporation	%
MALAYSIA	
LEVEL 11, MENARA TH 1 SENTRAL, JALAN RAKYAT, KUALA LUMPUR SENTRAL, WILAYAH PERSEKUTUAN, 50470	
P S Terminal Sendirian Berhad	35
LEVEL 30, TOWER 1, PETRONAS TWIN TOWERS, KLCC, KUALA LUMPUR/FEDERAL TERRITORY, 50088	
P S Pipeline Sendirian Berhad	50
LEVEL 8, SYMPHONY HOUSE, BLOCK D13, PUSAT DAGANGAN DANA 1, JALAN PJU 1A/46, SELANGOR, 46200	
Bonuskad Loyalty Sdn. Bhd. [g]	33
LOT 7689 AND LOT 7690, SECTION 64, KUCHING TOWN LAND DISTRICT, JALAN PENDING, KUCHING, SARAWAK, 93450	
IOT Management Sdn. Bhd.	7
NO. 20 & 21, WISMA KAFAZ, JALAN TUN DATUK PATINGGI HAJI ABDUL RAHMAN, YA'KUB, KUCHING, SARAWAK, 93050	
Tanjung Manis Oil Terminal Management Sdn. Bhd.	14
SUITE 13.03, 13 FLOOR, MENARA TAN & TAN, 207 TUN RAZAK, KUALA LUMPUR/ FEDERAL TERRITORY, 50400	
Kebabangan Petroleum Operating Company Sdn. Bhd.	30
MEXICO	
AV. PASEO DE LAS PALMAS 340, 1ST FLOOR, COLONIA LOMAS DE CHAPULTEPEC, DELEGACIÓN MIGUEL HIDALGO, CIUDAD DE MÉXICO, 11000	
Gas Del Litoral, S. de R.L. de C.V.	75
GUILLERMO GONZÁLEZ CAMARENA NO. 400, SANTA FE, LVARO OBREGÓN, CIUDAD DE MÉXICO, 1210	
Concilia S DE RL DE CV	50
PROLONGACION PAESO DE LA REFOMA NO. 600, SANTA FE, ALVARO OBREGÓN, CIUDAD DE MÉXICO, 1210	
COMERCIAL IMPORTADORA S DE RL DE CV	50
NETHERLANDS	
AMSTERDAMSEWEG 55, 1182 GP AMSTELVEEN, P.O. BOX 75650, LUCHTHAVEN SCHIPHOL, 1118 ZS	
Amsterdam Schiphol Pijpleiding Beheer B.V.	40
ANTARESLAAN 39, P.O. BOX 3068, HOOFDDORP, 2132 JE	
Multi Tank Card B.V.	30
BUTAANWEG 215, VONDELINGPLAAT, ROTTERDAM, 3196 KC	
N.V. Rotterdam-Rijn Pijpleiding Maatschappij [b]	56
CAREL VAN BYLANDTLAAN 30, THE HAGUE, 2596 HR	
Tamba B.V.	50
CAREL VAN BYLANDTLAAN 30, THE HAGUE, 2596HR	
BJS Oil Operations B.V.	80
Bogstone Holding B.V.	97
Cicerone Holding B.V.	97
Geocombinatie Leeuwarden B.V.	30
Shell and Vivo Lubricants B.V.	50
DR. HUB VAN DOORNEWEG 183, TILBURG, 5026RD	
Travis Road Services International B.V.	32
EUROPAWEG 975, MAASVLAKTE, ROTTERDAM, 3199 LC	
Maasvlakte Olie Terminal C.V. [d]	16
GROENHOVENSTRAAT 2, THE HAGUE, 2596 JM	
North Caspian Operating Company N.V. [b]	17
HERIKERBERGWEG 238, AMSTERDAM, 1101 CM	
Infineum Holdings B.V.	50
LAAN VAN BARCELONA 800, DORDRECHT, 3317 DD	
GeoThermie Delft B.V.	25
LAARDERHOOGTWEG 18, AMSTERDAM, 1101 EA	
Aecorsis B.V.	23
LANGE KLEIWEG 8, RIJSWIJK (ZH), 2288 GK	
Ecowende Beheer B.V. [b]	60
Ecowende C.V. [b]	60

Company by country and address of incorporation	%
MUIDERSTRAAT 1, AMSTERDAM, 1011 PZ	
Caspi Meruerty Operating Company B.V. [b]	40
OOSTERHORN 36, FARMSUM, 9936 HD	
Zealyst C.V.	50
OUDE VIJFHUIZERWEG 6, LUCHTHAVEN SCHIPHOL, SCHIPHOL, 1118 LV	
Aircraft Fuel Supply B.V.	8
P.O. BOX 477, GRONINGEN, 9700 AL	
Gasterra B.V.	25
POLARIS AVENUE 81, P.O. BOX 2047, HOOFDDORP, 2132 JH	
Loyalty Management Netherlands B.V.	40
REACTORWEG 301, UNIT 1.3, UTRECHT, 3542 AD	
Paqell B.V.	50
SCHEPERSMAAT 2, ASSEN, 9405 TA	
Nederlandse Aardolie Maatschappij B.V.	50
STATIONSPLEIN 45, 4TH FLOOR, ROTTERDAM, 3013 AK	
Investancia Group B.V. [b]	35
Quadriz B.V	30
STEENOVEN 11-13, EINDHOVEN, 5626DK	
BlueAlp Holding B.V.	21
STRAWINSKYLAAN 1343, AMSTERDAM, 1077 XX	
Shell & AMG Recycling B.V [d]	50
STRAWINSKYLAAN 1725, AMSTERDAM, 1077 XX	
Karachaganak Petroleum Operating B.V. [b]	29
VLISSINGENSTRAAT, 45, IJMUIDEN, 1976EV	
CrossWind Beheer B.V. [b]	80
Crosswind C.V. [b] [d]	80
VONDELINGENWEG 601, VONDELINGENPLAAT, VONDELINGENPLAAT ROTTERDAM, 3196 KK	
Ellba B.V. [b]	50
Ellba C.V. [b] [d]	50
WEENA 762, 9E VERDIEPING, ROTTERDAM, 3014 DA	
Guara B.V.	30
Iara B.V.	4
Lapa Oil & Gas B.V.	30
Libra Oil & Gas B.V.	20
Tupi B.V.	23
WEENA 788, ROTTERDAM, 3014 DA	
Blauwwind II C.V. [b] [d]	20
Blauwwind Management II B.V. [b]	20
WIJNAND VAN ARNHEMWEG 8, OOSTERBEEK, 6862 XM	
iLNG B.V.	26
ZEELANDSESTRAAT 1, MILLINGEN AAN DE RIJN, 6566 DE	
SolarNow B.V.	47
NIGERIA	
CORPORATE OFFICE, INTELS ABA ROAD ESTATE, KM16 ABA EXPRESSWAY, PORT HARCOURT, 500211	
Nigeria LNG Limited	26
NLNG Shipping and Marine Services Limited	20
NORWAY	
BYFJORDPARKEN 15, STAVANGER, 4007	
Northern Lights JV DA [d]	33
KRISTIAN AUGUSTS GATE 13, OSLO, 164	
Aviation Fuelling Services Norway AS	50
MONGSTAD 71A, MONGSTAD, 5954	
Technology Centre Mongstad DA	22
NYHAMNA, AUKRA, 6480	
Ormen Lange Eiendom DA	18
SMÅLONANE 16, P.O BOX 351, STRAUME, 5343	
Enhanced Well Technologies Group AS	20

Company by country and address of incorporation	%
OMAN	
MINA ALFAHAL, MUTTRAH, MUSCAT GOVERNORATE P.O.BOX 74, MUSCAT, 116	
Green Energy Oman LLC	35
P.O. BOX 560, MINA AL FAHAL, MUSCAT, 116	
Oman LNG LLC	30
P.O. BOX 81, MINA AL FAHAL, MUSCAT, 113	
Petroleum Development Oman LLC	34
PAKISTAN	
OFFICE NO 8, LEVEL 3, GROUND FLOOR, SERENA BUSINESS COMPLEX, KHAYABAN-E-SUHRDWARDY, G-5/1, ISLAMABAD, 44000	
Pak Arab Pipeline Company Limited	20
PHILIPPINES	
2ND FLOOR, BONIFACIO TECHNOLOGY CENTER, 31ST STREET CORNER 2ND AVENUE, BONIFACIO GLOBAL CITY, TAGUIG, MANILA, 1635	
Bonifacio Gas Corporation	22
NDC BLDG., 116 TORDESILLAS ST., SALCEDO VILLAGE, MAKATI CITY, METRO MANILA, 1227	
Kamayan Realty Corporation	22
UNIT 1, 9TH FLOOR, ORE CENTRAL TOWER, 31ST STREET CORNER 9TH AVENUE, BONIFACIO GLOBAL CITY, TAGUIG CITY, FOURTH DISTRICT, FORT BONIFACIO	
Greenlight Renewables Holding Inc [b]	40
UNIT D 9TH FLOOR INOZA TOWER, 40TH STREET, NORTH BONIFACIO, BONIFACIO GLOBAL CITY, TAGUIG, MANILA, 1634	
Tabangao Realty, Inc.	40
QATAR	
1ST FLOOR, AL-MIRQAB TOWER, DOHA	
Marine LNG Solutions LLC [b]	50
P.O. BOX 22666, DOHA	
QatarEnergy LNG N(4)	30
QATARENERGY HQ TOWER 4, PODIUM LEVEL, BUILDING NO. 4, STREET NO. 951, DOHA, ZONE 63	
QatarEnergy LNG NFE(2)	25
QatarEnergy LNG NFS(2)	25
SAUDI ARABIA	
P.O. BOX 41467, RIYADH, 11521	
Al Jomaih and Shell Lubricating Oil Co.Ltd.	50
SINGAPORE	
1 HARBOURFRONT AVENUE, #08-01/08, KEPPEL BAY TOWER, SINGAPORE, 98632	
Infineum Singapore LLP	50
100 AYER MERBAU ROAD, SINGAPORE, 628277	
PCS Pte Ltd	26
100 PECK SEAH STREET, #10-18 PS100, SINGAPORE, 79333	
LRDTECH PTE LTD [f]	50
15, AIRLINE ROAD, SINGAPORE, 819828	
Changi Airport Fuel Hydrant Installation Pte. Ltd.	11
160 TUAS SOUTH AVENUE 5, SINGAPORE, 637364	
Singapore Lube Park Pte. Ltd. [b]	44
25 CHURCH STREET, 03-04 CAPITAL SQUARE THREE, SINGAPORE, 049482	
Cleantech Renewable Assets Pte Ltd	49
25 NORTH BRIDGE ROAD, #07-00, 25 NORTH BRIDGE, SINGAPORE, 179104	
Orb Energy Pte Ltd.	22
5 BENOI PLACE, #02, SINGAPORE, 629926	
Best Petrol and Diesel Supply Pte. Ltd. [d]	45
50 GUL ROAD, SINGAPORE, 629351	
Fuelng Pte. Ltd [b]	50
THE METROPOLIS TOWER 1, 9 NORTH BUONA VISTA DRIVE, #07-01, #07-01, SINGAPORE, 138588	
Connected Freight Pte. Ltd.	80
QPI and Shell Petrochemicals (Singapore) Pte Ltd	51

Company by country and address of incorporation	%
SOUTH AFRICA	
57 SLOANE STREET, TWICKENHAM BUILDING, THE CAMPUS, BRYANSTON, JOHANNESBURG, 2021	
Bituguard Southern Africa (Pty) Ltd	36
HONSHU ROAD, DURBAN, 4001	
Blendcor (Pty) Ltd. [b]	36
INANDA GREENS BUSINESS PARK, ST ANDREWS BUILDING 9, 1ST FLOOR, 54 WIERDA ROAD WEST SANDTON, GAUTENG, 2196	
Sekelo Oil Trading (Pty) Limited	43
REUNION, DURBAN, 4001	
Shell & BP South African Petroleum Refineries (Pty) Limited [b]	36
SPAIN	
CALLE SAN LUCAS, 6, SANTA CRUZ DE TENERIFE, 38003	
CMD Aeropuertos Canarios, S.L.	10
SWEDEN	
P.O. BOX 135, STOCKHOLM, 190 46	
A Flygbränslehantering Aktiebolag	25
P.O. BOX 2154, GOTHENBURG, 438 14	
Gothenburg Fuelling Company AB	33
P.O. BOX 85, STOCKHOLM-ARLANDA, 190 45	
Stockholm Fuelling Services AB	25
STURUP FLYGPLATS, P.O. BOX 22, MALMÖ, 230 32	
Malmö Fuelling Services AB	33
SWITZERLAND	
AUTOSTRADA A2 (DIREZIONE GOTTARDO), HOTEL BELLINZONA SUD, MONTE CARASSO, 6513	
Stazioni Autostradali Bellinzona SA	50
ROUTE DE PRÉ-BOIS 17, COINTRIN, 1216	
Saraco SA	20
ROUTE DE VERNIER 132, VERNIER, 1214	
SOGEP Société Genevoise des Pétroles SA	34
ZWÜSCHETEICH, RÜMLANG, 8153	
UBAG - Unterflurbetankungsanlage Flughafen Zürich AG	20
SYRIA	
CHAM CENTRE COMPLEX, MAYSALOON STREET, P.O. BOX 7660, DAMASCUS	
Al Furat Petroleum Company	20
DAMASCUS NEW SHAM WESTERN DUMMAR, ISLAND NO. 1 - PROPERTY 2299, P.O. BOX 7660, DAMASCUS	
Al Badiah Petroleum Company	22
TAIWAN (PROVINCE OF CHINA)	
NO. 2, TSO-NAN ROAD, NAN-TZE DISTRICT, P.O. BOX 25-30, KAOHSIUNG, 811	
CPC Shell Lubricants Co. Ltd	51
TANZANIA	
1ST FLOOR KILWA HOUSE, PLOT 369, TOURE DRIVE, OYSTER BAY, PO BOX 105833, DAR ES SALAAM	
Fahari Gas Marketing Company Limited	53
Ruvuma Pipeline Company Limited	53
1ST FLOOR, KILWA HOUSE, PLOT 369 TOURE DRIVE, OYSTERBAY, P.O BOX 105833, DAR ES SALAAM	
Mzalendo Gas Processing Company Limited	53
TRINIDAD AND TOBAGO	
1 INTERNATIONAL DRIVE, WESTMOORINGS	
The International School of Port of Spain Limited	25
5 ST. CLAIR AVENUE, PORT OF SPAIN	
Point Fortin LNG Exports Limited	81
PRINCES COURT, CORNER OF KEATE AND PEMBROKE STREETS, PORT OF SPAIN	
Atlantic LNG 2/3 Company of Trinidad and Tobago Unlimited	58
TUNISIA	
TANIT BUILDING, RUE DU LAC WINDERMERE, LES BERGES DU LAC, TUNISIA, 1053	
Amilcar Petroleum Operations S.A.	50

Company by country and address of incorporation	%
TÜRKIYE	
DILOVASI ORGANIZE SANAYI BOLGESI 1.KISIM, 1004 SOKAK NO:10, DILOVASI, KOCAELI	
Samsun Akaryakit VE Depolama A.S.	35
LIMAN MAHALLESI 60. SOKAK NO. 25, KONYAALTI, ANTALYA, 7070	
Cekisan Depolama Hizmetleri Ltd. Sti.	46
SULTANKOY MAHALLESI MALTEPE SOKAK NO:66, MARMARA EREGLISI, TEKIRDAG, 59750	
Marmara Depoculuk Hizmetleri A.S.	35
YAKUPLU MAH. GENCOSMAN CAD. NO:7, BEYLIKDUZU, ISTANBUL, 34524	
Ambarli Depolama Hizmetleri Ltd. Sti.	35
UK	
107 CHEAPSIDE, LONDON, EC2V 6DN	
Tausi Forests Limited [b]	50
50 LOTHIAN ROAD, FESTIVAL SQUARE, EDINBURGH, EH3 9WJ	
CAMPIONWIND LIMITED [b]	50
MARRAMWIND LIMITED [b]	50
5-7 ALEXANDRA ROAD, HEMEL HEMPSTEAD, HERTFORDSHIRE, HP2 5BS	
West London Pipeline and Storage Limited [b]	39
5-7 ALEXANDRA ROAD, SHELL-MEX HOUSE, HEMEL HEMPSTEAD, HERTFORDSHIRE, HP2 5BS	
British Pipeline Agency Limited	50
United Kingdom Oil Pipelines Limited [b]	48
Walton-Gatwick Pipeline Company Limited [b]	51
BUILDING 1204, SANDRINGHAM ROAD, HEATHROW AIRPORT, HOUNSLOW, MIDDLESEX, TW6 3SH	
Heathrow Airport Fuel Company Limited	14
BUILDING 1204, SANDRINGHAM ROAD, HEATHROW AIRPORT, HOUNSLOW, MIDDX, LONDON, TW6 3SH	
Heathrow Hydrant Operating Company Limited	10
LEVEL 39, ONE CANADA SQUARE, LONDON, E14 5AB	
Applied Blockchain Ltd [k]	22
MAIN ROAD, WATERSTON, MILFORD HAVEN, PEMBROKESHIRE, SA73 1DR	
Dragon LNG Group Limited [b]	50
Dragon LNG Limited [b]	50
ONE BARTHOLOMEW CLOSE, LONDON, EC1A 7BL	
Gatwick Airport Storage and Hydrant Company Limited	13
PO BOX 1, MILTON HILL, ABINGDON, OXFORDSHIRE, OX13 6BB	
Infineum International Limited	50
SHELL CENTRE, LONDON, SE1 7NA	
Consolidated Petroleum Company Limited (The)	50
Eastham Refinery Limited [b]	50
Manchester Airport Storage and Hydrant Company Limited	25
Private Oil Holdings Oman Limited [b]	85
SHELL MEX AND B.P. LIMITED	60
The Shell Transport and Trading Company Limited	50
UKRAINE	
M. HRINCHENKO, 4, KYIV, 03038	
Alliance Holding LLC [d]	97
Invest-Region LLC [d]	97
UNITED ARAB EMIRATES	
EMDAD AVIATION FUEL STORAGE FZCO, P.O. BOX 261781, JEBEL ALI, DUBAI	
Emdad Aviation Fuel Storage FZCO	33
P.O. BOX 665, ABU DHABI	
Abu Dhabi Gas Industries Limited (ADNOC Gas Processing)	15
URUGUAY	
LA CUMPARSITA, 1373 4TH FLOOR, MONTEVIDEO	
Gasoducto Cruz del Sur S.A.	40

Company by country and address of incorporation	%
USA	
1013 CENTRE ROAD SUITE 403B, WILMINGTON, DE 19805	
Statiq Mobility, Inc.	25
10346 BRECKSVILLE RD, BRECKSVILLE, OH 44141	
True North Energy LLC	50
15445 INNOVATION DRIVE, SAN DIEGO, 92128	
Mid-Atlantic Offshore Development, LLC [c]	50
1740 ED TEMPLE BLVD, NASHVILLE, TN 37208	
Tri Star Energy LLC	33
1900 EAST LINDEN AVENUE, LINDEN, NJ 07036	
Infineum USA Inc	50
2050 PLAINFIELD PIKE, CRANSTON, RI 02921	
Colbea Enterprises, LLC	50
2100 GENG ROAD, SUITE 210, SANTA CLARA, PALO ALTO, CA 94303	
D.Light Design Inc.	32
2237 HATCHER HILL ROAD, BACONTON, GA 31716	
Baconton Power LLC [c]	35
2900 NORTH LOOP WEST, SUITE 600, HOUSTON, TX 77092	
Innowatts Inc.	23
3450 E. COMMERCIAL CT., MERIDIAN, ID 83642	
Pacwest Energy, LLC.	50
3500 S DUPONT HWY, DOVER, 19901	
Carbon Informatics LLC [c]	49
4080 WEST JONATHAN MOORE PIKE, COLUMBUS, 47201	
RDK Ventures, LLC	50
41805 ALBRAE STREET, FREMONT, CA 94538	
Au Energy, LLC	50
930 WHITMORE DRIVE, ROCKWALL, 75087	
Shell & Whitmore Reliability Solutions, LLC [c]	50
BECHTEL ENTERPRISES, 12011 SUNSET HILLS ROAD, RESTON, VA 20190	
Maple Power Holdings LLC [b]	68
C/O THE CORPORATION TRUST COMPANY, 1209 ORANGE STREET, WILMINGTON, 19801	
Poseidon Oil Pipeline Company, LLC	36
CORPORATION SERVICE COMPANY, 251 LITTLE FALLS DRIVE, WILMINGTON, 19808	
Atlantic Shores Offshore Wind, LLC [c]	50
Bengal Pipeline Company LLC	58
Colonial Pipeline Company	16
MADISON FIELDS CLASS B MEMBER, LLC [c]	50
Madison Fields Solar Project, LLC [c]	25
MADISON FIELDS TAX EQUITY HOLDCO, LLC	25
Quantico Energy Solutions, Inc.	28
Vision Bioenergy Oilseeds LLC [b]	66
West Shore Pipe Line Company	19
CORPORATION SERVICE COMPANY, 2711 CENTERVILLE ROAD, SUITE 400, WILMINGTON, 19808	
Infineum USA L.P. [f]	50
CT CORPORATION SYSTEM, 330 N. BRAND BLVD., SUITE 700, GLENDALE, 91203-2336	
Cabazon Wind Partners, LLC [c]	50
R&F SERVICE CORP, 920 N. KING STREET, FLOOR 2, WILMINGTON, DE 19801	
Atlantic 1 Holdings LLC [c]	51
Atlantic 2/3 Holdings LLC [c]	58
Atlantic 4 Holdings LLC [c]	51

Company by country and address of incorporation	%
USA continued	
THE CORPORATION TRUST COMPANY, 1209 ORANGE STREET, CORPORATION TRUST CENTER, WILMINGTON, 19801	
Amberjack Pipeline Company LLC [c]	63
Brazos Wind Ventures, LLC [b] [c]	40
Caesar Oil Pipeline Company, LLC [c]	15
Endymion Oil Pipeline Company, LLC [c]	10
Mars Oil Pipeline Company LLC [c]	72
Mattox Pipeline Company LLC [c]	79
Proteus Oil Pipeline Company, LLC [c]	10
Rock River I, LLC [c]	50
Ship Shoal Pipeline Company LLC [c]	43
Three Wind Holdings, LLC [c]	50
URSA Oil Pipeline Company LLC [c]	45
Whitewater Hill Wind Partners, LLC [c]	50
THE CORPORATION TRUST COMPANY, CORPORATION TRUST CENTER, 1209 ORANGE STREET, WILMINGTON, 19801	
Brazos Wind Holdings, LLC [b] [c]	40
Crestwood Permian Basin LLC	50
Diamond Energy, LLC [c]	50
Explorer Pipeline Company	39
LOCAP LLC	41
LOOP LLC	46
Oceanus Pipeline Company, LLC [c]	50
Silicon Ranch Corporation	35
THE CORPORATION TRUST COMPANY, CORPORATION TRUST CENTER, 1209 ORANGE STREET, WILMINGTON, DE 19801	
Peru LNG Company LLC [c]	20
THE CORPORATION TRUST COMPANY, CORPORATION TRUST CENTRE, 1209 ORANGE STREET, WILMINGTON, 19801	
Blue Tide Environmental LLC [f]	49
96 CLEMATIS AVE, WALTHAM, MA 02453	
Cumulus Digital Systems, Inc.	20
VENEZUELA	
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BLOCK 1, TENDESEKA OFFICE PARK, CNR SAMORA MACHEL AVENUE, RENFREW ROAD, HARARE	
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Financial calendar in 2025

The Annual General Meeting will be held on May 20, 2025.

	2024 Fourth quarter [A]	2025 First quarter [B]	2025 Second quarter [B]	2025 Third quarter [B]
Results announcements	January 30	May 2	July 31	October 30
Interim dividend timetable				
Announcement date	January 30 [C]	May 2	July 31	October 30
Ex-dividend date for SHEL ADS	February 14	May 16	August 15	November 14
Ex-dividend date for SHEL ordinary shares	February 13	May 15	August 14	November 13
Record date	February 14	May 16	August 15	November 14
Closing of currency election date [D]	February 28	June 2	September 1	November 28
Pounds sterling and euro equivalents announcement date	March 10	June 9	September 8	December 8
Payment date	March 24	June 23	September 22	December 18

[A] In respect of the financial year ended December 31, 2024.
[B] In respect of the financial year ended December 31, 2025.
[C] The Directors do not propose to recommend any further distribution in respect of 2024.
[D] A different currency election date may apply to shareholders holding shares in a securities account with a bank or financial institution ultimately through Euroclear Nederland. This may also apply to other shareholders who do not hold their shares either directly on the Register of Members or in the corporate sponsored nominee arrangement. Shareholders can contact their broker, financial intermediary, bank or financial institution for the election deadline that applies.

Contact Us

The best way to get in touch is via the "Contact us" section of the Shell website shell.com/investors. From here questions are properly directed to the Shell team that can assist. In addition, we have introduced an automated question response tool to assist with the most popular questions that we receive and reviewed and updated the "Shareholder FAQ" section of our website to provide the most time efficient information for our investors.

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About this Report

The Shell plc Annual Report (this "Report") serves as the Annual Report and Accounts in accordance with UK requirements for the year ended December 31, 2024, for Shell plc (the "Company") and its subsidiaries (collectively referred to as "Shell"). This Report presents the Consolidated Financial Statements of Shell (pages 241-312) and the Parent Company Financial Statements of Shell (pages 333-339). Except for these Financial Statements, the numbers presented throughout this Report may not sum precisely to the totals provided and percentages may not precisely reflect the absolute figures due to rounding.

The Consolidated Financial Statements of Shell plc and its subsidiaries contained in this Report have been prepared in accordance with international accounting standards in conformity with the requirements of the UK Companies Act 2006 (the "Act"), and therefore in accordance with UK-adopted international accounting standards. As applied to Shell, there are no material differences from International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB); therefore, the Consolidated Financial Statements have been prepared in accordance with IFRS as issued by the IASB. IFRS as defined above includes interpretations issued by the IFRS Interpretations Committee. Financial reporting terms used in this Report are in accordance with IFRS.

This Report contains certain forward-looking non-GAAP measures such as cash capital expenditure and divestments. We are unable to provide a reconciliation of these forward-looking non-GAAP measures to the most comparable GAAP financial measures because certain information needed to reconcile those non-GAAP measures to the most comparable GAAP financial measures is dependent on future events some of which are outside the control of Shell, such as oil and gas prices, interest rates and exchange rates. Moreover, estimating such GAAP measures with the required precision necessary to provide a meaningful reconciliation is extremely difficult and could not be accomplished without unreasonable effort. Non-GAAP measures in respect of future periods which cannot be reconciled to the most comparable GAAP financial measure are calculated in a manner which is consistent with the accounting policies applied in Shell plc's consolidated financial statements.

The companies in which Shell plc directly and indirectly owns investments are separate legal entities. In this report "Shell", "Shell Group" and "Group" are sometimes used for convenience to reference Shell plc and its subsidiaries in general. Likewise, the words "we", "us" and "our" are also used to refer to Shell plc and its subsidiaries in general or to those who work for them. These terms are also used where no useful purpose is served by identifying the particular entity or entities. "Subsidiaries", "Shell subsidiaries" and "Shell companies" as used in this report refer to entities over which Shell plc either directly or indirectly has control. The terms "joint venture", "joint operations", "joint arrangements", and "associates" may also be used to refer to a commercial arrangement in which Shell has a direct or indirect ownership interest with one or more parties. The term "Shell interest" is used for convenience to indicate the direct and/or indirect ownership interest held by Shell in an entity or unincorporated joint arrangement, after exclusion of all third-party interest.

As used in this Report, "Accountable" is intended to mean: required or expected to justify actions or decisions. The Accountable person does not necessarily implement the action or decision (implementation is usually carried out by the person who is Responsible) but must organise the implementation and verify that the action has been carried out as required. This includes obtaining requisite assurance from Shell companies that the framework is operating effectively. "Responsible" is intended to mean: required or expected to implement actions or decisions. Each Shell company and Shell-operated venture is responsible for its operational performance and compliance with the Shell General Business Principles, Code of Conduct, Statement on Risk Management and Risk Manual, and Standards and Manuals. This includes responsibility for the operationalisation and implementation of Shell Group strategies and policies.

Shell's "net carbon intensity" referred to in this Report includes Shell's carbon emissions from the production of our energy products, our suppliers' carbon emissions in supplying energy for that production, and our customers' carbon emissions associated with their use of the energy products we sell. Shell's NCI also includes the emissions associated with the production and use of energy products produced by others which Shell purchases for resale. Shell only controls its own emissions. The use of the terms Shell's "net carbon intensity" or NCI is for convenience only and not intended to suggest these emissions are those of Shell plc or its subsidiaries.

Shell's operating plan and outlook are forecasted for a three year period and 10-year period, respectively, and are updated every year. They reflect the current economic environment and what we can reasonably expect to see over the next three and ten years. Accordingly, the outlook reflects our Scope 1, Scope 2 and NCI targets over the next 10 years. However, Shell's operating plan and outlook cannot reflect our 2050 net-zero emissions target, as this target is outside our planning period. Such future operating plans and outlooks could include changes to our portfolio, efficiency improvements and the use of carbon capture and storage and carbon credits. In the future, as society moves towards net-zero emissions, we expect Shell's operating plans and outlooks to reflect this movement. However, if society is not net zero in 2050, as of today, there would be significant risk that Shell may not meet this target.

Except where indicated, the figures shown in the tables in this Report are in respect of subsidiaries only, without deduction of any non-controlling interest. However, the term "Shell share" is used for convenience to refer to the volumes of hydrocarbons that are produced, processed or sold through subsidiaries, joint ventures and associates. All of a subsidiary's production, processing or sales volumes (including the share of joint operations) are included in the Shell share, even if Shell owns less than 100% of the subsidiary. In the case of joint ventures and associates, however, Shell-share figures are limited only to Shell's entitlement. In all cases, royalty payments in kind are deducted from the Shell share.

Except where indicated, the figures shown in this Report are stated in US dollars. As used herein all references to "dollars" or "$" are to the US currency.

This Report contains forward-looking statements concerning the financial condition, results of operations and businesses of Shell. All statements other than statements of historical fact are, or may be deemed to be, forward-looking statements. Forward-looking statements are statements of future expectations that are based on management's current expectations and assumptions and involve known and unknown risks and uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied in these statements. Forward-looking statements include, among other things, statements concerning the potential exposure of Shell to market risks and statements expressing management's expectations, beliefs, estimates, forecasts, projections and assumptions. These forward-looking statements are identified by their use of terms and phrases such as "aim", "ambition", "anticipate", "aspire", "aspiration", "believe", "commit", "commitment", "could", "desire", "estimate", "expect", "goals", "intend", "may", "milestones", "objectives", "outlook", "plan", "probably", "project", "risks", "schedule", "seek", "should", "target", "vision", "will", "would" and similar terms and phrases. There are a number of factors that could affect the future operations of Shell and could cause those results to differ materially from those expressed in the forward-looking statements included in this Report, including (without limitation): (a) price fluctuations in crude oil and natural gas; (b) changes in demand for Shell's products; (c) currency fluctuations; (d) drilling and production results; (e) reserves estimates; (f) loss of market share and industry competition; (g) environmental and physical risks, including climate change; (h) risks associated with the identification of suitable potential acquisition properties and targets, and successful negotiation and completion of such transactions; (i) the risk of doing business in developing countries and countries subject to international sanctions; (j) legislative, judicial, fiscal and regulatory developments including tariffs and regulatory measures addressing climate change; (k) economic and financial market conditions in various countries and regions; (l) political risks, including the risks of expropriation and renegotiation of the terms of contracts with governmental entities, delays or advancements in the approval of projects and delays in the reimbursement for shared costs; (m) risks associated with the impact of pandemics, regional conflicts, such as the Russia-Ukraine war and the conflict in the Middle East, and a significant cyber security, data privacy or IT incident; (n) the pace of the energy transition; and (o) changes in trading conditions. Also see "Risk management and risk factors" on pages 134-144 for additional risks and further discussion. No assurance is provided that future dividend payments will match or exceed previous dividend payments. All forward-looking statements contained in this Report are expressly qualified in their entirety by the cautionary statements contained or referred to in this section. Readers should not place undue reliance on forward-looking statements. Each forward-looking statement speaks only as of the date of this Report. Neither the Company nor any of its subsidiaries undertake any obligation to publicly update or revise any forward-looking statement as a result of new information, future events or other information. In light of these risks, results could differ materially from those stated, implied or inferred from the forward-looking statements contained in this Report.

Past performance cannot be relied on as a guide to future performance.

This Report contains references to Shell's website, the Shell Energy Transition Strategy 2024 Report, Tax Contribution Report, Shell Climate and Energy Transition Lobbying Report and our report on Payments to Governments. These references are for the readers' convenience only. Shell is not incorporating by reference into this Report any information posted on shell.com or in the Shell Energy Transition Strategy 2024 Report, Tax Contribution Report, Shell Climate and Energy Transition Lobbying Report or our report on Payments to Governments. The content of any other websites referred to in this Report does not form part of this Report.

With effect from January 29, 2022, Shell's A shares and B shares were assimilated into a single line of ordinary shares. Shell's A and B American Depositary Shares (ADSs) were assimilated into a single line of ADSs on the same date. This Report continues to refer to A shares, B shares, A ADSs and B ADSs when describing the position prior to January 29, 2022.

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