Shell plc

Sustainability Report 2023

#PoweringProgress

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Read the Shell Sustainability Report online at www.shell.com/sustainabilityreport or download our app:

Digital
The Sustainability Report is published in an online version at www.shell.com/sustainabilityreport. The online version includes additional information, such as an interactive GRI index to enhance usability for the reader. In the event of any discrepancy between the online and hardcopy versions, the information contained in the online report prevails. This hardcopy version is provided for the reader's convenience only.

Design and production:
Friend www.friendstudio.com

Implementation: nexxar www.nexxar.com

Sustainability at Shell

Welcome to the Shell Sustainability Report, which covers our social, safety and environmental performance in 2023.

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Letter from the CEO

Wael Sawan
Chief Executive Officer

In 2023, we made good progress in our goal of creating more value with less emissions.

We achieved our second-best financial results ever, while reducing our carbon emissions on the path towards becoming a net-zero emissions energy business by 2050. By year's end, we had achieved more than 60% of our target of halving carbon emissions in our own operations by 2030, compared with 2016. We also met our short-term target to reduce the net carbon intensity of the energy products we sell, with a 6.3% reduction against our target of 6–8% compared with 2016.

We work hard to minimise risk throughout our operations. I am deeply saddened that four of our contractor colleagues in Shell-operated ventures died in 2023: one in Malaysia, one in the Philippines and two in an attack on a convoy in Nigeria. Four government security agents also lost their lives in the attack. A fifth contractor colleague, who was injured in a fire in Nigeria in 2023, passed away in February 2024. We are determined to learn from these incidents and take steps to prevent something similar from happening again.

Delivering oil and gas with less emissions

As we continue to deliver the oil and gas that the global energy system relies on, we are reducing the carbon emitted in its production.

We expect liquefied natural gas (LNG) will play a critical role in the energy transition. LNG produces fewer greenhouse gas emissions than coal when used to generate electricity and fewer emissions than petrol or diesel when used as transport fuel. It also offers flexibility to electricity grids as wind and solar power grow.

In 2023, we helped two additional countries reduce their reliance on coal-fired power generation by delivering the first cargoes of LNG to new import terminals in the Philippines and Vietnam.

We are also working to reduce the emissions intensity of our LNG projects. LNG Canada (Shell interest 40%, non-operated), which is expected to start production later this decade, is designed to have the lowest carbon intensity of any large liquefaction facility currently operating anywhere in the world – about 60% lower than the average facility today and 35% lower than the best-performing facility.

Reducing emissions of methane is one of the most effective near-term actions to keep the goal of the Paris Agreement within reach. We aim to keep methane emissions below 0.2% at Shell-operated oil and gas assets each year, and I am pleased to say we achieved this again in 2023. Our target is to achieve near-zero methane emissions by the end of this decade.

Despite the progress we have made, there is much work still to be done and lessons to be learned, whether from safety incidents or in how to develop new projects that minimise our impact on the environment.

Our latest offshore oil and gas facility in the US Gulf of Mexico, Vito (Shell interest 63.1%), is a compelling example of how we work to embed sustainability and emissions reduction into the life cycle of our projects, from design to decommissioning. Vito, which started production in 2023, is one-third of the size of its original design. It is expected to reduce CO_2 emissions by about 80% over its operating life. We are now repeating the same concept in other new offshore projects.

Investing in the energy transition

We are also investing in low-carbon and non-energy products that reduce emissions for our customers.

In 2023, we invested $5.6 billion in low-carbon energy solutions, including biofuels, hydrogen, charging for electric vehicles and renewable power generation; and $2.3 billion on non-energy products such as chemicals, lubricants and convenience retail, which do not produce emissions when our customers use them. This amounted to around one-third of our total capital spending in 2023.

We also invested 49% of our research and development budget in 2023 on decarbonisation projects. These include testing a new solid sorbent technology to remove CO_2 emissions from the air, and an electrolyser to produce hydrogen from renewable energy at higher efficiency and lower cost than is currently possible.

Respecting nature

Along with generating shareholder value and achieving net-zero emissions, our Powering Progress strategy is about powering lives and respecting nature.

We have already achieved some of the commitments made under our respecting nature goal, which we set in 2021. These include reducing fresh-water consumption by 15% compared with 2018 in areas where water supplies are stressed, which we reached ahead of the target date of 2025.

We are working hard to help develop a viable circular economy for plastics, despite a global lack of feedstock made from plastic waste, slow technology development and regulatory uncertainty. In 2023, we signed several strategic co-operation agreements with partners to increase supplies of feedstock and enable its long-term storage.

We also continued to remove single-use plastics like cups and cutlery from our Shell-owned service stations and to find new ways to reduce, recycle or reuse plastics in our packaging for lubricants and car-care products.

Powering lives

Energy is essential to human life. Yet too many people in the world have no or, at best, unreliable access to electricity. Even more lack clean cooking facilities. For many years, we have worked to bring reliable and affordable electricity and improved cooking conditions to those who do not have them. We invest in businesses that supply energy access in emerging markets and we provide funds and expertise to social investment programmes.

Shell has pledged $200 million as part of a broader initiative to help people in sub-Saharan Africa, India and South-east Asia get access to energy in the near and medium term.

We are making progress in our ambition to become one of the most diverse and inclusive organisations in the world. For instance, in 2023, 32% of our senior leadership positions were held by women, which is close to our target of 35% by 2025. As of January 1, 2024, for the first time in our history we have more women than men on our Executive Committee.

We continue to support the UN Global Compact's corporate governance principles on human rights, environmental protection, anti-corruption and better labour practices. We respect human rights in our business and work hard to ensure that our joint-venture partners and supply chains do the same.

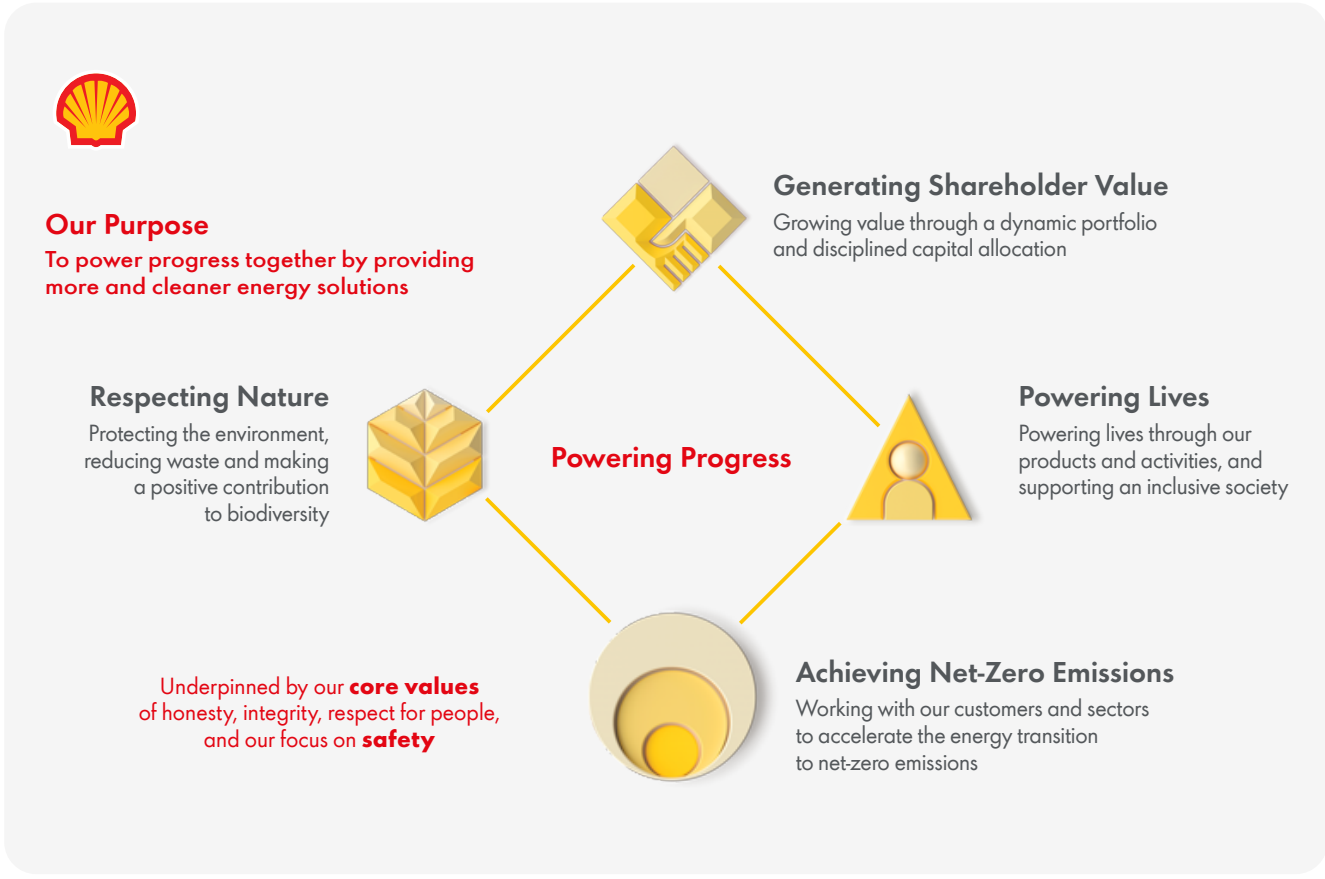
We recognise the importance of a just transition to a net-zero emissions energy system in which the costs and benefits are distributed fairly. In the UK, for example, we are supporting three Energy Transition Skills Hubs that plan to help 15,000 people into jobs with a focus on the energy transition by 2035.

This is our 27th Shell Sustainability Report, a voluntary publication we have issued each year since 1997. As of 2024, our sustainability reporting will be integrated with the Shell Annual Report and Accounts. I welcome this step, which brings all our reporting into one document. We will continue to be transparent in our reporting and demonstrate that sustainability is embedded in our way of doing business.

Wael Sawan
Chief Executive Officer

More in this report Sustainability at Shell | Our journey to net zero | Our approach to respecting nature | Providing access to energy
More on Shell websites Our approach | Shell at a glance

Powering Progress



More in this report Letter from the CEO | Sustainability at Shell | Sustainability governance | Performance overview
More on Shell websites Our approach | Shell at a glance

Our approach to sustainability

Sustainability at Shell

Powering Progress sets out our strategy to become a net-zero emissions energy business by 2050, generating value for our shareholders, our customers and wider society. As we move forward on this journey, we will power lives and respect nature while holding fast to our core values of honesty, integrity and respect for people.

It is a strategy that integrates sustainability with creating more value with less emissions through performance, discipline and simplification.

Our commitment to contribute to sustainable development has been part of the Shell General Business Principles since 1997. These principles, together with the Shell Code of Conduct, apply to the way we do business and to our conduct with the communities where we operate. We have worked to embed this sustainability commitment into our strategy, our business processes and our decision-making.

Read more about what sustainability means at Shell at www.shell.com/sustainability-at-shell. Discover more about our strategy at www.shell.com/powering-progress.

UN Sustainable Development Goals

We strive to play our part in helping governments and societies achieve the UN's 17 Sustainable Development Goals (SDGs). The goals were one of the considerations in the development of our Powering Progress strategy. We believe the actions we take as part of our strategy can help directly contribute to 13 of the SDGs, while indirectly contributing to others.

Information on how we are contributing to these SDGs can be found throughout this report and at www.shell.com/sdgs.

More in this report Our journey to net zero | Our Powering Progress targets | Sustainability governance | Performance overview | Respecting human rights
More on Shell websites Our approach | Commitments, policies and standards | UN Sustainable Development Goals | Shell's approach to human rights (pdf)

Sustainability governance

We have comprehensive governance structures throughout Shell, along with performance standards and other controls. These include the Shell General Business Principles, our Code of Conduct and our Health, Safety, Security, Environment and Social Performance (HSSE & SP) Control Framework [A]. They influence the decisions made and actions taken across Shell.

[A] We are transitioning from the HSSE & SP Control Framework to our new Safety, Environment and Asset Management (SEAM) Standards as part of the Shell Performance Framework. The SEAM Standards will come into effect in mid-2024.

The Sustainability Committee (SUSCO), previously known as the Safety, Environment and Sustainability Committee, is one of the four standing committees of the Board of Directors of Shell plc. SUSCO assists the Board of Directors in fulfilling its responsibilities by reviewing the progress of Shell with respect to sustainability and the non-financial elements of Shell's Powering Progress strategy.

The Committee meets regularly to review and discuss a wide range of topics, including progress on Shell's Powering Progress goals of net-zero emissions, respecting nature, and powering lives. The Committee also reviews wider matters of public concern such as biodiversity, plastic waste and methane emissions.

In 2023, the Committee visited Shell's Energy and Chemicals Park Rheinland in Germany to review energy transition projects and safety and to meet staff and a senior government representative. Two Committee members also visited the Olympus offshore platform in the US Gulf of Mexico to review safety and sustainability performance.

The Board of Directors has primary oversight of the delivery of Shell's energy transition strategy and is supported by SUSCO, the Audit and Risk Committee (ARC) and the Remuneration Committee (REMCO).

Read more about SUSCO and how Shell manages sustainability at www.shell.com/sustainability/our-approach/governance and in our 2023 Annual Report and Accounts (Annual Report).

More in this report Our journey to net zero | Our approach to safety | Energy transition | Our approach to respecting nature
More on Shell websites Our approach | Board of Directors | Sustainability governance

Performance overview

Performance in 2023

2.6
2022: 2.0
serious injuries and fatalities per 100 million working hours. See Our approach to safety

74 gCO_2e/MJ
2022: 76 gCO_2e/MJ
net carbon intensity, which measures the life-cycle emissions intensity of the portfolio of energy products sold. See Delivering our climate targets

31%
2022: 30%
reduction in our total combined Scope 1 and 2 absolute greenhouse gas emissions compared with 2016, the base year [A]. See Delivering our climate targets

63
2022: 66
operational process safety Tier 1 and 2 events. See Process safety

9.7 billion
2022: 9.5 billion
litres of biofuels went into Shell's petrol and diesel worldwide [B]. See Biofuels

54,000
2022: 27,000
public electric vehicle charge points operated by Shell. See Electric vehicle charging

2,134
2022: 1,790
reports to the Shell Global Helpline, where people can report potential breaches of the Code of Conduct. See Ethical leadership

70
2022: 55
operational spills of more than 100 kilograms. See Spills

0.1 million
2022: 0.1 million
tonnes routine flaring from upstream operations. See Flaring

25,000
2022: 24,000
suppliers around the world. See Supply chain

32%
2022: 30.4%
women in senior leadership positions. See Diversity, equity and inclusion

$128 million
2022: $182 million
spent on voluntary social investment. See Social investment

83%
2022: 83%
spent on goods and services from suppliers based in the same country of operation. See Local content

295,000
2022: 266,000
formal training days for employees and joint-venture partners. See Diversity, equity and inclusion

120,000
2022: 78,300
students participated in NXplorers, our flagship STEM programme. See STEM education

[A] From assets and activities under our operational control.
[B] Including around 3.4 billion litres through our Raízen joint venture.

More in this report Our journey to net zero | Letter from the CEO | Our Powering Progress targets
More on Shell websites Our approach | Our approach to sustainability | Results and reporting

Remuneration

Our remuneration is designed to support us in achieving our net-zero emissions target. Our Long-term Incentive Plan (LTIP), Performance Share Plan (PSP) and annual bonus scorecard all include performance indicators that help us to assess our success in delivering our energy transition strategy.

In 2023, Shell's journey in the energy transition continued to be part of the annual bonus scorecard (15% weighting), which applied to all Group employees. We assessed our performance using three metrics:

- selling lower-carbon products: the proportion of adjusted earnings in our Marketing segment coming from lower-carbon energy products (on a life-cycle basis), as well as non-energy products and convenience retail;
- reducing our operational emissions: greenhouse gas abatement projects that reduce our Scope 1 and 2 operational emissions; and
- partnering to decarbonise: progress in rolling out electric vehicle charge points.

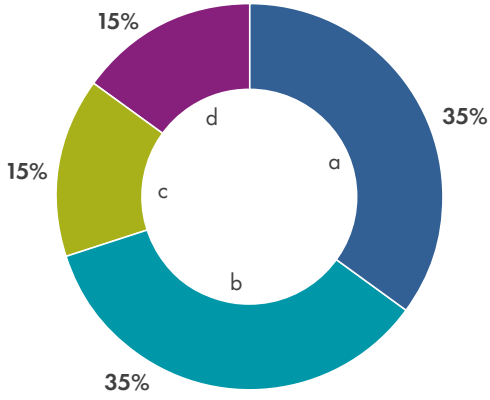
The annual bonus scorecard continued to include a customer excellence measure (10% weighting), highlighting the importance of building stronger customer relationships in the energy transition. The scorecard also continued to include safety performance (15% weighting). For a complete breakdown of the scorecard see the graphic below.

In 2023, a proportion of the Long-term Incentive Plan, applicable to Executive Directors and around 150 other senior executives, was linked to Shell's journey in the energy transition (25% weighting), including a target to reduce the net carbon intensity of our energy products by 9–13% (compared with a 2016 baseline) by 2025. The same energy transition performance condition was also part of the 2023 Performance Share Plan awards (12.5% weighting), applicable to around 16,500 employees.

Read more about remuneration in our 2023 Annual Report.

Annual bonus scorecard architecture 2023

Percentage



a **Cash flow from operations** (weighted 35%)

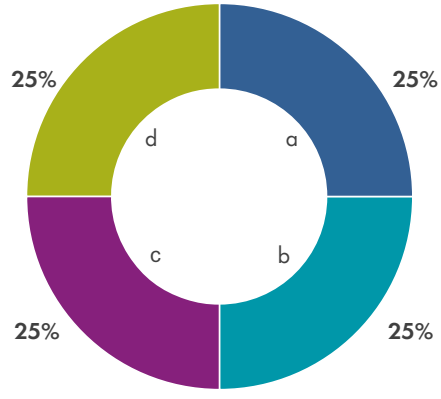
b **Operational excellence** (Asset management excellence 15%, project delivery excellence 10%, customer excellence 10%)

c **Shell's journey in the energy transition** (Selling lower-carbon products 5%, reducing operational emissions 5%, partnering to decarbonise 5%)

d **Safety** (Serious injury and fatality frequency 7.5%, Tier 1 and 2 process safety 7.5%)

Long-term Incentive Plan performance conditions 2023

Percentage



a **Relative cash generation (cash flow from operations/average capital employed)** (weighted 25%)

b **Relative total shareholder returns** (25%)

c **Absolute organic free cash flow** (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).

More in this report Our journey to net zero | Energy transition | Delivering our climate targets
More on Shell websites Our approach | Leadership | Corporate governance

About this report

Selecting the topics

The 2023 Sustainability Report, published on March 19, 2024, is our 27th such report. It details our social, safety and environmental performance in 2023. As of 2024, our sustainability reporting will be integrated with the Shell Annual Report and Accounts.

Each year we use a structured process to select the report's content. We engage with various groups and individuals to understand specific concerns about our business and its impact, particularly relating to the environment and society. We consider the views of others such as non-governmental organisations, customers, the media, academics, investors and employees.

Input from our Report Review Panel of independent experts helps to ensure that coverage is relevant, balanced, fair and complete.

Read more about our topic selection process at www.shell.com/sustainability/transparency-and-sustainability-reporting/sustainability-reports.

Reporting guidelines

Our reporting is informed by several voluntary reporting standards and guidelines including those developed by Ipieca, the global oil and gas industry association for advancing environmental and social performance across the energy transition, and the Global Reporting Initiative (GRI) (see the GRI content index and www.shell.com/voluntary-reporting-standards-and-esg-ratings for full details).

As a member of the World Business Council for Sustainable Development, we support the organisation's updated criteria for membership, which include requirements for corporate transparency.

We are also a founding member and a signatory of the United Nations Global Compact. We continue to support its corporate governance principles on human rights, environmental protection, anti-corruption and better labour practices.

The recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) guide our reporting in our Annual Report. Our climate-related financial disclosures are consistent with all of the TCFD recommendations and recommended disclosures. We recognise the value that the recommendations bring.

As a third-country issuer with securities listed on an EU-regulated market, Shell plc expects to come within the scope of the EU Corporate Sustainability Reporting Directive in 2024, subject to relevant legislative processes. We also continue to monitor the development of emerging frameworks such as the Taskforce on Nature-related Financial Disclosures.

More detailed information about how we report is available at www.shell.com/sustainability/transparency-and-sustainability-reporting.

More in this report Sustainability at Shell | About our data | Our standards and policies | GRI content index
More on Shell websites Our approach | Voluntary reporting standards and ESG ratings | External voluntary codes

Report Review Panel

We use an external review panel to strengthen our sustainability reporting. The panel helps evaluate and improve the quality and credibility of our Sustainability Report. The 2023 Report Review Panel comprised five sustainability and corporate reporting experts:

- Hilary Parsons, UK, formerly Head of Creating Shared Value Engagement, Nestlé (Chair of the Report Review Panel);
- Vanessa Zimmerman, Australia, Chief Executive Officer, Pillar Two;
- Renard Siew, Malaysia, Adviser on Climate Change, Centre for Governance and Political Studies;
- Elizabeth White, USA, Principal Strategist and Global Head Sustainability and Development Impact, Sector Economics and Impact Measurement, International Finance Corporation, part of the World Bank Group; and
- Maria Pontes, UK, Director of Programmes and Partnerships, Earthwatch Europe.

The panel provided input into our 2023 topic selection process. Panel members reviewed the report, discussed Shell's reporting and spoke to relevant Shell employees before preparing their statement. The panel's mandate focused on the quality of Shell's reporting, including credibility, completeness and responsiveness. The panel is not accountable for reviewing the data in the report or material on Shell.com outside the bounds of this report. Panel members are offered an honorarium for their input.

Find out more about the panel at www.shell.com/sustainability-report-review-panel.

Report Review Panel recommendations

"As in previous years, Shell has given the panel the opportunity to review two drafts of the 2023 Sustainability Report and to provide written and verbal feedback which has been considered by Shell when producing the final version of the report. In 2021, Shell altered its approach to sustainability reporting in order to highlight significant data with further explanations and background provided through links to Shell.com. It should be noted that the panel has no remit in connection with the website and has not reviewed any of the information provided therein.

Overall, the panel has welcomed the conciseness of the Sustainability Report and has been keen to ensure that sufficient explanation of the context of the data is included in order to help readers better understand the information without having to resort immediately to clicking on website links. The panel has therefore stressed the importance of including transparent, qualitative information along with the figures, and we are pleased that this has been recognised by Shell who has continued to make progress in this area although more remains to be done. The use of graphics to get across progress on strategic priorities is a useful tool in this respect and we welcome that Shell continues to adopt this approach.

Highlighting key differences between the current report and that of the previous year is also useful such as changes to the most important topics, reasons for achieving or not achieving key targets or significant external actions such as the signing of the Oil and Gas Decarbonization Charter launched at COP28. However, there is also an opportunity to better demonstrate the connections between the different topics. For example, making further links between the human rights section and other sustainability topics could aid readers to understand Shell's overall approach and to highlight that this approach is also guided by respecting people.

We were also pleased to see additional detail on the actions taken in relation to contributing to a just transition. The respecting nature section has also been more elaborated than previously, although more transparency about the challenges involved would be useful. We were also pleased to see additional detail on salient human rights issues and Shell's broader approach to managing human rights risks.

To further improve transparency, the panel recommends that Shell provides additional information and data on the following:

- Ensuring that key terms and concepts used throughout the report are clearly defined.
- The human rights risks associated with the transition to renewable solutions (including solar) and in connection with biodiversity, and actions taken to manage these risks.
- How Shell has used its salient human rights issues assessment to prioritise its human rights risk management actions, including more detail on how these issues guide work under its four focus areas.
- How Shell tracks the effectiveness of its sustainability performance, including comparisons with other sectors.
- Clearer information on the key challenges faced by Shell in achieving its respecting nature targets.
- The environmental challenges associated with wind and solar activities.
- More detail on the nature of stakeholder engagements."

More in this report Sustainability at Shell | About our data | Our standards and policies | GRI content index
More on Shell websites Our approach | Voluntary reporting standards and ESG ratings | External voluntary codes

Living by our values

Powering Progress is underpinned by our core values of honesty, integrity and respect for people, and our focus on safety and sustainability.

11	Business ethics and transparency
14	Safety

Business ethics and transparency

Ethical leadership

Powering Progress is underpinned by our core values of honesty, integrity and respect for people, and our focus on safety. This includes our commitment to doing business in an ethical and transparent way.

Our core values of honesty, integrity and respect for people underpin our work with employees, customers, investors, contractors, suppliers, non-governmental organisations, the communities where we operate and others.

Shell General Business Principles

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 integrity, care and respect for people. As part of these principles, we commit to contribute to sustainable development, 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.

Code of Conduct

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. The Code of Conduct covers safety, anti-bribery and corruption, fair competition, human rights and other important areas.

Shell employees, contractors and third parties can report any potential breaches of the Code of Conduct confidentially through several channels, including anonymously through the Shell Global Helpline, which is operated by an independent provider. We maintain a stringent no retaliation policy to protect any person making an allegation in good faith.

Anti-bribery and corruption

Shell has rules on anti-bribery and corruption in its Code of Conduct and Ethics and Compliance Manual. Contractors and consultants are also required to act consistently with our Code of Conduct when working on our behalf.

Shell has around 25,000 suppliers worldwide. We offer free training in anti-bribery and anti-corruption practices to selected suppliers and contractors. This training is available in 14 languages. In 2023, we offered training to 131 third-party organisations in 16 countries.

Read more at www.shell.com/sustainability/transparency-and-sustainability-reporting/transparency-and-anti-corruption.

In 2023 there were:

2,134
reports to the Shell Global Helpline

254
confirmed breaches of the Code of Conduct

278
employees or contractor staff subject to disciplinary action

66
people dismissed

Shell Performance Framework

The Shell Performance Framework is the overarching framework adopted by Shell plc to deliver on its strategy. The framework applies to all Shell companies and provides a consistent approach for how each company in Shell operates. It was introduced in July 2023 and replaces the Shell Control Framework.

Safety, Environment and Asset Management (SEAM) Standards

Our standards and governance structure are currently defined in our Health, Safety, Security, Environment and Social Performance (HSSE & SP) Control Framework and supporting guidance documents.

We are transitioning to our new Safety, Environment and Asset Management (SEAM) Standards, which come into effect from July 1, 2024. The standards are part of the Shell Performance Framework. Implementation of migration to the SEAM Standards, pursuant to guidance on expectations and process, will continue throughout 2024 into 2025.

Protecting personal data

Shell respects the privacy of individuals and recognises that personal data belong to the individual.

We maintain a data privacy programme, a comprehensive governance structure and established reporting lines to ensure consistent levels of data protection across the Group. Our staff and contractors receive clear guidance and training on the importance of managing data privacy risks.

Whenever we acquire a company, we work to ensure they follow our privacy compliance framework and information management standards. Some of our newly acquired companies are not yet in full compliance with our Binding Corporate Rules on data privacy. 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.

In 2023, we notified a number of data privacy regulators of personal data breaches.

Read more about Shell data privacy rules in our 2023 Annual Report and at www.shell.com/privacy.

Cyber security

Digitalisation is a key success factor in Shell's Powering Progress strategy. However, a breach of IT systems or loss of data could cause significant harm to Shell in the form of loss of productivity, loss of intellectual property, regulatory fines or reputational damage,

Shell operates a multi-level defence strategy underpinned by the Shell Performance Framework. Our advanced cyber defence capabilities help us prevent, detect, respond to and evolve as cyber security and data privacy risks become more complex.

Shell employees and contract staff are required to complete mandatory training courses and participate in regular awareness campaigns aimed at protecting us against cyber threats.

More in this report Letter from the CEO | Working with our suppliers | Collaborations and stakeholder engagement | Tax transparency
More on Shell websites Our approach | Code of Ethics | Our values

Collaborations and stakeholder engagement

Shell continues to value and recognise the importance of engagement and co-operation with its stakeholders.

We work with governments, non-governmental organisations (NGOs), coalitions, industry bodies, academic institutions, national oil and gas companies and other businesses. We do this in compliance with antitrust rules and regulations. These collaborations include individual conversations, working together on a project or areas of advocacy, or sponsoring a particular group or event. These efforts help us to learn, share best practice, achieve specific objectives, set future goals and build trust with our stakeholders.

The Chair, certain Board committees and Non-executive Directors traditionally visit a number of Shell operations and overseas offices. The visits are designed to provide them with first-hand insights into portfolio positions and opportunities to engage directly with stakeholders including employees, partners, communities and NGOs.

Our broader businesses regularly engage with stakeholders throughout the year and in the build-up to or during many Shell projects or activities.

Read more about our efforts to understand and engage with our stakeholders in our 2023 Annual Report.

Learn more about our collaborations and stakeholder engagement at www.shell.com/sustainability/our-approach/working-in-partnership.

More in this report Managing our impact on people | Letter from the CEO | Biodiversity and ecosystems | Social investment
More on Shell websites Our approach | External voluntary codes | Human rights

Political engagement

Shell engages with governments, regulators and policymakers to help shape comprehensive policy, legislation and regulation. We advocate our positions on matters which affect us, our employees, customers, shareholders or local communities, in accordance with our values and the Shell General Business Principles. Our internal governance approach to political engagement is summarised in our statement on corporate political engagement.

In the European Union (EU) and the USA, we report expenditure associated with our lobbying activities, which includes estimated percentages of industry association costs, in line with the requirements and guidelines set out in the EU Transparency Register and the US Lobbying Disclosure Act respectively. There are different rules for which costs should be reported in these two submissions and we are required to comply with the appropriate requirements for each jurisdiction. These submissions are publicly available:

- In the EU, Shell's reported estimated annual costs related to activities covered by the register were €4,000,000 to €4,500,000 in 2023 [A].
- In the USA, Shell's reported expenses related to lobbying practices were $7,080,000 in 2023.

[A] In our 2022 Sustainability Report, we stated that Shell's reported estimated annual costs related to activities covered by the register were €5,500,000 to €5,999,999 in 2022. However, we subsequently discovered an error in calculating this amount. The amount should have been reported as €4,500,000 to €4,999,999.

In 2023, we continued to advocate our policy positions on climate and the energy transition. In the EU, Shell advocated policies to enable commercial investments in the energy transition, notably the creation of demand for low-carbon solutions. We supported the Fit for 55 package, including binding targets for the use of renewable hydrogen and advanced biofuels. We supported policies to accelerate the electrification of road transport and frameworks that help the business case for carbon abatement and removal.

In the USA, we advocated the full implementation of the Infrastructure Investment and Jobs Act of 2021 and the Inflation Reduction Act of 2022. We also advocated simplifying and streamlining the permitting process for new energy and infrastructure projects, which is crucial for the delivery of secure and affordable energy supplies in the USA.

In March 2024, we updated our global climate and energy transition policy positions, which we believe support the energy transition and the Paris Agreement as we transform our business. We plan to publish our next Climate and Energy Transition Lobbying Report in April 2024.

Further information on our approach to political engagement, our lobbying expenditure, our policy positions, advocacy and industry association memberships is provided on our website www.shell.com/advocacy.

More in this report Letter from the CEO | Tax transparency
More on Shell websites Our approach | Corporate political engagement transparency statement and lobbying spend | Payments to governments

Tax transparency

Our tax strategy is designed to support Powering Progress through our commitment to transparency, compliance and open dialogue with our stakeholders, from governments to civil society. Our strategy and actions reflect our values and principles.

Tax revenues enable governments to pay for public services, such as education, health care and transport. In 2023, our taxes paid and collected amounted to $67 billion: we paid $14 billion in corporate income taxes and $6 billion in government royalties, and collected $47 billion in excise duties, sales taxes and similar levies on our fuel and other products on behalf of governments [A].

[A] Non-GAAP financial measure. See Reconciliation of non-GAAP financial measures where non-GAAP reconciliation is provided..

We also made other payments to governments, including $11 billion in production entitlements, $2 billion in fees and $47 million in bonuses. Such payments to governments are derived from our Report on Payments to Governments for the year 2023. This report is prepared in accordance with the UK's Reports on Payments to Governments Regulations 2014 (amended December 2015).

Shell publishes a Tax Contribution Report annually which sets out the corporate income tax that Shell companies paid in the 97 countries and locations where we have a taxable presence. Our latest Tax Contribution Report includes a breakdown of our total tax contribution in 48 countries where we have key business activities, an increase from 21 in the previous year.

We regularly engage with policymakers to support the development of tax rules and regulations based on sound tax policy principles. 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.

In 2023, we published a set of principles which we believe governments should follow when shaping their fiscal policies to advance the energy transition. These include encouraging investment in low-carbon energy, while maintaining energy security and meeting the economic and social needs of their countries and communities.

Read our latest Tax Contribution Report and Payments to Governments report.

More in this report Political engagement | Social investment
More on Shell websites Our approach | Shell's Tax Contribution Report | Payments to governments

Safety

Our approach to safety

Powering Progress is underpinned by our core values of honesty, integrity and respect for people, and our focus on safety.

Safety, along with our core values, underpins our Powering Progress strategy. We aim to do no harm to people and to have no leaks across our operations. We call this our Goal Zero ambition.

We seek to improve safety by focusing on the three areas where the safety risks associated with our activities are highest: personal, process and transport. 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.

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, for example:

- executing frontline work: build an environment of trust and learning, strengthen team leaders' coaching and engagement skills, and embed pre-start work preparations such as those developed by the International Association of Oil & Gas Producers (IOGP);
- applying acknowledged industry safety tools: in 2022, we moved from the Shell Life-Saving Rules to industry-wide Life-Saving Rules so that Shell staff and contractors are working on the same basis to manage risks; and
- using technology and digital tools to reduce exposure, identify conditions that may lead to serious incidents and fatalities, and enhance learning.

It is also about capturing more insights by, for example:

- using metrics focused on serious injuries and fatalities (SIF) and the lessons that we can derive from high-potential incidents and events that could have led to SIF incidents;
- seeking to capture underlying causes and systemic patterns through incident investigations; and
- aiming to embed lessons learned from the above points in training and instructions for work preparation and execution.

In 2023, we integrated this safety approach into the plans of our facilities, projects and functions. Many of our non-operated ventures and companies that are operated by Shell, but not integrated into our systems, have also chosen to implement elements of our refreshed approach.

Read more about our approach to safety at www.shell.com/safety.

More in this report Preparing for emergencies | Letter from the CEO | Respecting human rights
More on Shell websites Our approach | Safety | HSSE materials for contractors

Personal safety

We continue to strengthen the safety culture and leadership among our employees and contractor staff. This aligns with our focus on caring for people.

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 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 2023, the focus was on "failing safely", which means we recognise that people make mistakes and that our barriers need to be capable of managing the impact of those mistakes to prevent harm.

In 2023, we achieved safe construction, commissioning and start-up of a floating production unit (FPU) for the Shell-operated Vito field (Shell interest 63.1%) in the US Gulf of Mexico. The fabrication of another FPU, Whale (Shell interest 60%) in the Gulf of Mexico, was completed in 2023 after 12 million hours without fatality or serious injury.

Working with others

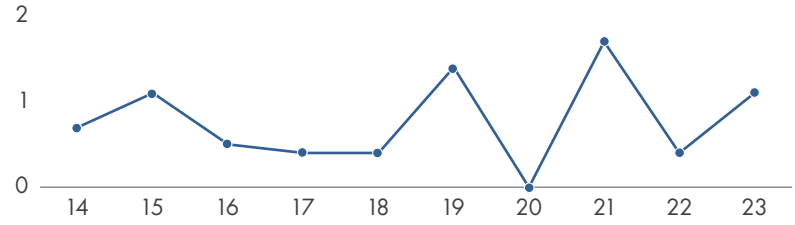
We work with contractors and suppliers to help them understand our safety requirements. We strive to help improve the energy industry's safety performance by sharing safety standards and experience with other operators, joint-venture partners, contractors and professional organisations.

In 2023, senior executives from Shell's 23 major global contractors joined Shell executives in Norway for our annual Contractor Safety Leadership workshop. Focus areas of discussion were worker welfare and human rights, mental health, and technology solutions for safer work at the frontline.

Also in 2023, leadership teams from 25 Shell joint ventures and companies newly acquired by Shell met in the Netherlands to discuss topics such as worker welfare and industry standards, and the importance of alignment on safety.

Fatal accident rate

Fatal accident rate (FAR)
Number per 100 million hours



Serious injuries and fatalities

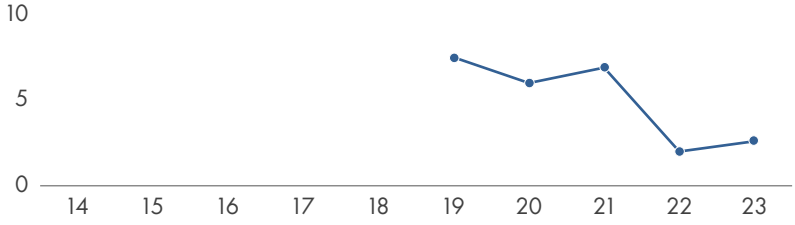
We are deeply saddened to report that four of our contractor colleagues in Shell-operated ventures lost their lives in 2023 in the course of their work for Shell. An additional contractor colleague who was injured in 2023, succumbed to their injuries in February 2024. One contractor colleague in Malaysia died during scaffolding work, and one in the Philippines died after a fall from height. Two contractor colleagues in Nigeria died in a security incident, along with four government security agents. In Nigeria, another contractor colleague injured in a tugboat fire incident later passed away.

These losses have a deep and far-reaching impact on families, friends and colleagues. We are determined to learn from these incidents and take steps to prevent something similar from happening again. We continue to work closely with our contractors to help build a strong safety culture at the frontline.

The number of serious injuries and fatalities increased to 12 (five fatalities [A] and seven serious injury cases) in 2023 from nine in 2022.

[A] Fatalities in 2023 include one contractor colleague who was injured in a 2023 incident and unfortunately succumbed to their injuries in February 2024.

Serious injury and fatality frequency (SIF-F) [A] [B]
Number per 100 million hours



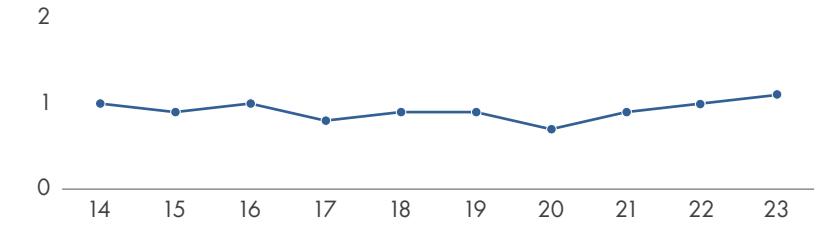
[A] Defined as a serious work-related injury or illness, including those that resulted in fatality or a life-altering event. Life-altering event is defined as a long-term or permanent injury or illness with significant impact on daily activities. Examples of SIF include, but are not limited to, permanent total disability, amputation of a body part (full or partial), reduced bodily mobility (full or partial), third-degree burns, and impaired vision, hearing, sense of taste or smell.
[B] Data before 2019 are not available. The number of SIF cases for 2019 and 2020 reflects the best estimate. Combined workforce SIF frequency for 2019–20 was adjusted to account for some uncertainty in the number of SIF cases.

Since 2021, we measure the number of serious injuries and fatalities per 100 million working hours, as well as the total recordable case frequency, which measures injuries per million working hours. The serious injury, illness and fatality frequency (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 2023, the SIF-F was 2.6 injuries and illnesses per 100 million working hours, compared with 2.0 in 2022.

Total recordable case frequency

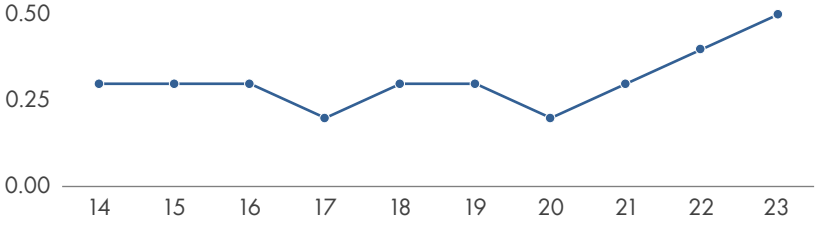
Total recordable case frequency (TRCF)
Number per million hours



In 2023, the number of injuries per million working hours – the total recordable case frequency – was 1.1, an increase from 1.0 in 2022. The increase was primarily due to incidents in new acquisitions and growth in the Downstream, Renewables and Energy Solutions business.

Lost time injury frequency

Lost time injury frequency (LTIF)
Number per million hours



The level of injuries that led to time off work in 2023 increased to 0.5 cases per million hours compared with 0.4 in 2022. The increase was primarily due to incidents in new acquisitions and growth in the Downstream, Renewables and Energy Solutions business.

Read more about our approach to personal safety at www.shell.com/sustainability/safety/personal-safety.

Learn more about how Shell's 2023 safety performance impacted the Executive Directors' remuneration in the Directors' Remuneration Report in our 2023 Annual Report.

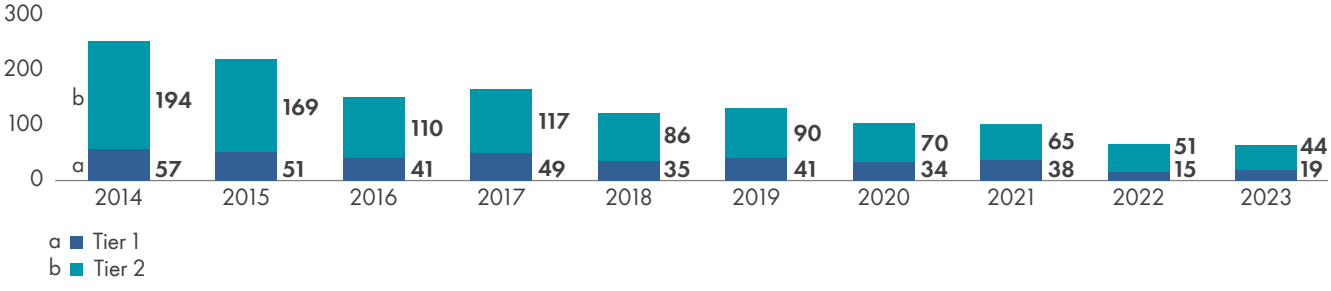
More in this report Preparing for emergencies | Letter from the CEO
More on Shell websites Our approach | Driver safety | Community road safety | Life-saving rules

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 Asset Integrity and Process Safety Management principles guide our actions from project design and construction throughout the life cycle of facilities to keep sites, employees and contractors safe.

In line with industry standards, we measure and report process safety incidents according to significance.

Tier 1+2 operational process safety events, excluding sabotage [A]



[A] Process safety events are classified according to guidance from the International Association of Oil & Gas Producers and the American Petroleum Institute. In 2023, there were two Tier 1 sabotage-related events. The classification of sabotage-related process safety events is made on the best-endeavours basis.

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 2023 decreased slightly compared with 2022. There were 63 events reported during the year compared with 66 in 2022. This sets a new record for Shell, confirming our top-tier performance in the industry. The decrease was in our Downstream, Renewables and Energy Solutions business, due to improvements in work processes and using data to enhance safety planning.

Process safety events related to sabotage and theft in Nigeria are recorded separately. In Nigeria, there were two in 2023, compared with three in 2022 (see Spill response and prevention in Nigeria).

Read more about process safety at www.shell.com/process-safety.

More in this report Our approach to safety | Letter from the CEO
More on Shell websites Our approach | Safety | Life-saving rules | HSSE materials for contractors

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 assets to test their emergency response preparedness every three years. In 2023, we held four large-scale emergency response exercises at certain assets we operate in Trinidad and Tobago, Singapore, the UK and the USA. We also supported one large-scale emergency response exercise at an asset in Argentina, owned and operated by Raízen, one of our joint ventures (Shell interest 44%).

We have set up 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 2023, the councils' annual conferences covered a variety of topics such as business continuity, cyber security, performance under stress, battery storage emergencies, use of drones and competence development.

Spills

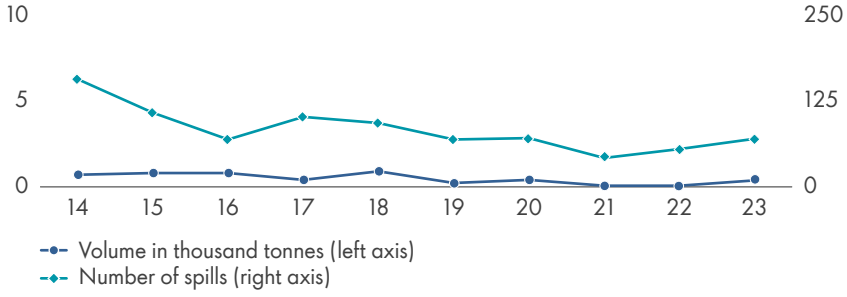
We design, operate and maintain our facilities with the intention of avoiding spills. To minimise the risk of spills, Shell has routine programmes in place to help reduce failures and maintain the reliability of facilities and pipelines.

However, spills still occur for reasons such as operational failure, accidents or unusual corrosion.

In 2023, there were 70 operational spills of more than 100 kilograms compared with 55 in 2022. The volume of operational spills of oil and oil products in 2023 was 0.37 thousand tonnes, compared with 0.06 thousand tonnes in 2022.

In 2023, there were no Level 1 or Level 2 well-control incidents at Shell-operated ventures.

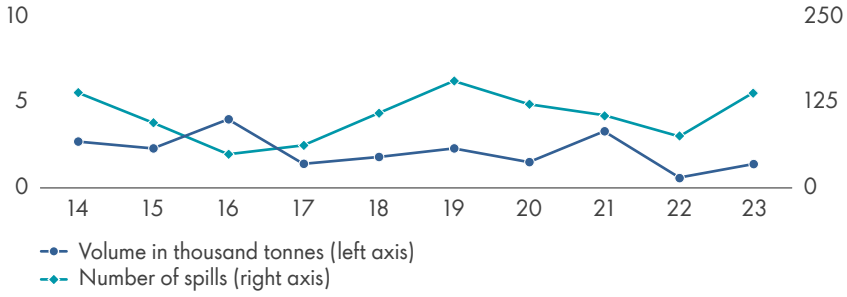
Spills – operational [A]



[A] All spill volumes and numbers are for hydrocarbon spills of more than 100 kilograms into the environment (land or water). We have updated some of our historical figures following a review of the data.

In 2023, 140 spills were caused by sabotage, compared with 75 in 2022. Of those, 139 were in Nigeria and 1 in Australia. The volume of spills also increased to 1.4 thousand tonnes from 0.6 thousand tonnes in 2022.

Spills – sabotage [A] [B]



[A] All spill volumes and numbers are for hydrocarbon spills of more than 100 kilograms into the environment (land or water). We have updated some of our historical figures following a review of the data.
[B] All sabotage- and theft-related spills occurred in Nigeria except in 2015 (0.005 thousand tonnes), 2016 (0.001 thousand tonnes) and 2023 (0.0002 thousand tonnes).

Read about our emergency response procedures at www.shell.com/process-safety.

More in this report Spill response and prevention in Nigeria | Our approach to safety | Letter from the CEO
More on Shell websites Our approach | Our approach to safety | Process safety

Spill response and prevention in Nigeria

In the Niger Delta, over the last 13 years, the total number of operational hydrocarbon spills and the volume of oil spilled from them into the environment have been significantly reduced.

Most oil spills in the Niger Delta continue to be caused by crude oil theft, the sabotage of oil and gas production facilities, and illegal oil refining, including the distribution of illegally refined products.

In 2023, the Shell Petroleum Development Company of Nigeria Limited (SPDC), as operator of the SPDC joint venture (JV, Shell interest 30%) [A], reported nine operational spill incidents of more than 100 kilograms of crude oil, compared with the 10 reported in 2022. The volume of around 0.005 thousand tonnes was less than the 0.01 thousand tonnes recorded in 2022.

[A] Unless otherwise stated, all activities reported for or as relating to SPDC in this section should be understood as SPDC acting as the operator of the SPDC JV. SPDC, as the corporate entity, owns 30% of the JV.

Spills caused by sabotage

In 2023, about 94% of the oil spills of more than 100 kilograms from the SPDC-operated facilities were caused by the illegal activities of third parties. In 2023, the volume of crude oil spills of more than 100 kilograms caused by sabotage was around 1.4 thousand tonnes (139 incidents), compared with around 0.6 thousand tonnes (75 incidents) in 2022.

The increased number of incidents in 2023 can be directly attributed to an increase in third-party illegal connections to pipelines, with 119 incidents reported in 2023 compared with 56 in 2022. SPDC continues to work with the government security agencies to maintain surveillance and address illegal activities of third parties, primarily along the SPDC JV pipeline and its operational areas.

Spill response and prevention in Nigeria

Spills in 2023	Clean-up	Prevention
Number of operational spills: 9 Volume of operational spills: 5 tonnes	Average days before joint investigation commences: 2.74 days in 2023, improved from six days in 2016	Illegal theft points removed: 675 in 2023, 2,065 in total since 2016
Number of spills caused by third-party interference and other illegal activities: 139, 94% of the total	Average days to complete the recovery of surface oil: around one week in 2023, improved from 13 days in 2016	Steel cages installed to protect wellheads: 374 as of December 31, 2023
Volume of spills caused by third-party interference and other illegal activities: less than 1,400 tonnes, 99.7% of the total volume	Number of sites remediated: 194 in 2023, 970 in total since 2016	Breaches of steel cages in 2023: 38 out of 508 attempts

Prevention

In 2023, SPDC 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.

There are daily surveillance flights over the most vulnerable segments of the pipeline network to identify any new spills or illegal activity. SPDC has introduced anti-theft protection mechanisms for key infrastructure, including steel cages to protect wellheads.

In 2023, 60 new steel cages were installed around critical infrastructure nodes, bringing the total number of cages installed to 374. This includes 52 cages that have been upgraded with CCTV and 28 with satellite communications. In 2023, out of 508 registered attempts to breach the cages, 38 were successful.

SPDC has an ongoing programme to appraise, maintain and replace key sections of pipelines and flow lines in order to reduce the number of operational spills. In 2023, around 54 kilometres of pipelines and flow lines were replaced.

Response and remediation

Regardless of the cause of a spill, SPDC cleans up and remediates areas affected by spills originating from its facilities. In 2023, the time that SPDC needed to complete the recovery of free-phase oil – oil that forms a separate layer and is not mixed with water or soil – remained at around one week.

In January 2024, Shell announced the sale of SPDC. Completion of the transaction is subject to regulatory approvals and other conditions. To learn more visit: www.shell.com/media/news-and-media-releases/2024/shell-agrees-to-sell-nigerian-onshore-subsidiary-spdc/spdc-sale

For more detailed information on spills in Nigeria in 2023 and our response see www.shell.com.ng/oil-spills. Read more on spill prevention and response in Nigeria at www.shell.com.ng/environment.

More in this report Contributing to Nigeria's economy | Preparing for emergencies | Our approach to safety
More on Shell websites Our approach | Nigeria Briefing Notes | Shell Nigeria | Oil spill data

Transport safety

Transporting large numbers of people, products and equipment by road, rail, sea and air 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 2023, Shell employees and contractors drove around 464 million kilometres on work-related business. Commercial road transport accounts for most of the kilometres, but only two of this year's 18 severe motor vehicle incidents (SMVIs) happened during commercial road transport. Nine SMVIs occurred during business travel, two during commercial transport activities and the remaining seven during on-site operations. There were no road transport-related fatalities in 2023.

In 2023, about 30,600 Shell employees and contractors were identified as driving on work-related business, and therefore required defensive driver training (DDT). In 2023, we launched an internal virtual DDT course to align better with industry partners' approaches.

By the end of 2023, we had installed active fatigue and distraction detection (AFDD) devices in around 3,380 vehicles operated by Shell or our contractors in countries where road transport risks are highest. In 2024, we will continue to install AFDD devices in vehicles operated by Shell, including both contractor and Shell-owned vehicles. The AFDD devices have recorded and intervened in at least 130 high-risk fatigue events, preventing what could have resulted in motor vehicle incidents if the devices had not alerted the drivers.

Safety at sea

At the end of 2023, we managed and operated a global fleet of 25 tankers, liquefied natural gas carriers and the world's first liquefied hydrogen carrier, the Suiso Frontier. We are one of the world's largest charterers of oil and gas vessels. We work with our 500 global maritime partners through our Maritime Partners in Safety Programme to improve the safety performance of the shipping industry.

In 2023, we held 20 workshops on applying cause and effect analysis in incident investigations. Cause and effect analysis helps to identify the likely causes of an incident so that similar occurrences can be prevented in the future. The last serious injury or fatality on a Shell-operated vessel was in 2015.

Air safety

In 2023, for Shell-operated ventures, our owned and contracted aircraft flew more than 38,000 hours and safely carried Shell employees and contractors on more than 281,000 passenger journeys to destinations across the world. In addition, remotely piloted aircraft safely completed almost 3,400 flight hours on surveys, inspections, emissions surveillance, and security and incident response.

More in this report Process safety | Our approach to safety | Letter from the CEO
More on Shell websites Our approach | Transport safety | Community road safety

Product stewardship

We work to ensure our products – such as fuels, lubricants and chemicals – are safe throughout their life cycle. In 2023, we carried out more than 900 risk assessments for products and additives. We also published and distributed around 170,000 safety data sheets to customers in about 180 countries.

Read more about product stewardship at www.shell.com/product-stewardship.

More in this report Resource use and circular economy | Driving innovation | Letter from the CEO
More on Shell websites Our approach | Shell Product Catalogue | Safety

Achieving net-zero emissions

We aim to be a net-zero emissions energy business by 2050 and work with our customers and across sectors to help accelerate the energy transition.

22	Energy transition
27	Managing greenhouse gas emissions
34	Providing lower-carbon electricity
37	Fuelling mobility
39	Driving innovation

Energy transition

Our journey to net zero

Net-zero emissions by 2050 (Scope 1, 2 and 3) [A]

Emissions from our own operations (Scope 1 and 2):

- Halve Scope 1 and 2 emissions by 2030 [B] (2016 baseline).
- Eliminate routine flaring from Upstream operations by 2025 [C].
- Maintain methane emissions intensity below 0.2% and achieve near-zero methane emissions by 2030 [D].

Emissions from products we sell (Scope 3):

- Reduce the net carbon intensity (NCI) of the energy products we sell by 9–12% by 2024, 9–13% by 2025, 15–20% by 2030, and 100% by 2050 (2016 baseline).
- Ambition to reduce customer emissions from the use of our oil products by 15–20% by 2030 (Scope 3, Category 11) (2021 baseline) [E].

[A] Our targets for 2050 are based on mitigation activities undertaken by both Shell and our customers.
[B] Operational control boundary. Our 2030 and 2050 targets are on a net basis (i.e. inclusive of any future use of carbon credits).
[C] Subject to completion of the sale of SPDC.
[D] Covers all oil and gas assets for which Shell is the operator. Measured separately for assets with marketed gas (gas, LNG and GTL available for sale) and assets without marketed gas (oil and gas assets where gas is reinjected). 2023 actual performance relates to assets with marketed gas.
[E] 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 recognises that greenhouse gas emissions from our operations as well as the use of hydrocarbon-based energy contribute to climate change. 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 preindustrial levels". 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.

Our target is to become a net-zero emissions energy business by 2050. To help us get there, we have set short-, medium- and long-term targets to reduce the carbon intensity of the energy products we sell, measured using our net carbon intensity metric. We believe these targets are aligned with a 1.5°C pathway derived from scenarios developed for the IPCC's Sixth Assessment (AR6) Report.

Becoming a net-zero emissions energy business means reducing emissions from our operations and from the fuels and other energy products, such as electricity, that we sell to our customers. It also means capturing and storing any remaining emissions using technology, protecting natural carbon sinks and providing high-quality carbon credits to our customers to compensate for hard-to-abate emissions.

We follow the Greenhouse Gas Protocol's Corporate Accounting and Reporting Standard, which defines three scopes of greenhouse gas emissions:

- Scope 1: direct greenhouse gas emissions from sources under Shell's operational control;
- Scope 2: indirect greenhouse gas emissions from the generation of purchased energy consumed by Shell assets under operational control; and
- Scope 3: other indirect greenhouse gas emissions, including emissions associated with the use of energy products sold by Shell.

Scope 3 emissions from the energy products we sell account for most of the total emissions we report.

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 2016 levels on a net basis. By the end of 2023, we had achieved more than 60% of our target (see Delivering our climate targets).

We have also established remuneration policies which are designed to support our short-term climate targets (see Remuneration).

In March 2024, we published our Energy Transition Strategy 2024, in which we take stock of our progress since launching our Powering Progress strategy in 2021 and look forward as we transform Shell into a net-zero emissions energy business by 2050.

We are also working with governments on their climate policies to help establish regulatory frameworks that will enable society to reach the goals of the Paris Agreement. In March 2024, we updated our global climate and energy transition policy positions. By advocating these positions as we transform our business, we believe we are supporting both the energy transition and the Paris Agreement.

We signed up to the Oil and Gas Decarbonization Charter announced at COP28 in 2023, within which organisations have pledged to achieve near-zero methane emissions by 2030 and zero routine flaring by no later than 2030. We also intend to contribute to the World Bank's Global Flaring and Methane Reduction Fund, which was launched at COP28.

Read more about our climate targets at www.shell.com/energy-and-innovation/the-energy-future/what-is-shells-net-carbon-footprint-ambition/faq.html and in our 2023 Annual Report and Energy Transition Strategy 2024.

Supporting our customers

Emissions resulting from customer use of our energy products make up the largest percentage of Shell's carbon 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. This is reflected in our strategy to develop a portfolio that seeks to:

- develop low- and zero-carbon alternatives to traditional fuels, including biofuels, hydrogen and other low- and zero-carbon gases;
- provide more electricity to customers, while also driving a shift to renewable electricity;
- work with customers across different sectors to help them decarbonise their use of energy, for example by substituting the use of coal with liquefied natural gas; and
- address any remaining emissions from conventional fuels with solutions such as carbon capture and storage and carbon credits.

Assessing climate-related risks and opportunities

Shell has identified climate change and the associated energy transition as a material risk based on societal concerns and developments related to climate change and managing greenhouse gas emissions. The risks could potentially result in changes to the demand for our products, supply chains and markets, and in further changes to the regulatory environment in which we operate.

Overall, we mitigate climate-related risks through our Powering Progress strategy to deliver more value with less emissions. With our focus on performance, discipline and simplification, we believe that we are in a better position to achieve both our financial and climate-related targets and ambitions. This approach includes:

- reducing the greenhouse gas emissions from our operations (Scope 1 and 2) by improving our energy efficiency, deploying renewable electricity, managing flaring and reducing methane emissions from our assets and projects;
- growing our world-leading liquefied natural gas (LNG) business while decarbonising our LNG portfolio in two main ways: by growing our portfolio with a lower carbon intensity, and by focusing on reducing methane emissions;
- managing our Upstream portfolio by cutting emissions from oil and gas production, while keeping oil production stable. Oil production is increasingly from our deep-water business which, through innovation, produces higher-margin and lower-carbon barrels; and
- transforming our businesses in Downstream and Renewables and Energy Solutions to offer low-carbon solutions while reducing sales of oil products.

In addition, we are working to effectively adapt our assets and activities to enhance our resilience to the physical risks related to climate change where needed.

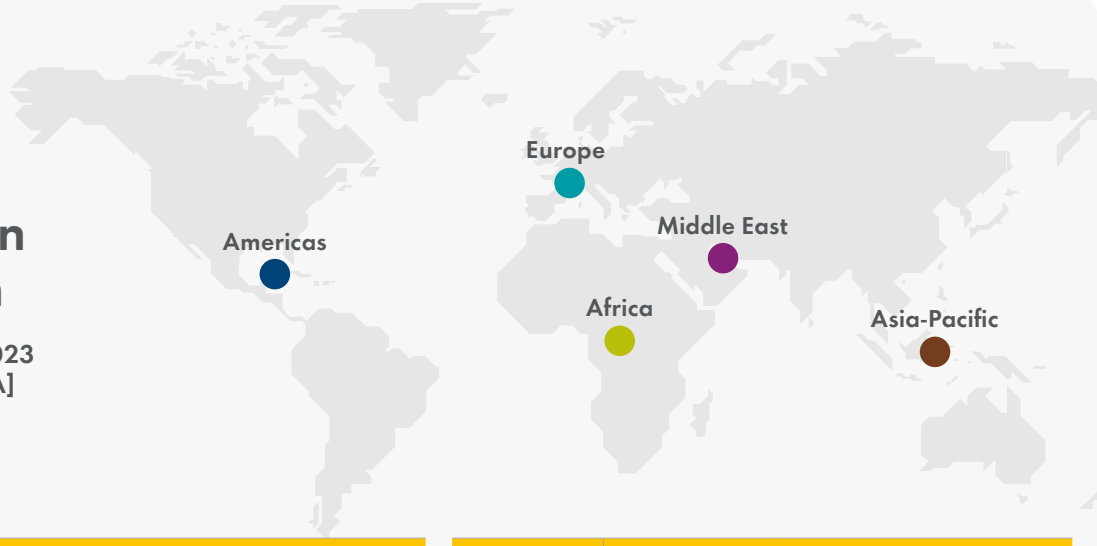
The transition to a low-carbon economy also brings significant opportunities. As the global energy mix changes, our current infrastructure, know-how and global footprint put us in an ideal position to service the changing energy demands of the market. As we work to deliver more value with less emissions, we are focusing on natural gas, particularly LNG; continuing the transformation of select integrated refineries into energy and chemicals parks; biofuels; and developing low-carbon products and solutions for our customers.

Read more about Shell's material climate-related risks and opportunities in our 2023 Annual Report.

More in this report Our Powering Progress targets | Managing greenhouse gas emissions | Letter from the CEO | Performance overview
More on Shell websites Our approach | Our climate target | Our climate target: frequently asked questions

Energy transition in action

A selection of 2023 developments [A]



	Country	Development
Leading Integrated Gas	Canada	LNG Canada T1-2
	Indonesia	Masela PSC/Abadi divestment
	Nigeria	NLNG T7
	Qatar	QatarEnergy LNG NFE(2)
Advantaged Upstream	Brazil	Mero-2 start-up
		Mero-3
		Mero-4
	Malaysia	Marjoram/Rosmari
	United Kingdom	Pierce redevelopment
		Jackdaw
	USA	Aera Energy divestment
		Sparta FID
		Vito start-up
		Whale
	Malaysia	Baram Delta divestment
		Timi start-up
	Nigeria	Nigerian onshore (SPDC) divestment agreed

	Country	Development
Differentiated Downstream, Renewables and Energy Solutions	China	EV growth
	Denmark	Nature Energy acquisition
	Germany	FID to repurpose Energy and Chemicals Park Rheinland
		Shell home energy retail divestment
	India	Sprng Energy investment funnel
	Netherlands	CrossWind/HKN
		HEFA Biofuels Plant Rotterdam
		Holland Hydrogen I
		Ecowende/HKW
	Norway	Northern Lights JV (Phase 1)
	Pakistan	Shell Pakistan Limited divestment agreed
	Singapore	Aspired divestment of Energy and Chemicals Park Singapore
	United Kingdom	Shell home energy retail divestment
		Acorn CCS
		Three CCS licenses
	USA	Volta acquisition
		Savion investment funnel
		Renewable natural gas investments
		Atlantic Shores - Project 1

[A] These developments include acquisitions, investments, projects, divestments and withdrawals, at various stages of maturity and with different levels of Shell interest from minority investment to full ownership.

More in this report Our journey to net zero | Providing lower-carbon electricity | Carbon capture and storage
More on Shell websites Our approach | Nature-based solutions | Carbon capture and storage

Delivering our climate targets

Investing in the energy transition

We help provide energy security while investing in the energy transition.

In 2023, we invested $7.9 billion in low-carbon energy and non-energy products, around a third of our total cash capital expenditure [A] of $24.4 billion. Of this, we invested $5.6 billion in low-carbon energy solutions including biofuels, hydrogen, charging for electric vehicles, wind and solar power, an increase of 30% compared with the previous year. This was mainly due to the acquisition of Nature Energy and the roll-out of electric vehicle charging. The remaining $2.3 billion was invested in non-energy products such as chemicals, lubricants and convenience retail. Our investment in non-energy products decreased by 41% compared with 2022 due to the completion of Shell Polymers Monaca in 2022 and greater inorganic expansion in our lubricants and convenience retailing businesses in 2022.

[A] Non-GAAP financial measure. See Reconciliation of non-GAAP financial measures where non-GAAP reconciliation is provided.

Our strategy supports a balanced energy transition by responsibly delivering the oil and gas people need today, while helping to build the clean energy system of the future. We are prioritising slower-to-decarbonise sectors, namely transport and industry, where we believe we have the competitive strengths to provide our customers with the products they need through the transition. See our 2023 Annual Report to learn more about our investments in energy in 2023.

Investing in the energy transition

Total cash capital expenditure * of $24.4 billion in 2023

Non-energy products [A]	Low-carbon energy solutions [B]
$2.3 billion	$5.6 billion
LNG, gas and power marketing and trading [C]	**Oil, oil products and other [D]**
$4.0 billion	$12.5 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.

* Non-GAAP financial measure. See Reconciliation of non-GAAP financial measures where non-GAAP reconciliation is provided.

Absolute emissions reduction performance

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 2016 levels on a net basis.

In 2023, our total combined Scope 1 and 2 absolute greenhouse gas emissions (from assets and activities under our operational control) were 57 million tonnes on a CO_2 equivalent basis, a 2% reduction compared with 2022 and a 31% reduction compared with 2016, the base year for our target.

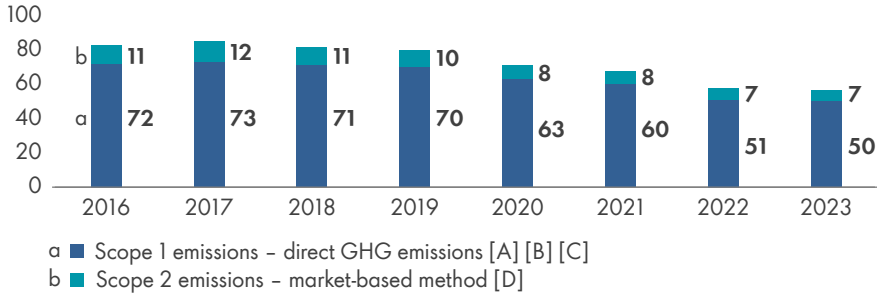
Our Scope 3 emissions associated with our energy product sales were 1,147 million tonnes of CO_2 equivalent, compared with 1,174 million tonnes of CO_2 equivalent in 2022.

In March 2024, we set an ambition to reduce customer emissions related to the use of our oil products by 15–20% by 2030, compared with 2021 (Scope 3, Category 11) [B]. This level of ambition is in line with the European Union's climate goals in the transport sector, which are among the most progressive in the world. Read more about our climate targets in our Energy Transition Strategy 2024.

[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.

Scope 1 and 2 emissions under operational control

Million tonnes CO_2e



[A] Greenhouse gas emissions comprise carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulphur hexafluoride and nitrogen trifluoride. The data are calculated using locally regulated methods where they exist. Where there is no locally regulated method, the data are calculated using the 2021 API Compendium, which is the recognised industry standard under the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard. There are inherent limitations on the accuracy of such data. Oil and gas industry guidelines (Ipieca, API and IOGP) indicate that several sources of uncertainty can contribute to the overall uncertainty of a corporate emissions inventory. We have estimated the overall uncertainty for our direct greenhouse gas emissions to be around 4% for 2023.
[B] Greenhouse gas emissions for 2023 were calculated using global warming potential (GWP) factors from the IPCC Fifth Assessment Report. Data from previous years were calculated using GWP factors from the IPCC Fourth Assessment Report. For comparison, our Scope 1 emissions would still have been 50 million tonnes in 2023 if we were to use GWPs from the IPCC Fourth Assessment Report.
[C] Greenhouse gas emissions in this table do not include carbon credits.
[D] We estimated the uncertainty of our 2023 Scope 2 greenhouse gas emissions from the market-based method to be around 8%.

We undertake external verification of our greenhouse gas emissions annually. Our Scope 1 and 2 greenhouse gas emissions from assets and activities under our operational control and the emissions associated with the use of our energy products (Scope 3) included in our net carbon intensity have been verified to a level of limited assurance by LRQA. Limited assurance means nothing has come to the verifier's attention that would indicate the greenhouse gas data and information, as presented in the Greenhouse Gas Statement/Assertion, were not materially correct.

Read our most recent assurance statements at www.shell.com/ghg.

Net carbon intensity

Our target is to reduce the net carbon intensity of the energy products we sell by the following amounts: 9–12% by 2024, 9–13% by 2025, 15–20% by 2030 and 100% by 2050. We use net carbon intensity to track our progress in reducing the overall carbon intensity of the energy products sold by Shell. Net carbon intensity 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, hydrogen and renewable electricity. Unlike Scope 1 and 2 emissions, reducing the net carbon intensity 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 line with our shift to prioritising value over volume in power, we are concentrating on select markets and segments. One example is our focus on commercial customers more than retail customers. Given this focus on value, we expect growth in total power sales to 2030 will be lower than previously planned. This has led to an update to our net carbon intensity target.

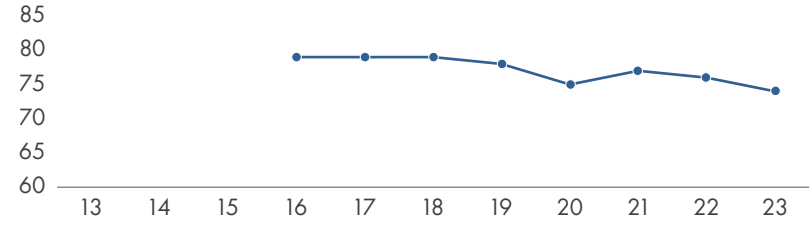
As a result, we are now targeting a 15–20% reduction in the net carbon intensity of the energy products we sell by 2030, compared with 2016, against 20% previously. Read more about our climate targets in our Energy Transition Strategy 2024.

Shell's net carbon intensity is the average intensity, weighted by sales volume, of the energy products sold by Shell. It is tracked, measured and reported using the Net Carbon Footprint methodology. We express our net carbon intensity as the grams of CO_2 equivalent per megajoule (gCO_2e/MJ) produced for each unit of energy delivered to, and used by, a consumer.

In 2023, Shell's net carbon intensity was 74 grams of carbon dioxide equivalent per megajoule of energy (gCO_2e/MJ), a 2.6% decrease from the previous year and a 6.3% reduction compared with 2016, the base year. The decrease in our net carbon intensity in 2023 was mainly achieved through a reduction in the average intensity of power sold and the use of carbon credits. The power intensity reduction was driven mainly by progress in grid decarbonisation in key markets such as the USA and Europe and partly by increased sales of renewable power including the retirement of renewable energy certificates.

Net carbon intensity [A] [B]

Grams of CO_2 equivalent per megajoule (gCO_2e/MJ)



[A] All figures disclosed are rounded in grams of carbon dioxide equivalent per megajoule.
[B] Acquisitions and divestments are included in the actual performance tracking with the target and baseline year unchanged. Acquisitions and divestments could have a material impact on meeting the targets.

The carbon credits we retired in 2023 amounted to 20 million tonnes of emission offsets, compared with 4.1 million tonnes that were included in our 2022 net carbon intensity. Of the carbon credit retirements included in Shell's net carbon intensity metric for 2023, 85% were certified by Verra, 9% by the American Carbon registry, 6% by Gold Standard, and less than 1% via Australian Carbon Credit Units.

We undertake external verification of our net carbon intensity annually, and we have received third-party limited assurance on our net carbon intensity for the period 2016 to 2023 by LRQA. Limited assurance means nothing has come to the verifier's attention that would indicate the net carbon intensity data and information, as presented in the Net Carbon Intensity Assertion, were not materially correct.

Read more about our Net Carbon Footprint methodology in our 2023 Annual Report and at www.shell.com/ncf.

More in this report Managing greenhouse gas emissions | Our Powering Progress targets | Letter from the CEO | Performance overview
More on Shell websites Our approach | Our climate target | Our climate target: frequently asked questions

Managing greenhouse gas emissions

Greenhouse gas emissions

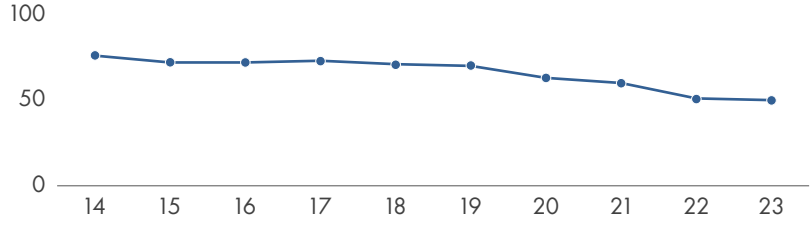
Greenhouse gas emissions performance

In 2023, our total combined Scope 1 and 2 absolute greenhouse gas emissions (from assets and activities under our operational control) were 57 million tonnes on a CO_2 equivalent basis, a 2% reduction compared with 2022 and a 31% reduction compared with 2016, the base year for our target. Our Scope 3 emissions associated with our energy products sales were 1,147 million tonnes of CO_2 equivalent, compared with 1,174 million tonnes of CO_2 equivalent in 2022.

Our direct greenhouse gas emissions (Scope 1, operational control boundary) decreased from 51 million tonnes of CO_2 equivalent in 2022 to 50 million tonnes of CO_2 equivalent in 2023.

Direct greenhouse gas emissions

Million tonnes CO_2 equivalent



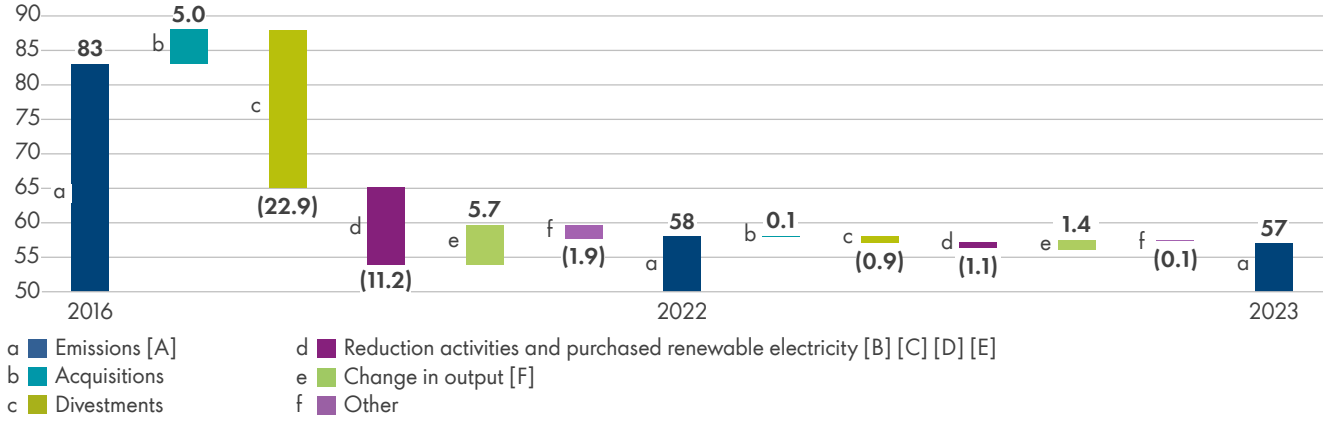
The reduction was achieved by divestments in 2022 (including the Deer Park and Mobile refineries in the USA and Shell-operated upstream assets in Tunisia and the Philippines); the handover of operations at OML 11 in Nigeria in 2022; reduced flaring at assets, including the Shell Nigeria Exploration and Production Company (SNEPCo); and greenhouse gas abatement projects and the purchase of renewable electricity. These decreases were partly offset by bringing more units online at Shell Polymers Monaca, our new polyethylene production facility in the USA, and higher emissions due to maintenance activities at our Pearl GTL gas-to-liquids facility in Qatar and a shutdown of our Prelude floating liquefied natural gas facility in Australia in 2022.

In 2023, 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 2023 are listed under "Energy use in our operations" in our 2023 Annual Report.

Drivers of absolute Scope 1 and 2 emissions change

Scope 1 and Scope 2 greenhouse gas emission changes from 2016 to 2022 and from 2022 to 2023

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 the market-based method.
[B] In addition to reductions from greenhouse gas abatement and energy efficiency projects, this category also includes reductions from shutdowns and conversion of existing assets.
[C] Excludes 6.8 million tonnes of CO_2 captured and sequestered by the Shell-operated Quest CCS facility in Canada between 2016 and 2022.
[D] Excludes 1.0 million tonnes of CO_2 captured and sequestered by the Shell-operated Quest CCS facility in Canada in 2023.
[E] Of the 1,081 thousand tonnes of reduction activities and purchased renewable electricity in 2023, around 200 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.

Our indirect greenhouse gas emissions associated with imported energy (Scope 2, operational control boundary) remained flat at 7 million tonnes of CO_2 equivalent in 2023 (using the market-based method), compared with 2022.

Read our most recent assurance statements at www.shell.com/ghg.

More in this report Our journey to net zero | Delivering our climate targets
More on Shell websites Our approach | Our climate target | Our climate target: frequently asked questions

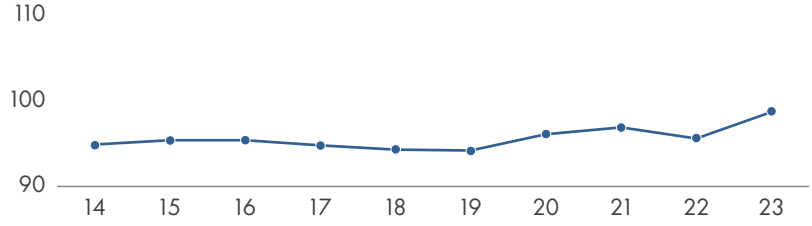
Energy efficiency in our operations

One of the metrics we use to measure our performance is energy intensity: the amount of energy consumed for every unit of output.

The refinery energy intensity index increased from 95.6 in 2022 to 98.7 in 2023, in part due to lower utilisation at several sites.

Energy intensity – refining

Refinery Energy Index [A]

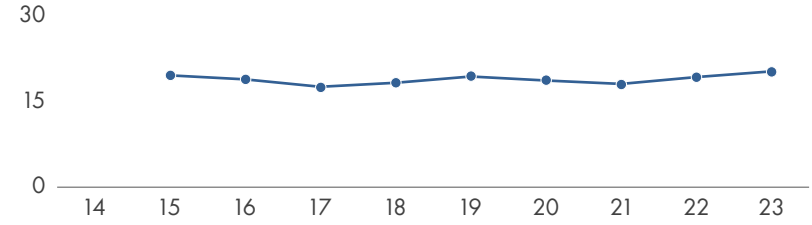


[A] Data are indexed to 2002, based on Solomon Associates Energy Intensity Index methodology.

Chemical steam cracker energy intensity in 2023 was 20.3 gigajoules per tonne (GJ/tonne) of high-value chemical (HVC) production, up from 19.3 GJ/tonne HVC in 2022. The increase was due in part to economic under-utilisation and less demand across our sites.

Energy intensity – chemical plants

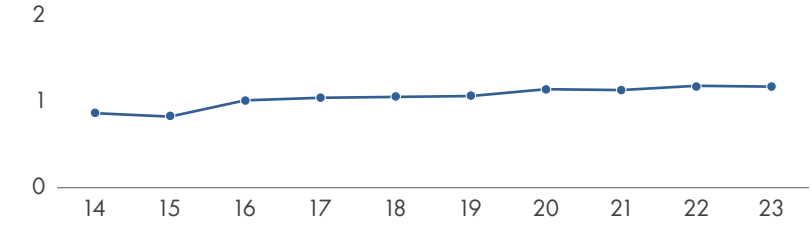
Chemical energy intensity – gigajoules per tonne of production



In 2023, the overall energy intensity for the production of oil and gas in our Integrated Gas and Upstream business (excluding liquefied natural gas and gas-to-liquids) decreased from 1.19 in 2022 to 1.18.

Energy intensity – upstream

(Excl. liquefied natural gas and gas-to-liquids) – gigajoules per tonne of production



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Methane emissions

Maintain methane emissions intensity of Shell-operated oil and gas assets (including liquefied natural gas) to below 0.2% and achieve near-zero methane emissions by 2030.

Methane is a powerful greenhouse gas; its impact on climate change over 20 years is more than 80 times greater than CO_2. While methane is much more efficient in trapping radiation, it is also a short-lived climate pollutant. Reducing emissions of methane is considered one of the most effective near-term actions to keep the more ambitious 1.5°C goal of the Paris Agreement within reach.

Our target is to maintain methane emissions intensity of Shell-operated oil and gas assets (including liquefied natural gas) to below 0.2% and achieve near-zero methane emissions by 2030.

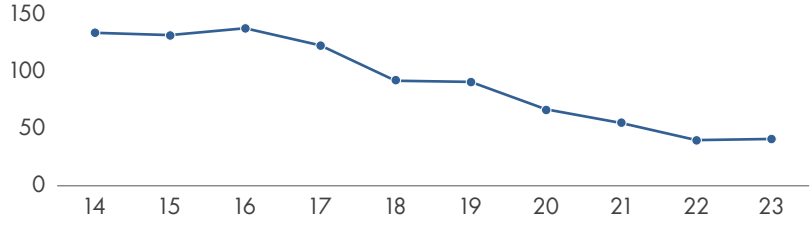
Methane emissions performance

Shell's methane emissions intensity target covers all Integrated Gas and Upstream oil and gas assets for which Shell is the operator.

In 2023, we again met our target to keep methane emissions intensity below 0.2%. Our methane emissions intensity averaged 0.05% for facilities with marketed gas and 0.001% for facilities without marketed gas. It ranged from less than 0.01% to 0.6% in 2023, compared with less than 0.01% to 0.7% in 2022.

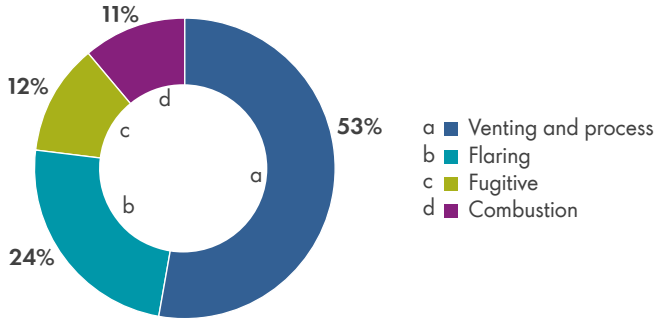
Methane emissions

Thousand tonnes



Methane emissions by source in 2023

Percentage



In 2023, Shell's total methane emissions were 41 thousand tonnes compared with 40 thousand tonnes in 2022. The increase was due to venting (which includes maintenance at our Prelude floating LNG facility, Australia and operational issues at Sarawak Shell Berhad, Malaysia) and higher reported emissions from integrated gas assets in Canada resulting from the adoption of enhanced source level measurements in line with Oil and Gas Methane Partnership (OGMP) reporting requirements. Methane emissions were around 2% of Shell's greenhouse gas emissions on a CO_2 equivalent basis in 2023. More than 65% of our reported methane emissions in 2023 came from flaring and venting in our upstream and midstream operations.

Methane reduction at Shell-operated and non-operated sites

We continue to reduce methane emission sources across Shell-operated assets. By the end of 2023, around 80% of fugitive emission sources at our operated oil, gas and liquified natural gas production facilities used leak detection and repair programmes to tackle leaks and monitor equipment.

We have reduced reported methane emissions by using multiple approaches to detect and prevent emissions, including reduced flaring and venting, as well as implementing more accurate methods for calculating emissions. At our QGC natural gas project in Australia, for instance, we have reduced methane emissions from gas dehydration facilities by around 2,800 tonnes since 2017.

We also work with our joint ventures to help them develop emission monitoring programmes. We have encouraged our non-operated ventures to adopt the voluntary UN-led OGMP 2.0 reporting framework. Many of our non-operated venture partners became signatories to the OGMP programme in 2023. They include Nigeria LNG, Oman LNG, Atlantic LNG and North Caspian Operating Company.

Working with others to reduce methane emissions

We encourage industry-wide action on methane emissions reduction by participating in voluntary initiatives.

For example, we are a founding signatory of the OGMP 2.0 reporting framework and continue to implement enhanced methane emissions measurement and reporting. In 2023, we were awarded Gold Standard status for our OGMP 2.0 reporting for the third consecutive year.

We participate in other multi-stakeholder groups, such as the Methane Guiding Principles (MGP) coalition, which we initiated in 2017, the Oil & Gas Climate Initiative and the World Bank's Zero Routine Flaring by 2030 initiative.

In 2023, members of the MGP, including Shell, started to engage with governments and companies in 20 countries, informing them about methane policies and regulations and sharing best practice on methane emissions reduction along the gas value chain.

We intend to contribute to the World Bank's Global Flaring and Methane Reduction Fund to help finance methane emissions detection, quantification and abatement projects in low- and middle-income countries.

Shell also signed the Oil and Gas Decarbonization Charter that was launched at COP28 in 2023. The charter aims to reduce methane and greenhouse gas emissions across the oil and gas industry as a whole, including through collaboration and sharing best practice.

Read more about Shell and methane emissions at www.shell.com/what-we-do/oil-and-natural-gas/methane-emissions.

More in this report Our journey to net zero | Managing greenhouse gas emissions | Producing oil and natural gas
More on Shell websites Our approach | Zero routine flaring by 2025 | External voluntary codes

Flaring

Eliminating routine flaring from Upstream operations by 2025 [A].

Routine flaring of gas occurs during normal oil production if it is not possible to use the gas or reinject it into a well.

We are working to reduce flaring, which is inefficient and contributes to climate change. We have set a target to eliminate routine flaring from our Upstream operations by 2025 [A], challenging ourselves to move faster than the World Bank's Zero Routine Flaring by 2030 initiative, to which we are a signatory.

[A] Subject to the completion of the sale of Shell Petroleum Development Company Limited (SPDC).

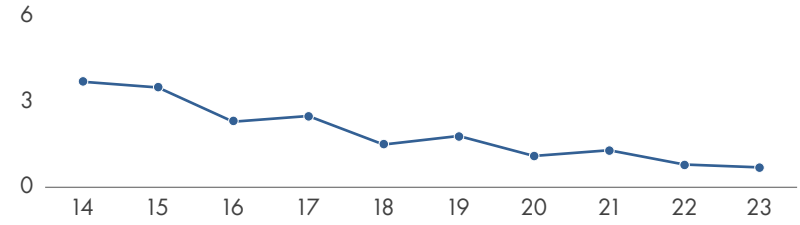
We signed up to the Oil and Gas Decarbonization Charter announced at COP28, within which organisations have pledged to achieve near-zero methane emissions by 2030 and zero routine flaring by 2030. We also intend to contribute to the World Bank's Global Flaring and Methane Reduction Fund, which was launched at COP28.

Flaring performance

Flaring of gas in our Integrated Gas and Upstream business contributed around 6% of our overall direct greenhouse gas emissions in 2023.

Flaring – upstream hydrocarbons flared [A]

Million tonnes



[A] Includes the Integrated Gas and Upstream business.

In 2023, 0.7 million tonnes of hydrocarbons were flared in our Integrated Gas and Upstream business, down from 0.8 million tonnes in 2022.

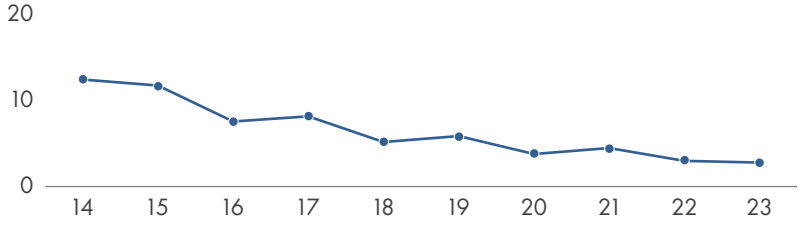
Routine hydrocarbon flaring remained relatively flat compared with 2022 at 0.1 million tonnes.

Around 50% of total routine and non-routine flaring in our Integrated Gas and Upstream facilities in 2023 occurred in assets operated by Shell Petroleum Development Company of Nigeria Limited (SPDC) and Shell Nigeria Exploration and Production Company Limited (SNEPCo). On January 16, 2024, Shell reached an agreement to sell SPDC to Renaissance, a consortium of five companies, subject to approvals by the Federal Government of Nigeria and other conditions. 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. This includes work programmes to eliminate routine flaring.

[A] The SPDC JV comprises SPDC Ltd (30%), the government-owned NNPC (55%), Total Exploration and Production Nigeria Ltd (10%) and Nigeria Agip Oil Company Ltd (5%).

Flaring – upstream CO_2 equivalent [A]

Million tonnes CO_2e



[A] Includes the Integrated Gas and Upstream business.

In 2023, around 10% of our greenhouse gas emissions from flaring occurred at facilities where there was no infrastructure to capture the gas, which is similar to the percentage in 2022. Overall flaring decreased to 2.8 million tonnes of carbon dioxide equivalent (CO_2e) in 2023 from 3.0 million tonnes of CO_2e in 2022 due to a reduction in flaring from some assets including the Shell Nigeria Exploration and Production Company (SNEPCo) in 2023.

Read more about our flaring reduction commitment at www.shell.com/what-we-do/oil-and-natural-gas/flaring.

More in this report Our journey to net zero | Energy transition | Managing greenhouse gas emissions
More on Shell websites Our approach | Methane emissions

Carbon credits including from nature-based solutions

As part of our ambition to become a net-zero emissions energy business by 2050, we are working to reduce emissions from our own operations and from the fuels and other energy products, such as electricity, we sell to our customers. For remaining emissions, we offer and use high-quality carbon credits, including from nature-based solutions.

To help us do that, we invest directly in natural ecosystem projects to increase the supply of carbon credits and help meet growing demand.

Nature-based solutions protect and enhance natural ecosystems – such as forests, grasslands, wetlands and coastal zones – or improve agricultural sustainability by absorbing or preventing the release of greenhouse gases.

We aim to work with or invest in nature-based projects that have robust environmental and social safeguards while also creating net-positive impacts on biodiversity and for local communities. We select projects that are certified under credible and independent carbon credit standards. These include the Verified Carbon Standard, Gold Standard and the 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 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.

Our performance

In 2023, which was a turbulent year for the voluntary carbon market, we continued to build a portfolio of high-quality nature-based and non-nature-based projects with long-term commitments. We deployed $86 million: $52 million for nature-based projects and $34 million for technology-based projects that generate carbon credits.

For 2023, we retired around 21.8 million carbon credits, of which 20 million credits are included in our net carbon intensity and 1.8 million credits are associated mainly with the sale of non-energy products and Shell's business travel (one carbon credit represents the avoidance or removal of 1 tonne of CO_2). These numbers exclude direct carbon trading activities.

In 2023, in the USA, we launched Greenline Climate with the Spatial Informatics Group to provide development services for projects generating forest carbon credits. We also invested in carbon sequestration developer Kateri to help livestock farmers protect and restore grasslands and earn carbon credit revenues through sustainable land and grazing management.

In India, Shell is providing finance for one of the largest household efficiency programmes globally. The programme aims to replace inefficient incandescent light bulbs with energy-efficient LED bulbs for more than 8 million households, generating carbon credits that Shell can offer to its customers.

Read more about nature-based solutions at www.shell.com/energy-and-innovation/new-energies/nature-based-solutions.

More in this report Our journey to net zero | Carbon capture and storage | Managing greenhouse gas emissions | Energy transition
More on Shell websites Our approach | Shell Environmental Products | Ensuring high-quality nature-based carbon credits

Carbon capture and storage

If society is to reach the goal of the Paris Agreement and achieve net-zero emissions by 2050, it will need to widely deploy carbon capture and storage (CCS) in hard-to-abate sectors and remove carbon dioxide already in the atmosphere. CCS is a combination of technologies that capture and store carbon dioxide deep underground or under the seabed, preventing its release into the atmosphere.

In 2023, Shell's spending on CCS opportunities (operating expenses and cash capital expenditure) amounted to around $340 million, an increase of 55% from $220 million in 2022.

By the end of 2023, the Shell-operated Quest CCS project at the Scotford upgrader in Canada (Shell interest 10%) had captured and safely stored more than 8.8 million tonnes of CO_2 since it began operating in 2015. We are exploring the possibility of increasing CCS capacity at the Scotford Complex, initially by 750,000 tonnes a year, through our proposed Polaris project and Atlas Carbon Sequestration Hub.

In Australia, the Gorgon CCS project (Shell interest 25%, operated by Chevron), reported it had stored more than 9 million tonnes of CO_2 equivalent as of December 2023. In addition to these significant emission reductions, Chevron has confirmed it had acquired and surrendered carbon credits to address historical injection shortfalls. The joint venture will also invest $27 million in lower-carbon projects in Western Australia. Gorgon started operating in 2019 and is the largest CCS operation in the world.

In May 2023, our Northern Lights CO_2 transport and storage joint venture (Shell interest 33.3%) in Norway signed agreements with Yara, the crop nutrition company, and Ørsted, the renewable energy company, to transport and store 830,000 tonnes and 430,000 tonnes of CO_2 a year respectively. The CO_2 will be transported by ship from plants in the Netherlands and Denmark and permanently stored 2,600 metres below the seabed in the North Sea. Northern Lights is under construction and is expected to start operations in 2025.

In the UK, the Acorn CO_2 transport and storage project (Shell interest 30%), for which we are the technology developer, advanced to the next stage of government approval. Acorn aims to use decommissioned oil and gas infrastructure to help local industries decarbonise their operations. The CO_2 will be transported and permanently stored 2,500 metres below the North Sea. Acorn is part of the UK government's ambition to capture and store 20–30 million tonnes of carbon dioxide by 2030.

Also in the UK, Shell and Esso Exploration and Production UK were jointly awarded three carbon storage appraisal licences in the UK's first-ever carbon storage licensing round. The joint venture (Shell interest 50%) will evaluate three sites in the North Sea for the potential storage of CO_2 captured and transported from industrial facilities.

Shell also won an order in 2023 for its CANSOLV® carbon capture technology for the world's largest post-combustion carbon capture, utilisation and storage plant. The plant, in Abu Dhabi, UAE, will capture and permanently store 1.5 million tonnes of CO_2 a year at a gas processing plant, helping Abu Dhabi National Oil Company (ADNOC) to decarbonise its operations.

Read more about our CCS projects at www.shell.com/ccs.

CCS projects at the end of 2023

Project	Country	Shell involvement	Shell interest	Total capacity (100%), million tonnes per year
CCS facilities in operation				
Quest	Canada	Operator Technical developer	10%	1 mtpa
Gorgon	Australia	JV partner	25%	Up to 4 mtpa
Technology Centre Mongstad test and research facility	Norway	JV partner	22%	Test site
CCS projects under construction				
Northern Lights (Phase 1)	Norway	JV partner	33.3%	1.5 mtpa
Pernis CO_2 capture	Netherlands	Operator	100%	1.15 mtpa
CCS projects pre-FID options				
Acorn (initial)	UK	JV partner Technical developer	30%	Around 6 mtpa
Aramis (initial)	Netherlands	JV partner	25%	5 mtpa
Polaris	Canada	Operator	100%	0.75 mtpa
Atlas	Canada	Operator	50%	5 mtpa
Pernis SPeCCS CO_2 capture expansion	Netherlands	Operator	100%	0.5 mtpa
Asia-Pacific CCS hub	Asia-Pacific	TBC	TBC	TBC
US Gulf Coast	USA	Operator	100%	6 mtpa
Daya Bay	China	TBC	TBC	10 mtpa
Northern Lights (Phase 2)	Norway	JV partner	33.3%	3.7 mtpa
Northern Carnarvon (Angel)	Australia	JV partner	20%	5 mtpa
Southern North Sea	UK	Operator	50%	TBC
Shell Offshore Carbon Storage	Netherlands	Operator	35%	6 mtpa

Note: mtpa = million tonnes per annum; JV = joint venture; FID = final investment decision; TBC = to be confirmed.

More in this report Our journey to net zero | Carbon credits including from nature-based solutions | Energy transition
More on Shell websites Our approach | Top CCS frequently asked questions | How to cut carbon from cement

Providing lower-carbon electricity

Integrated power

Electricity is the fastest-growing part of the energy system and low-carbon power solutions are helping society to decarbonise. At Shell, we continue to develop an integrated power business – from generation to trading, storage and supply – with a focus on business customers. In 2023, we sold 279 terawatt-hours of electricity.

In the Netherlands, in 2023, the Hollandse Kust Noord offshore wind farm (Shell interest 79.9%), which has a generating capacity of 759 megawatts, became operational. We also opened two onshore renewable energy parks in the Netherlands: Pottendijk, a hybrid solar and wind farm, and Koegorspolder. Koegorspolder is the largest of our six solar parks in the country, with a peak capacity of 71 megawatts. (See Wind and Solar.)

In March 2023, we entered into a partnership to deliver a utility-scale battery energy storage system in Australia. With this system, Shell will have access to 100% of the battery system's offtake over a 20-year period. Completion of the project is expected in late 2024.

In November, we divested our retail businesses in the UK and Germany to Octopus Energy and are closing the business in the Netherlands. This helps us to focus on trading and optimisation and on supplying businesses through corporate power purchase agreements (PPAs).

During the year, we signed renewable energy PPAs with Microsoft and Baker Hughes and with Google in early 2024. We also acquired EGO, one of Italy's largest operators of virtual power plants. EGO manages and trades 1.6 gigawatts of power generated by around 1,500 renewable and flexible energy units in Italy. It complements our previous virtual power plant acquisitions of UK-based Limejump in 2019 and Germany-based Next Kraftwerke in 2021.

Read more about lower-carbon and renewable power at www.shell.com/shellenergy.

More in this report Providing access to energy | Energy transition | Energy transition in action
More on Shell websites Our approach | Wind power | Solar

Wind

We have wind power interests in operation, under construction or under development in several countries, including onshore in India, the Netherlands and the USA and off the coasts of the Netherlands, Norway, the UK and the USA.

Ecowende (Shell interest 60%), our joint venture with Eneco, plans to create a new ecological benchmark for the development of its 750 megawatt offshore wind farm at Hollandse Kust West in the Netherlands. The project aims to minimise its impact on the environment by, among other things, placing reef structures on the seabed to stimulate biodiversity and creating a safe flight corridor for birds through the wind farm.

Nearby, our Hollandse Kust Noord offshore wind farm (Shell interest 79.9%) became operational in 2023. The wind farm has a generating capacity of 759 megawatts and will supply almost 3% of electricity demand in the Netherlands.

In the UK, our MarramWind and CampionWind joint ventures (Shell interest 50% in each) with ScottishPower are preparing to develop floating offshore wind farms that could have a total capacity of around 5 gigawatts, which is enough to power the equivalent of six million UK homes.

In the USA, we are partnering with Gulf Wind Technology to develop a demonstration wind turbine that can operate in the challenging environment of the Gulf of Mexico, where conditions vary from seasonal hurricanes to long periods of moderate wind speeds.

Read more about wind power at www.shell.com/energy-and-innovation/new-energies/wind.

Wind projects at the end of 2023

Project	Type	Country	Shell interest	Total capacity (100%), MWac	Shell-operated	Planned start-up
Wind projects in operation						
Sprng Energy	Onshore	India	100%	497.5	Yes	
Three Wind Holdings, LLC	Onshore	USA	50%	103	No	
Borssele III & IV (Blauwwind)	Offshore	Netherlands	20%	732	JV-operated	
NoordzeeWind	Offshore	Netherlands	100%	108	JV-operated	
Pottendijk (wind)	Onshore	Netherlands	100%	50	Yes	
Hollandse Kust Noord [B]	Offshore	Netherlands	79.9%	759	JV-operated	
TetraSpar	Floating wind	Norway	46.2%	4	JV-operated	
Wind projects under construction and/or capacity committed for sale						
Brazos [A]	Onshore	USA	40%	182	Yes	2024
Atlantic Shores – Project 1	Offshore	USA	50%	1,509	JV-operated	2027+
Hollandse Kust West	Offshore	Netherlands	60%	760	JV-operated	2026
Sprng Energy	Onshore	India	100%	218	Yes	n/a

[A] Brazos Repower represents the complete replacement of the Brazos turbines, increasing capacity from 160 MW to 182 MW.
[B] Construction completed in December 2023 with formal commercial operations beginning in 2024.

More in this report Providing access to energy | Embedding sustainability into our activities | Biodiversity and ecosystems | Energy transition
More on Shell websites Our approach | Renewable power | Solar

Solar

We are expanding our solar photovoltaic power generation capability by investing in the development and operation of solar projects to support the decarbonisation of our customers, Shell and society.

When procuring solar panels and modules for our projects, we engage extensively with our suppliers to promote transparency and understand human rights risks in our supply chain.

In 2023, we increased our solar power activities significantly through the acquisition of 12 solar projects in Spain from renewables developer Isemaren. The plants have a total generating capacity of 1.1 gigawatts.

We also started production at two solar parks in the Netherlands: Pottendijk and Koegorspolder. Koegorspolder is one of the largest solar parks in the Netherlands, with a peak capacity of 71 megawatts. Pottendijk is our first wind-solar hybrid plant. It has a peak capacity of around 100 megawatts and is designed to have minimal impact on biodiversity and the environment.

In Italy, we are building the Zamboni solar park, which will have a peak capacity of around 20 megawatts and is expected to be operational in 2024. Shell has signed a power purchase agreement with Baker Hughes, the energy technology company, which will use the electricity to help decarbonise its Italian facilities (see also Integrated power).

Read more about solar power at www.shell.com/energy-and-innovation/new-energies/solar.

Solar projects at the end of 2023

Project	Country	Shell interest	Total capacity (100%), MWac	Shell-operated	Planned start-up
Solar projects in operation [A]					
Sprng Energy [B]	India	100%	1,319	Yes	
Cleantech Solar [B]	Asia	24.5% – 49%	469	No	
Daystar Power [B]	Nigeria	100%	51	Yes	
Sohar Solar Quabas	Oman	100%	25	Yes	
Sas van Gent	Netherlands	100%	24	Yes	
Pottendijk (solar)	Netherlands	100%	37	Yes	
Koegorspolder Tractaatweg	Netherlands	100%	30	Yes	
Koegorspolder Sluiskil	Netherlands	100%	23	Yes	
Moerdijk	Netherlands	100%	20	Yes	
Heerenveen	Netherlands	100%	10	Yes	
Emmen	Netherlands	100%	9	Yes	
Solar projects under construction and/or capacity committed for sale [A]					
Sprng Energy [B]	Asia	100%	900	Yes	various
Gangarri	Australia	100%	120	Yes	2024
Cleantech Solar AUC [B]	Asia-Pacific	24.5% – 49%	405	No	various
Sikat – Leyte (Phase 1)	Philippines	40%	100	Yes	2025
Daystar Power [B]	Nigeria	100%	32	Yes	various
Italy [B]	Italy	100%	155	Yes	various
Iddenshall	UK	100%	14	Yes	2024
Savion [B] [C]	USA	100%	491	Yes	various

[A] Figures exclude Silicon Ranch (Shell interest 36% as at the end of 2023, non-operated), the US solar power developer.
[B] Multiple projects.
[C] Savion projects include Madison Fields (180 MW), Martin County (111 MW), Kiowa County (100 MW) and Elkhart County (100 MW).

More in this report Providing access to energy | Energy transition | Working with our suppliers | Respecting human rights
More on Shell websites Our approach | Renewable power | Wind power

Fuelling mobility

Biofuels

Shell aims to be a significant and profitable supplier of sustainable low-carbon fuels to help decarbonise harder-to-abate sectors including aviation, marine and commercial road transport.

We supply low-carbon fuels such as biodiesel, bioethanol, renewable natural gas (also known as RNG, biogas or biomethane), renewable diesel (also known as hydro-treated vegetable oil or HVO) and sustainable aviation fuel to help lower the carbon emissions from transport.

These fuels can be blended with existing fuels – such as diesel, petrol and aviation fuel – and do not require costly investment in new infrastructure, which means they are a practical option for reducing transport emissions.

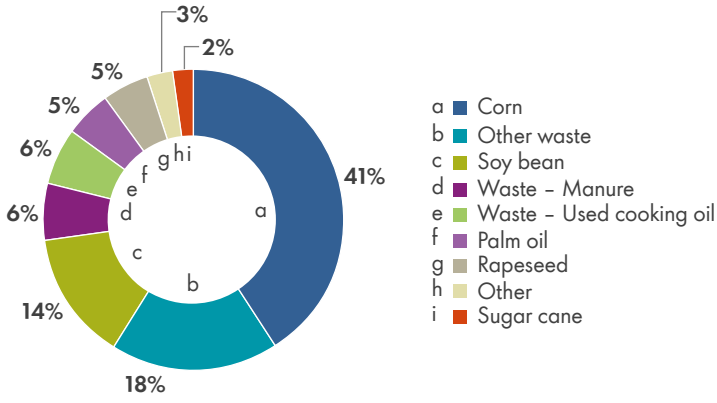
Shell is one of the world's largest traders and blenders of biofuels. In 2023, around 9.7 billion litres of biofuels went into Shell's petrol and diesel worldwide, compared with 9.5 billion litres in 2022. This included around 3.4 billion litres through our joint venture Raízen (Shell interest 44%, not Shell-operated) in Brazil, compared with about 3 billion litres in 2022.

Raízen is one of the world's biggest bioethanol producers, producing some of the lowest carbon intensity biofuels available today. In 2023, Raízen produced around 3.1 billion litres of ethanol from sugar cane and 30 million litres of second-generation cellulosic ethanol made from inedible agricultural waste. Raízen also commissioned in 2023 the first of eight world-scale advanced biofuel plants which it aims to build in Brazil.

To support our biofuel production capacity, we are also investing in new feedstocks. We have invested in agroforestry company Investancia Group. Investancia is reforesting degraded cattle land in Paraguay with pongamia oil trees and native trees to provide sustainable feedstock for biofuels, along with additional protein for animal feed markets. Pongomia oil is non-edible and of low carbon intensity. It can be grown on marginal land and does not require land use change.

Global biocomponent purchase by feedstock [A]

Percentage



[A] Does not include purchases by Raízen.

Sustainability of biofuels

We purchase biocomponents to produce biofuels, blend into fuels and/or to trade. Certain biofuel feedstocks are considered higher risk with regard to human rights, biodiversity or the release of carbon into the atmosphere. To help mitigate these risks, the palm oil derivatives and waste, sugar cane and South American soy feedstock we purchase are certified as sustainable under credible sustainability standards like the Round Table on Responsible Soy Association, the Roundtable on Sustainable Palm Oil, and Bonsucro, or credits are purchased where direct certification is not available. Forestry products and residue feedstock are certified by credible forest management certification bodies. We have also committed not to use crude palm oil or palm oil derivatives in any of our biofuel refineries.

Read more about biofuels at www.shell.com/biofuels and about our approach to the sustainable sourcing of biocomponents at www.shell.com/sourcing-biocomponents.

Sustainable aviation fuel

We continue to take steps to help increase production and supply of sustainable aviation fuel (SAF).

In 2023, we announced a multi-year agreement to buy sustainable aviation fuel from Montana Renewables, the largest SAF producer in North America, and worked together on building blending and distribution capabilities to deliver SAF to customers. We also signed an agreement to supply SAF to Emirates airline at Dubai International Airport, the first time that SAF has been used in the airport's fuelling system.

Also in 2023, Bank of America, Google, Yokagawa and many other companies joined Avelia, a blockchain-powered book-and-claim programme for business travel that we launched in 2022 with partners to help aggregate demand for SAF.

Read more about SAF at www.shell.com/business-customers/aviation/the-future-of-energy/sustainable-aviation-fuel.

Renewable natural gas and bioLNG

We produce renewable natural gas (RNG) from agricultural residues and manure. RNG can significantly reduce CO_2 emissions when replacing its fossil-fuel equivalent. It can be used instead of natural gas (as renewable compressed natural gas or bioLNG) in vehicles and shipping.

Shell is increasing bioLNG production capacity and building a network of bioLNG refuelling sites in Europe. In 2023, we completed the acquisition of one of Europe's largest RNG producers, Nature Energy of Denmark. Together with its partners, Nature Energy owns and operates 13 biogas plants in Denmark and one in the Netherlands. The acquisition supports our ambition to build an integrated RNG value chain on a global scale. We are also building a bioLNG liquefaction plant at our Energy and Chemicals Park Rheinland in Germany, which is expected to start production in 2024.

In the USA, we have RNG production facilities ramping up in Idaho and Kansas and in operation in Oregon.

More in this report Our journey to net zero | Driving innovation | Energy transition in action
More on Shell websites Our approach | Purchasing policy statement: Sustainable sourcing of biocomponents | Mobility

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.

Shell Recharge, our public charging network, is present in around 30 markets. At the end of 2023, we had around 54,000 public charge points at Shell forecourts, on-street locations and at destinations like supermarkets, up from 27,000 charge points in 2022. We expect to have around 70,000 public charge points by 2025 and around 200,000 public charge points by 2030.

In 2023, we completed the acquisition of Volta Inc. in the USA. We now operate one of the largest public electric vehicle charging networks in the country, with more than 3,000 charge points across 31 states. We also acquired evpass, which owns Switzerland's largest network of electric vehicle charging stations.

In China in 2023, we opened our largest electric vehicle charging station globally, which has 258 fast-charging points partially powered by the station's rooftop solar panels.

More in this report Our journey to net zero | Driving innovation | Energy transition in action
More on Shell websites Our approach | Mobility | Hydrogen

Hydrogen

Hydrogen is a versatile energy carrier that can play a significant role in the transition to a lower-carbon world. We are investing in producing decarbonised hydrogen for our own facilities and, in the future, for customers in industry and mobility where direct electrification is challenging.

At the end of 2022, we started to build Holland Hydrogen I in the Netherlands, one of the largest renewable hydrogen plants in Europe. The 200 megawatt electrolyser will supply the Shell Energy and Chemicals Park Rotterdam, where it will partially decarbonise our production of energy products like petrol, diesel and jet fuel. The plant will be powered by renewable energy from the Hollandse Kust Noord offshore wind farm (Shell interest 79.9%).

In Oman, we acquired a 35% interest in Green Energy Oman, which aims to produce renewable hydrogen, ammonia, methanol and synthetic fuels from seawater, powered by 25 gigawatts of solar and wind energy.

In Germany, we launched Hydrogen Pay-Per-Use, through which truck operators can hire hydrogen-fuelled trucks to explore transitioning their fleet from diesel to hydrogen and reduce their carbon emissions.

As a founding member of the H2 Accelerate consortium, Shell continues to work with partners to enable the use of hydrogen to decarbonise long-haul road transport across Europe.

Read more about hydrogen at www.shell.com/hydrogen.

More in this report Our journey to net zero | Driving innovation | Energy transition in action
More on Shell websites Our approach | Mobility | Electric vehicle charging

Driving innovation

In 2023, we spent $1,287 million on research and development (R&D), compared with $1,067 million in 2022. We also started work on more than 270 R&D projects with universities, compared with more than 250 in 2022.

Our R&D activities are key to achieving our net-zero emissions target. In 2023, our R&D expenditure on projects that contributed to decarbonisation was around $628 million, representing about 49% of our total R&D spend, compared with around 41% in 2022. This includes expenditure on reducing greenhouse gas 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, and the integration of robotics, automation and artificial intelligence.

Innovations in 2023

In 2023, Shell won an order for its CANSOLV® carbon capture technology for the world's largest post-combustion carbon capture, utilisation and storage facility. The facility, in Abu Dhabi, UAE, will capture and permanently store 1.5 million tonnes of CO_2 a year at a gas processing plant, helping Abu Dhabi National Oil Company (ADNOC) to decarbonise its operations (see also Carbon capture and storage).

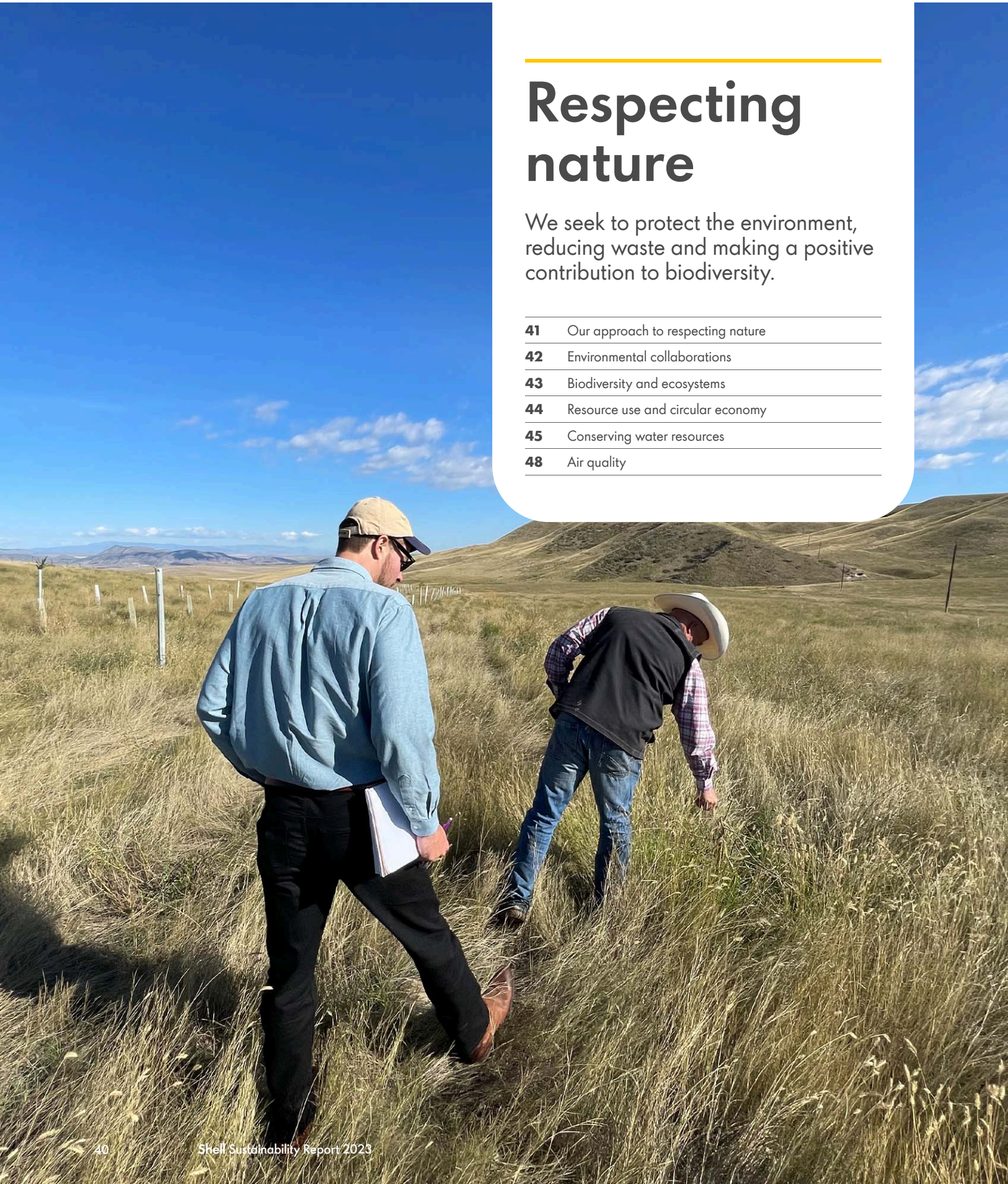
We also took the decision to build a direct air capture demonstration unit in the USA to prove the technical viability of our solid sorbent technology, which removes carbon dioxide from the air. The CO_2 could then be stored permanently underground or reused as feedstock in the production of chemicals and fuels.

In China, we have introduced a thermal energy storage system at our Zhuhai plant, which produces lubricants and greases. The system replaces diesel fuel with renewable electricity to generate process steam for manufacturing lubricants. The storage system will optimise steam production and is expected to reduce the use of diesel by 300 tonnes and CO_2 emissions by more than 900 tonnes annually.

As part of our commitment to develop sustainable biofuels, we have partnered with two leading Brazilian research institutes, Unicamp and Senai Cimatec, to explore the potential of using agave as a feedstock. Agave is a semi-arid plant that requires minimal amounts of water. By growing it in Brazil, we hope to develop a scalable value chain that could significantly reduce emissions.

Read more about technology and innovation at www.shell.com/energy-and-innovation/the-role-technology-plays/technology-for-a-sustainable-energy-industry.

More in this report Carbon capture and storage | Biofuels | Energy efficiency in our operations
More on Shell websites Our approach | Technology and innovation | Technology for a net zero energy future



Respecting nature

We seek to protect the environment, reducing waste and making a positive contribution to biodiversity.

41	Our approach to respecting nature
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43	Biodiversity and ecosystems
44	Resource use and circular economy
45	Conserving water resources
48	Air quality

Our approach to respecting nature

Respecting nature is part of our Powering Progress strategy. We recognise there is a growing global urgency to protect and enhance biodiversity, conserve fresh water and use resources more efficiently.

The links between nature and climate are recognised in the UN Kunming-Montreal Global Biodiversity Framework of 2022 and in discussions at the 2023 UN Climate Change Conference (COP28). We will work with governments and others to help implement the framework, which provides a common direction and targets for governments to take action to halt and reverse biodiversity loss.

As a business, we use natural resources such as land, water and materials for our operations. Our activities can have an impact on nature through discharges and emissions to the environment, and through changes to the use of land and water including oceans.

Respecting the environment and local communities has been integral to the way we do business for many years, as set out in the Shell General Business Principles and Shell Commitment and Policy on Health, Security, Safety, the Environment and Social Performance.

Our Executive Committee is accountable for delivery of respecting nature, progress towards which is reviewed by our Board's Sustainability Committee (SUSCO).

Our progress

For a large global organisation like Shell, implementing a change programme for respecting nature has many elements and is a multi-year journey. Since launch in 2021, we have:

- worked to embed respecting nature into our activities and business processes;
- enhanced our internal performance management systems to track and report on progress; and
- continued to build employees' awareness, knowledge and skills to deepen their understanding of respecting nature.

We are also updating our environmental standards and guidance used by our projects and facilities around the world.

In 2023, we reviewed our progress and performance on respecting nature.

We consolidated our respecting nature ambitions into the following themes: having a positive impact on biodiversity, aiming for zero waste and using water, other resources and materials efficiently.

We have already achieved some of the commitments we set when we launched respecting nature in 2021. Our commitment to reduce fresh-water consumption in highly water-stressed areas by 15% was achieved ahead of the target date of 2025. We have also conducted detailed assessments to inform our approach to fresh water and waste, which will be tailored to local conditions.

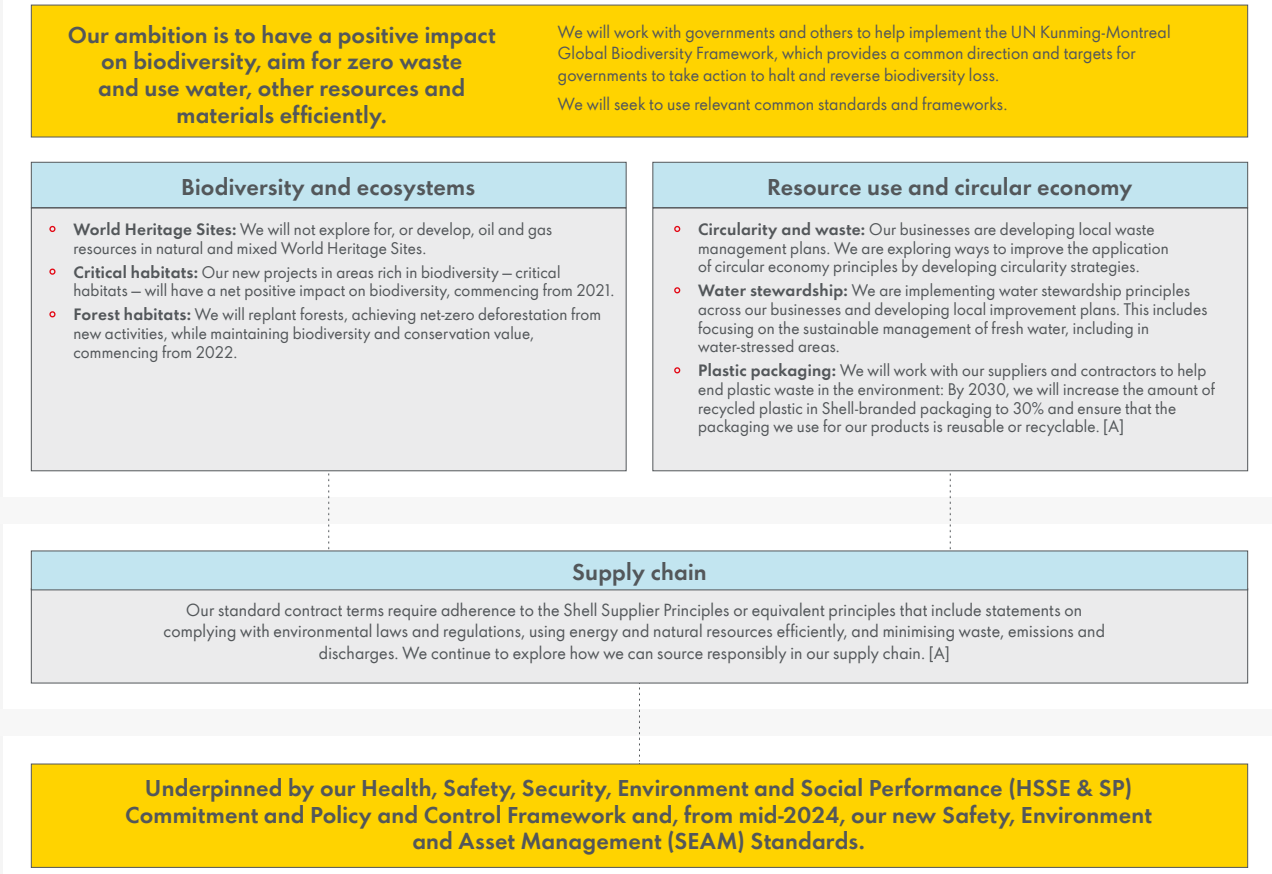
We have concluded that the scale of our ambition to use 1 million tonnes of plastic waste a year in our global chemical plants by 2025 is unfeasible due to lack of available plastic waste feedstock, slow technology development and regulatory uncertainty. We continue to work with partners across the plastic waste value chain, such as the waste management industry and pyrolysis oil producers, to help develop a circular value chain globally (see Plastics).

The remaining commitments announced in 2021 have either been incorporated into our new Safety, Environment and Asset Management (SEAM) Standards, which take effect from mid-2024, or are included in the relevant business objectives and processes.

Our approach, ambition and priorities are shown in the graphic below.

You can read more in the other respecting nature sections and more about our approach at www.shell.com/sustainability/environment.

Respecting nature



[A] These priorities are delivered through business objectives and processes outside of the SEAM Standards.

More in this report Sustainability at Shell | Biodiversity and ecosystems | Social investment | Respecting human rights
More on Shell websites Our approach | Biodiversity | Water

Environmental collaborations

Collaborations and partnerships are key to implementing respecting nature. They can help us to protect biodiversity, reduce waste, improve circularity of materials and help ensure local communities benefit from our presence.

For instance, we have worked with our global environmental partners, the International Union for Conservation of Nature (IUCN) and Earthwatch for more than 20 years.

In 2023, we continued to collaborate with the IUCN, non-governmental organisations and other energy companies to develop guidance for renewable energy developments and infrastructure.

Together with Earthwatch, in 2023, we trained more than 800 employees in virtual sessions across the world and face-to-face sessions in 10 countries. This year marked 25 years of our formal partnership, which will not be extended in 2024.

We are a founding member of the World Business Council for Sustainable Development, have a seat on the executive committee and on the Energy Pathway Board and participate in several working groups related to nature including biodiversity, plastic waste, circular economy and nature-based solutions.

Shell is a Vice Chair of Ipieca, the global oil and gas industry association for advancing environmental and social performance across the energy transition. Shell chairs Ipieca's Environmental Group and is active in all workstreams on climate, nature, people and sustainability.

We are co-Chair of the International Association of Oil & Gas Producers (IOGP) environment committee, which works to enhance environmental performance and good practice across the oil and gas upstream industry. We also participate in several expert groups and joint industry programmes on topics including water stewardship, biodiversity, and reporting and disclosure.

We are a signatory of the Business for Nature Call to Action.

Working with these organisations and partners helps form and develop our own thinking with respect to sustainability.

Transparency and standards

We are a member of the Taskforce on Nature-related Financial Disclosures (TNFD) Forum. We are also a member of the Science Based Targets Network Corporate Engagement Program.

Our major installations are certified to independent environmental management system standards, such as ISO 14001 or equivalent systems required by local regulations. Major installations include crude oil and natural gas terminals, gas plants, manned offshore production platforms, refineries and chemical manufacturing facilities. Of these, 89% were certified at the end of 2023. We are pursuing certification for the remainder. See our 2023 Annual Report for more on the certification of our major installations.

More than 45% of our offices and laboratories in our real estate portfolio have been certified as sustainable by Leadership in Energy and Environmental Design (LEED), a leading green building rating system.

More in this report Sustainability at Shell | Biodiversity and ecosystems | Social investment
More on Shell websites Our approach | Working in partnership | Nature

Biodiversity and ecosystems

- World Heritage Sites: We will not explore for, or develop, oil and gas resources in natural and mixed World Heritage Sites.
- Critical habitats: Our new projects in areas rich in biodiversity – critical habitats – will have a net positive impact on biodiversity, commencing from 2021.
- Forest habitats: We will replant forests, achieving net-zero deforestation from new activities, while maintaining biodiversity and conservation value, commencing from 2022.

In 2003, we decided not to explore for, or develop, oil and gas resources in natural and mixed World Heritage Sites.

When planning a new project on land or offshore in the marine environment, we apply the mitigation hierarchy, a decision-making framework that involves a sequence of four key actions: avoid, minimise, restore and offset. We assess the potential impact of projects on biodiversity and local communities as part of our impact assessment process (see Respecting human rights and Embedding sustainability into our activities).

In 2023, we embedded our biodiversity commitments into our new Safety, Environment and Asset Management (SEAM) Standards, which take effect in mid-2024. We are developing guidance and sharing good practice across the organisation to support implementation (see Our approach to respecting nature).

Critical habitats

Potential new projects are screened to determine if they are located in a critical habitat. If we decide to proceed with a project that is in a critical habitat, we develop a biodiversity action plan. This sets out actions needed to follow the mitigation hierarchy and, where there is impact, the actions designed to achieve a net positive impact.

At the end of 2023, 43 of our new projects, which started after we launched Powering Progress in February 2021, were wholly or partly located in critical habitats. Of these, 20 already have a biodiversity action plan in place to work towards a net positive impact, compared with four in 2022.

Achieving a net positive impact on biodiversity can take many years. Examples of activities in development or under way in 2023 include:

- identifying opportunities to restore heathland habitats around the Nyhamna gas processing plant in Norway;
- collaborating with Universiti Malaysia Sarawak to help understand environmental conditions in the region and support turtle conservation; and
- monitoring our annual progress towards achieving a net positive impact at the biodiversity offset sites managed by our QGC business in Australia.

Nature-based solutions

We set a commitment in 2021 that our nature-based solution projects, which protect, transform or restore land, will have a net positive impact on biodiversity. This commitment is embedded in our new SEAM Standards, which take effect in mid-2024. It applies to all nature-based projects we invest in directly that generate carbon credits.

These projects work to achieve accreditation on net positive impact on biodiversity from a standard or regulation equivalent to the voluntary Climate, Community and Biodiversity Standards (CCB). The CCB standards set out criteria for having a positive impact on climate change, local communities and biodiversity. The projects are audited by independent third parties.

In 2023, all our direct-investment nature-based projects that were certified and produced carbon credits complied with this commitment.

Forest habitats

We use the definition of forest used by the Food and Agriculture Organization of the United Nations.

Deforestation occurs when forests are converted to non-forest uses. Our aim is to avoid deforestation, in line with the mitigation hierarchy. Where avoidance cannot be achieved, we require our projects and assets to develop and implement reforestation plans that include measures 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.

Between January 2022 and the end of 2023, around 292 hectares had been deforested as a result of our new activities, which occurred largely in Australia, Canada and Nigeria where reforestation plans have been finalised.

More in this report Sustainability at Shell | Our approach to respecting nature | Carbon credits including from nature-based solutions
More on Shell websites Our approach | Water | Circular economy and waste

Resource use and circular economy

Managing waste

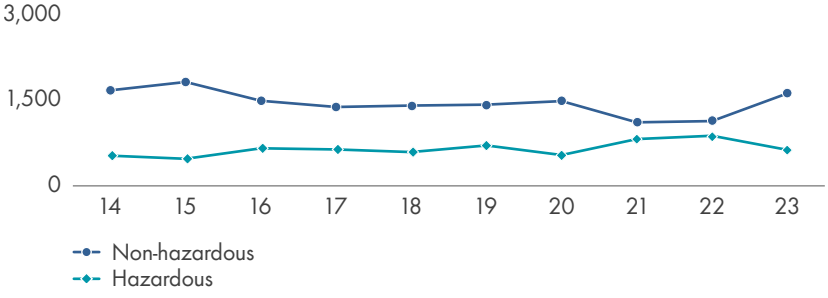
- Circularity and waste: Our businesses are developing local waste management plans. We are exploring ways to improve the application of circular economy principles by developing circularity strategies.

As part of our overall respecting nature ambition, we aim to use water, other resources and materials efficiently, and to increase reuse and recycling. We have been conducting detailed assessments across our businesses to better understand our waste streams and define our approach.

In 2023, we started to embed the findings from the 24 waste and circularity assessments we conducted in 2021 and 2022 into local performance management systems. Our businesses are now developing local waste management plans. We are investigating options to reduce some of the more significant of our waste streams such as biosludge, potentially contaminated soils and drilling fluids.

We are exploring ways to improve the application of circular economy principles and to identify and integrate the risks and opportunities associated with a "rethink, refuse, reduce, reuse, repair, recycle" hierarchy. We also work with our supply chain to help our businesses progress towards our aim of zero waste (see Supply chain).

Waste disposal
Thousand tonnes



In 2023, we disposed of 631 thousand tonnes of hazardous waste, compared with 878 thousand tonnes in 2022. The decrease was due, in part, to lower volumes of sour water for deep-well disposal from processing activities at the Shell Scotford Refinery in Canada.

We disposed of 1,619 thousand tonnes of non-hazardous waste in 2023, compared with 1,135 thousand tonnes in 2022. The increase was primarily caused by higher volumes of water from production and maintenance activities that required disposal at the Shell-operated Scotford Upgrader (Shell interest 10%), Canada, and the ramp-up of low-carbon solutions and other project work.

In total, we disposed of 2,251 thousand tonnes of waste, compared with 2,012 thousand tonnes in 2022. We also sent 654 thousand tonnes of residual materials for reuse, recycling or use as a raw material in another process. For example, waste that might otherwise go to landfill can be incinerated to generate energy.

Find out more about waste and our circular economy approach at www.shell.com/sustainability/environment/circular-economy-and-waste.

More in this report Sustainability at Shell | Our approach to respecting nature | Plastics
More on Shell websites Our approach | Circular economy and waste | Water

Plastics

We will work with our suppliers and contractors to help end plastic waste in the environment: By 2030, we will increase the amount of recycled plastic in Shell-branded packaging to 30% and ensure that the packaging we use for our products is reusable or recyclable.

Shell supports the need for improved circularity of the global plastics market and encourages reduction, reuse and recycling of plastics. We are a founding member of the Alliance to End Plastic Waste, which helps governments to assess and improve waste collection and waste management.

Reducing, reusing and recycling our packaging

We are working with our suppliers and contractors to help end plastic waste in the environment. By 2030, we aim to increase the amount of recycled plastic in Shell-branded packaging to 30% and ensure that the packaging we use for our products is reusable or recyclable.

In 2023, 19% of the plastic packaging for Shell-branded car care, food and drink products globally was made from post-consumer recycled material, compared with 8% in 2022. In Europe, 31% of the plastic used in our Shell Car Care packaging for screenwash, coolant and other products was post-consumer recycled (up from 6% in 2022) and 90% of it was recyclable.

Also in 2023, we launched our first lubricant bottles made from 100% post-consumer recycled plastic for selected premium products produced at our plants in Thailand, India, Indonesia and Malaysia. In Europe, we introduced jerrycans which use around 27% less plastic and have better recycling potential than the alternative of round pails. In China, we introduced a 1-litre label-free bottle for motor oil which uses 3% less plastic by weight compared with the standard alternative. In China and North America, our bag-in-box lubricants use 89% less plastic than 1-litre plastic bottles. And in North America, our pilot campaign to collect and recycle lubricant containers recovered around 4,260 kg of hard-to-degrade plastic which might otherwise have been deposited in landfills.

In 2023, more than 40% of Shell-owned service stations had eliminated unnecessary single-use plastic including cutlery, straws and stirrers, up from 30% in 2022; and almost 60% had completely removed single-use plastic bags, compared with 40% in 2022.

Recycling plastic waste as chemical feedstock

Shell is helping to develop a viable plastic circular economy. We are working with partners across the plastic waste value chain, such as the waste management industry and pyrolysis oil producers, to help develop a circular value chain globally.

In 2023, we signed several strategic co-operation agreements with partners to unlock access to plastic waste feedstock and enable long-term storage of pyrolysis oil. Work on our new pyrolysis oil upgrader at the Shell Chemicals Park Moerdijk in the Netherlands continues. The plant, which is expected to start production in 2024, will have the capacity to process up to 50,000 tonnes of pyrolysis oil a year.

While Shell sees customer demand for circular chemicals, the pace of growth globally is less than expected due to lack of available feedstock, slow technology development and regulatory uncertainty. As a result, in 2023 we concluded that the scale of our ambition to turn 1 million tonnes of plastic waste a year into pyrolysis oil by 2025 is unfeasible.

Find out more about how we transform plastic waste into chemical feedstock.

Discover more about waste and our circular economy approach at www.shell.com/sustainability/environment/circular-economy-and-waste.

More in this report Sustainability at Shell | Product stewardship | Driving innovation
More on Shell websites Our approach | Sustainability at our service stations | Shell Lubricant Solutions

Conserving water resources

Water

We are implementing water stewardship principles across our businesses and developing local improvement plans. This includes focusing on the sustainable management of fresh water, including in water-stressed areas.

In 2023, we continued to make progress in reducing our consumption of fresh water in highly water-stressed areas.

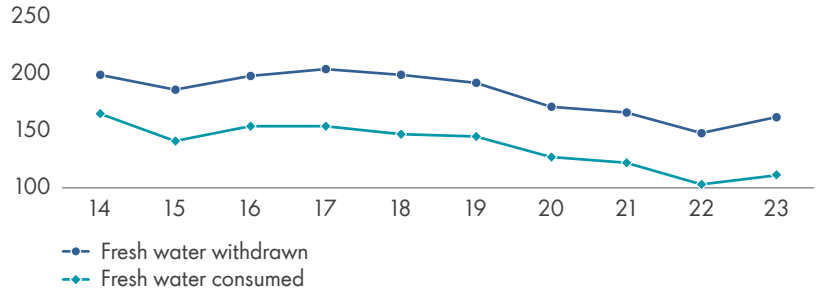
At the end of 2023, four of our major facilities were located in areas where there is a high level of water stress based on analysis using water stress tools such as the World Resources Institute's Aqueduct Water Risk Atlas and local assessments. The facilities are:

- Pearl GTL (gas-to-liquids) plant in Qatar;
- Shell Energy and Chemicals Park Singapore;
- Shell Jurong Island chemical plant in Singapore; and
- Tabangao Import Terminal in the Philippines.

In 2023, these four facilities consumed 17 million cubic metres of fresh water, compared with 18 million cubic metres in 2022. With this reduction, we achieved our commitment to reduce fresh-water consumption by our facilities in areas of high water stress by 15% compared with our 2018 baseline of 25 million cubic metres. The reduction was mainly the result of decreased water use at the Shell Energy and Chemicals Park Singapore following the decommissioning of some processing units, with a smaller reduction at the Pearl GTL facility in Qatar.

Fresh water withdrawn and consumed [A]

Million cubic metres

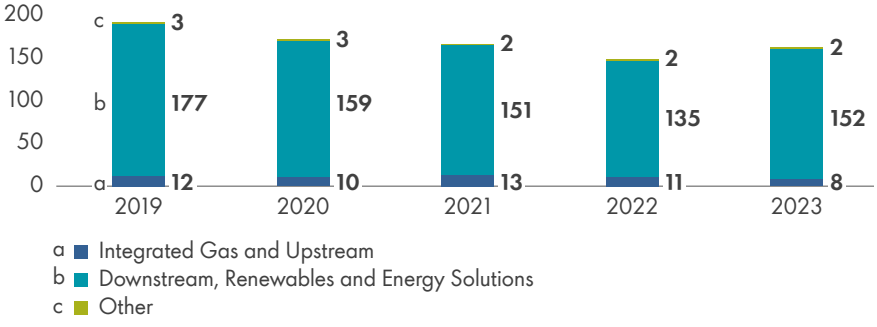


[A] Fresh-water figures do not include once-through cooling water.

In 2023, for all our sites, our overall intake of fresh water increased to 162 million cubic metres from 148 million cubic metres in 2022. The increase was due, in part, to the effects of a fire at the Shell Deer Park chemical plant and increased production at Shell Polymers Monaca in the USA.

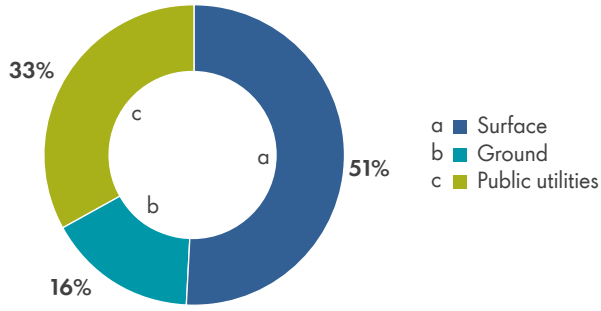
Fresh water withdrawn by business

Million cubic metres



Fresh water withdrawn by source

Percentage



Of our fresh-water intake in 2023, 33% was from public utilities, such as municipal water supplies. The rest was taken from surface water, such as rivers and lakes (51%) and groundwater (around 16%). Around 94% of our fresh-water intake in 2023 was used for manufacturing oil products and chemicals, with the rest mainly used for oil and gas production.

In addition to our Powering Progress commitment to reduce water consumption in water-scarce areas, we also aimed to assess options for further reduction goals. In 2021 and 2022, we conducted detailed water use assessments at six major Shell facilities. The results of these assessments, along with discussions with stakeholders, have moved us towards a more sustainable and holistic stewardship approach. This goes beyond focusing on water use and includes aspects of governance and water quality, involvement of stakeholders and consideration of catchments. We are now implementing water stewardship principles across our businesses and developing local improvement plans.

By the end of 2023, we had completed detailed assessments against these principles at eight of our downstream and upstream facilities to identify opportunities for improvement. We plan to roll out the programme across other facilities and projects in 2024.

Waste water and produced water

We track low-level concentrations of oil, grease and other hydrocarbons 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.

In 2023, the combined total of hydrocarbons discharged to surface water across all our facilities increased to 1.0 thousand tonnes, compared with 0.9 thousand tonnes in 2022, which was due, in part, to discharges at the Shell Energy and Chemicals Park Singapore.

We disposed of 58 million cubic metres of produced water in 2023, which is unchanged from 2022.

Find out more about water use at www.shell.com/sustainability/environment/water.

More in this report Sustainability at Shell | Our approach to respecting nature | Managing waste
More on Shell websites Our approach | Circular economy and waste | Nature

Air quality

Air quality continues to be embedded in our environmental standards. Good air quality contributes to the health of the world's population and the natural world.

We are developing a range of choices for customers – from electric vehicle charge points to hydrogen – to help people and companies reduce their transport emissions.

For heavy-duty road transport, liquefied natural gas (LNG) as a fuel and gas-to-liquids fuel and motor oils help reduce sulphur emissions, particulates and nitrogen oxide compared with oil-based products. For ships, LNG also reduces these emissions and is the lowest-carbon fuel currently available at scale today. We have built up one of the largest LNG bunkering networks on key shipping routes to enable more customers to use LNG as a fuel.

Sulphur oxide, nitrogen oxide and volatile organic compound emissions

We follow our own standards and those of local regulators to manage airborne pollutants in our oil and gas production and processing, including emissions of nitrogen oxides, sulphur oxides and volatile organic compounds.

Our sulphur oxide (SO_X) emissions in 2023 decreased to 31 thousand tonnes from 37 thousand tonnes in 2022. The decrease was mainly because of less flaring at the Shell-operated Scotford Upgrader in Canada and divestment of Shell-operated Upstream assets in Tunisia.

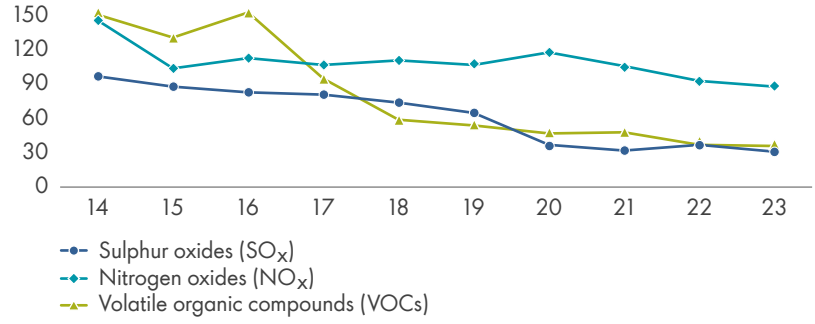
Our nitrogen oxide (NO_X) emissions in 2023 decreased to 88 thousand tonnes from 93 thousand tonnes in 2022, due, in part, to divestments of Shell-operated Upstream assets in Tunisia and the Philippines and downtime of generators at Shell-operated assets in Trinidad and Tobago.

Our emissions of volatile organic compounds (VOCs) in 2023 decreased to 36 thousand tonnes in 2023 from 37 thousand tonnes in 2022 because of, in part, planned and unplanned production stops at our Shell MDS gas-to-liquids facility in Malaysia.

To find out more about air quality, visit www.shell.com/airquality.

Acid gases and volatile organic compounds

Thousand tonnes



More in this report Sustainability at Shell | Our approach to respecting nature
More on Shell websites Our approach | Zero routine flaring by 2025 | Decarbonising mobility

Powering lives

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

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50	Providing access to energy
51	Working with our suppliers
53	Contributing to communities
56	Diversity, equity and inclusion
57	Worker welfare
58	Respecting human rights
60	Managing our impact on people
62	A just transition

Our approach to powering lives

Shell is dedicated to making a positive impact on people around the world, and powering lives explains how we do that. It includes providing the energy people need, championing inclusion, respecting human rights and contributing to local communities.

People's lives are better with energy. It provides warmth and light, cooked food and transport. We deliver this for millions of people around the world every day and are working to provide energy to those who do not yet have it.

We also want to help communities benefit from having us as their neighbour. We generate jobs, pay billions in tax each year and support start-ups, local businesses and education programmes. And we promote human rights in the communities, companies and organisations we work with. This includes activities such as advancing worker welfare and shaping an inclusive world so that everyone can be themselves.

Embedding a people-centred approach

Respecting people has been integral to the way we do business for many years. Shell's HSSE & SP Control Framework [A] sets out how we identify, assess and manage our impacts on communities where we operate, including any impact on human rights. The framework also defines how we should share the benefits arising from our presence, such as by providing local employment and contractual opportunities.

[A] We are transitioning from the HSSE & SP Control Framework to our new Safety, Environment and Asset Management (SEAM) Standards as part of the Shell Performance Framework. The SEAM Standards will come into effect in mid-2024.

As part of our aim to become one of the most diverse and inclusive organisations in the world, our CEO and Executive Committee are accountable for our progress against our diversity, equity and inclusion goals.

The importance of respecting people also extends to our suppliers. Shell's Supplier Principles outline our expectations for business integrity, including safety, security, labour and human rights, and environmental and social performance. We expect all suppliers to understand and implement the principles in their supply chains when working with Shell.

Open dialogue

Our commitment to continuous improvement means we have several mechanisms to encourage people to raise issues of concern. This includes the opportunity to report them anonymously through, for example, the Shell Global Helpline; and our community feedback mechanism and network of 148 community engagement practitioners, who act as a bridge between the communities where we operate and our activities. We also have reporting mechanisms for workers to speak freely about injustices or poor facilities. By encouraging people to raise their concerns and ideas for improvement, we hope to make a positive impact on people's lives and livelihoods.

More in this report Providing lower-carbon electricity | Letter from the CEO | Our Powering Progress targets
More on Shell websites Our approach | Working with communities | Diversity, equity and inclusion

Providing access to energy

Around 760 million people in the world have no electricity, according to the International Energy Agency [A], and millions more have unreliable power supply.

[A] International Energy Agency, SDG7: Data and Projections, 2023.

Shell works to bring a reliable and affordable supply of electricity to those who do not have it. We do this commercially, by investing in businesses that supply energy access in emerging markets; and socially, by investing funds and expertise in access to energy programmes.

Investing in energy access

Through our commercial investments, we are working to improve the reliability of existing power supply to on-grid customers and to provide first power to off-grid customers and communities.

We are seeking strategic partnerships with governments, utilities, developers, banks and investors to address local challenges and opportunities.

In 2022, we acquired Daystar Power, a provider of solar power to businesses in West Africa. The investment helps expand our energy business into developing markets like those in Africa where more low-carbon electricity is needed. Daystar is now expanding its operations into South Africa. Daystar Power is present in seven countries and runs more than 400 power installations. It has installed more than 50 megawatts of solar power for commercial and industrial customers.

In 2024, we took a further step towards providing access to energy for those without. We pledged $200 million as part of a broader initiative to help people get access to energy in the near and medium term. The initiative aims to help millions of people in underserved communities in sub-

Saharan Africa, India and South-east Asia get access to electricity and improved cooking conditions (as defined by the World Bank Multi-Tier Framework).

Read more about our commercial energy access business at www.shell.com/emerging-markets-power.

Social programmes

Separate from our commercial activities, we invest in social programmes that benefit communities where we work. Through these voluntary initiatives, we work with partner organisations to help individuals and communities access reliable electricity.

In 2023, we continued to implement programmes to improve access to energy. Through these programmes, around 42,000 people – in India, Malaysia, the Philippines and South Africa – gained access to either electricity or improved cooking conditions. The programmes also provide micro-enterprises with reliable supplies of renewable electricity to power equipment that can generate income, such as water pumps, welding machines or refrigerators to keep agricultural produce fresh.

For instance, in India, we partnered with Care India to promote the use of improved cooking solutions in 25 villages in South Gujarat. Around 5,800 households, two-thirds of those reached by the project, are now using an improved cookstove, compared with none before the project.

And in Nigeria, we worked with Pact in 2022 and 2023 to help micro-enterprises switch from diesel generators to electric motors to power their businesses. The project enabled a 30% reduction in energy consumption and a 60% increase in recorded income.

Read more about how our social investment programmes help to increase access to energy at www.shell.com/sustainability/communities/access-to-energy.

More in this report Providing lower-carbon electricity | Letter from the CEO | Our Powering Progress targets
More on Shell websites Our approach | Working with communities | Local employment and enterprise

Working with our suppliers

Supply chain

Our standard contract terms require adherence to the Shell Supplier Principles or equivalent principles that include statements on complying with environmental laws and regulations, using energy and natural resources efficiently, and minimising waste, emissions and discharges. We continue to explore how we can source responsibly in our supply chain.

Shell aims to work with suppliers, including contractors, that behave in an economically, environmentally and socially responsible manner, as set out in our Shell General Business Principles and Shell Supplier Principles. Our standard contract terms require adherence to these or equivalent principles. They require contractors and suppliers to:

- protect the environment in compliance with all applicable environmental laws and regulations;
- use energy and natural resources efficiently; and
- continually look for ways to minimise waste, emissions and discharges from their operations, products and services.

In 2023, we worked with around 25,000 suppliers globally.

Collaboration with suppliers is crucial to achieving Powering Progress. By delivering, learning and improving together with honesty, integrity and mutual respect, we can accelerate our shared progress towards achieving net zero.

In 2023, our operated and non-operated ventures spent around $48.6 billion on goods and services from suppliers around the world [A].

[A] Non-GAAP financial measure. See Reconciliation of non-GAAP financial measures where non-GAAP reconciliation is provided.

Decarbonising the supply chain

We work closely with our suppliers to promote decarbonisation. This involves using digital technology to establish transparency in energy consumption and emissions throughout our supply chains.

We encourage our suppliers to set emission ambitions and track performance, share best practice and exchange emissions data with their own supply chains. We are also developing plans to work with the 50 largest carbon emitters in our supply chain to create a shared vision and roadmap for decarbonisation. By the end of 2023, we had signed non-binding memoranda of understanding with eight companies to identify and potentially provide solutions for decarbonisation.

Respecting human rights

Our supply chains are at the heart of powering lives. Shell is committed to respecting human rights as set out in the UN Universal Declaration of Human Rights. Our focus in the supply chain is on worker welfare, modern slavery and other labour rights. When procuring solar panels and modules for our projects, for example, we engage extensively with our suppliers to promote transparency and understand human rights risks in our supply chain. In step with rapidly evolving societal and legislative expectations, our supplier due diligence relating to human rights performance will play an increasingly important role.

Towards zero waste

We are working towards achieving zero waste and circularity in our supply chains by reducing waste generated and increasing reuse and recycling in our business.

In 2023, we focused on improving waste management at 12 key facilities in Argentina, Australia, Canada, Qatar and the USA. We also developed a waste dashboard that provides visibility across facilities. It includes a waste baseline, waste management vendors, progress tracking against planned reductions, and identification of common waste types that can lead to opportunities for reducing waste.

We aim to source responsibly and build diverse local supply chains (see Local content). We are committed to collaborating with our suppliers to drive innovation and collectively move towards a sustainable future.

Discover how Shell contributes to sustainability through its supply chain at www.shell.com/business-customers/powering-progress-in-supply-chain.

More in this report Respecting human rights | Preparing for emergencies | Energy transition
More on Shell websites Our approach | Supplier Principles | Buying locally and encouraging local suppliers | Human rights

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.

Shell local content activities in 2023 [A]

83%
spent on goods and services purchased from suppliers based in the same country of operation

61%
spent in Canada, Germany, the Netherlands, the UK and the USA

12%
spent in low-income countries [B]

90%
of the 12% spent in low-income countries is with local suppliers [B]

[A] Based on the total spent globally on goods and services by Shell-operated ventures.
[B] Low-income countries are countries where gross national income is less than $15,000 a year per person, according to the UN Development Programme's Human Development Index 2021.

In 2023, around 83% of what we spent on goods and services globally was purchased from suppliers based in the same country of operation, also called local procurement. About 60.7% of our procurement was in Canada, Germany, the Netherlands, the UK and the USA, of which 83% was spent with local suppliers in these countries.

We estimate that around 12% of what we spent on goods and services was spent in countries that, according to the UN Development Programme's Human Development Index 2021, have a gross national income of less than $15,000 a year per person. In these countries, Shell companies spent around 90% with local suppliers.

In 2023, our Scotford Complex in Canada signed a Good Neighbour Agreement with the Alexander First Nation and Enoch Cree Nation, and awarded a three-year maintenance contract to an Alexander First Nation joint venture. In cases where First Nation entities are unsuccessful in their applications, we hold debriefings to explain why.

In Namibia, where we are exploring for offshore oil and gas, we conducted a baseline study with an industry peer in 2023 to assess the potential of local suppliers for inclusion in our supply chain.

And in the USA, the Women's Business Enterprise National Council named Shell a Top Corporation for Women's Business Enterprises for "implementing world-class diversity and inclusion programs that enable growth and innovation, while breaking down barriers for women enterprises". The award was one of four that Shell received in the USA in 2023 for its efforts in local content and diversity.

Discover more about how we work to support the countries in which we operate in the Community skills and entrepreneurship section and at www.shell.com/sustainability/communities/local-employment-and-enterprise.

More in this report Respecting human rights | Worker welfare | Indigenous Peoples
More on Shell websites Our approach | Supplier Principles | Buying locally and encouraging local suppliers | Human rights

Contributing to communities

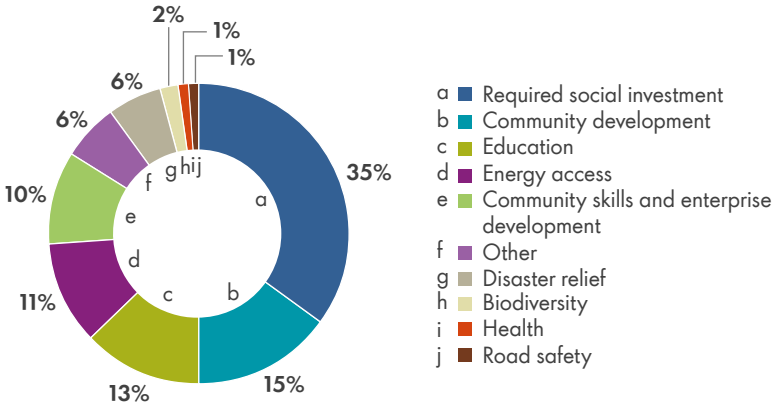
Social investment

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 maths education. In 2023, we spent almost $198 million on social investment, of which 35% was required by government regulations or contractual agreements. We spent the remaining $128.3 million (65%) on voluntary social investment.

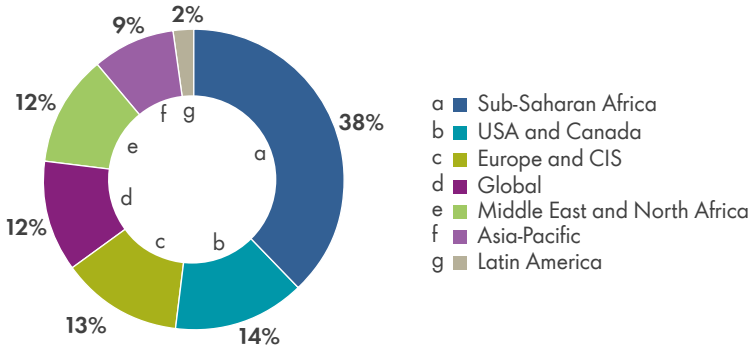
An important part of our social investment is our contribution to communities that have been impacted by disasters. Typically, Shell provides financial donations to non-governmental and partner organisations that are experienced in providing humanitarian aid in disaster situations. Where possible and needed, we also contribute our products and services, such as fuel, chemical products, transport and logistics. In 2023, Shell contributed $11.6 million towards disaster relief response across several countries, including $5 million towards earthquake relief in Turkey.

Social investment – by theme
Percentage



Around $84.8 million of our total social investment spend in 2023 was in countries that, according to the UN Development Programme's Human Development Index 2021, have a gross national income of less than $15,000 a year per person.

Social investment – by region
Percentage



Find out more about our social investment at www.shell.com/sustainability/communities.

More in this report Providing access to energy | Community skills and enterprise development | Contributing to Nigeria's economy
More on Shell websites Our approach | People | Working with communities | Generating prosperity for countries and communities

Community skills and enterprise development

Our community skills and enterprise development programmes benefit local communities where we operate by creating employment opportunities and contributing to economic development, while adding value to our supply chain.

In 2023, around 25,000 people participated in, and more than 2,800 businesses were supported by, our skills development programmes, which helped more than 1,800 people gain employment and/or improve their livelihoods after the training.

Shell has two global enterprise development programmes – Shell LiveWIRE and Shell StartUp Engine.

Shell LiveWIRE helps entrepreneurs in 18 countries start and/or grow their businesses. In 2023, Shell LiveWIRE trained about 3,400 people around the world and helped create more than 1,200 jobs. The programme supported 1,051 existing businesses and the creation of 196 new businesses, with 38 Shell LiveWIRE-supported businesses entering our supply chain in 2023. Shell started the programme in 1982.

Shell StartUp Engine is a global innovation programme for entrepreneurs in the energy industry. It supports early-stage start-ups in areas such as renewables, energy storage, smart grids and electric mobility. In 2023, the programme supported 44 start-ups in Brazil, the Netherlands (as New Energy Challenge), Singapore and the UK.

Find out more about community skills and entrepreneurship in the Local content section and at www.shell.com/sustainability/communities/local-employment-and-enterprise.

More in this report Social investment | Providing access to energy | A just transition
More on Shell websites Our approach | Supporting enterprise development and entrepreneurs | Local employment and enterprise | Buying locally and encouraging local suppliers

Education in science, technology, engineering and maths

We actively support science, technology, engineering and maths (STEM) through a range of programmes in more than 20 countries. NXplorers, our flagship STEM programme, aims to help young people develop creative thinking to bridge the skills gap. NXplorers is now active in 19 countries, and engaged more than 120,000 students in 2023.

In 2023, in the UK, our year-long Girls in Energy course taught some 230 young women about energy and career opportunities in the energy industry. And in Kazakhstan, we signed a non-binding memorandum of understanding with the Ministry of Education to strengthen co-operation in promoting critical, creative and systemic thinking by using the NXplorers methodology.

Read more about our contribution to STEM at www.shell.com/sustainability/communities/education.

More in this report Community skills and enterprise development | Providing access to energy | A just transition
More on Shell websites Our approach | Education | Local employment and enterprise

Contributing to Nigeria's economy

Shell's Nigerian businesses support the development of local communities and companies. The businesses in which Shell has interests employed more than 2,500 people directly in 2023 and provided jobs for many others in supplier networks. In 2023, the Shell Petroleum Development Company joint venture (SPDC JV), Shell Nigeria Exploration and Production Company (SNEPCo) and Shell Nigeria Gas (SNG) awarded 1,163 contracts to Nigerian-registered companies.

2,500+
people employed by Shell in Nigeria, plus more than 9,000 contractors

96%
employees in Nigeria who are Nigerian

400
power installations run by Daystar Power, in seven countries

1,163
contracts awarded to Nigerian-registered companies in 2023

10
health-care projects supported by the SPDC [A] JV and SNEPCo [B]

3,700+
university grants awarded by the SPDC JV and SNEPCo since 2016

[A] The Shell Petroleum Development Company of Nigeria Limited (SPDC), which has a 30% interest in the SPDC joint venture (SPDC JV) and produces oil and gas in the Niger Delta.
[B] The Shell Nigeria Exploration and Production Company Limited (SNEPCo), which operates in the deep waters of the Gulf of Guinea.

In 2023, SPDC and SNEPCo paid $1.09 billion in royalties and corporate taxes to the Nigerian government (SPDC $442 million, SNEPCo $649 million) [C].

[C] Royalties and corporate taxes paid to the Nigerian government comprise royalties and corporate income tax as defined and reconciled in "Reconciliation of non-GAAP financial measures, Taxes paid and collected".

Between them, the SPDC JV, SNEPCo and SNG also contributed $42.2 million in direct social investment. Social investment was mainly in projects related to community, health, education, road safety and enterprise programmes. These projects are often implemented in partnership with local authorities.

In 2023, the SPDC JV, SNEPCo and SNG invested $3 million in education programmes. More than 3,450 secondary school grants, 3,772 university grants and 1,062 cradle-to-career scholarship grants have been awarded since 2016.

In 2022, the SPDC JV transitioned from its existing global memorandum of understanding agreements to Host Communities Development Trusts (HCDTs) in accordance with the provisions of the Petroleum Industry Act of 2021. By 2023, 27 of the 33 HCDTs had been incorporated. These trusts were funded by the SPDC JV, with $42 million representing its statutory contributions for 2022 and 2023.

In 2022, Shell acquired Daystar Power, a provider of solar power to businesses in West Africa. The investment helps expand our energy business into developing markets like those in Africa where more lower-carbon electricity is needed. Daystar is now expanding its operations into South Africa. Daystar Power is present in seven countries and runs more than 400 power installations. It has installed more than 50 megawatts of solar power for commercial and industrial customers.

In January 2024, Shell announced the sale of SPDC. Completion of the transaction is subject to regulatory approvals and other conditions. To learn more visit: www.shell.com/media/news-and-media-releases/2024/shell-agrees-to-sell-nigerian-onshore-subsidiary-spdc/spdc-sale.

Read more about Shell's economic contribution in Nigeria at www.shell.com.ng/nigeria-briefing-notes.

More in this report Spill response and prevention in Nigeria | Our approach to safety | Providing access to energy
More on Shell websites Our approach | Shell Nigeria | Nigeria Briefing Notes | Buying locally and encouraging local suppliers

Diversity, equity and inclusion

We are focusing on removing barriers and creating equality of opportunity in four strategic priority areas: gender; race and ethnicity; lesbian, gay, bisexual and transgender plus (LGBT+); and disability inclusion and enABLEment, as set out in our powering lives commitments to diversity, equity and inclusion.

- Shell is working towards achieving 35% representation of women in our senior leadership positions by 2025 and 40% by 2030.
- We aim to increase racial and ethnic representation across our workforce so that we better reflect the communities in which we work and live.
- At Shell, we seek to provide a safe, caring and inclusive environment for LGBT+ and PWD (people with disabilities) staff so that they can be themselves and reach their full potential.
- By 2030, we will make our global network of service stations more inclusive and accessible to customers with physical disabilities.

Diversity, equity and inclusion

Our vision is a bold one – to become one of the most diverse and inclusive organisations in the world. A place where everyone – from employees to our customers, partners and suppliers – feels valued, respected and has a strong sense of belonging.

We have set clear goals for diversity, equity and inclusion (DE&I) and monitor these regularly. Our CEO and Executive Committee are accountable for progress. Detailed information on progress against our DE&I aspirations can be found at shell.com/DEI.

We are focusing on removing barriers and creating equality of opportunity in four strategic priority areas: gender; race and ethnicity; LGBT+; and disability inclusion and enABLEment.

Gender

As of December 31, 2023, 42% of Shell plc's Board members were women, compared with 55% in 2022. Additionally, a senior Board position, the Chief Financial Officer, is held by a woman. Representation of women on the Executive Committee rose to 43% at the end of December 2023, from 22% in 2022. As of January 1, 2024, we have more women than men on our Executive Committee.

We are working towards achieving 35% women in our senior leadership positions by 2025 and 40% by 2030. At the end of 2023, 32% of senior leadership were women, up from 30% in 2022.

In 2023, 38% of experienced hires were women, compared with 40% in 2022. Our graduate hires have consistently been 48% or 49% women since 2019, against our 50% ambition. In 2023, 40% of our graduate hires were women, compared with 49% in 2022.

Our overall representation of women in Shell was 35% at the end of 2023, compared with 33% in 2022.

Race and ethnicity

We aim to increase racial and ethnic representation across our workforce so that we better reflect, and support equity in, the communities where we work.

At the end of 2023, Shell plc's Board had three members who self-identify as ethnic minority, which exceeds the UK's Parker Review recommendation of at least one. In addition, one of our Executive Committee members self-identifies as being from an ethnic minority group.

In support of the 2023 Parker Review recommendations, by 2027, Shell aims to achieve 15% ethnic minority representation in its senior management [A].

[A] As per the Parker Review, senior management refers to Executive Committee members and senior managers who report directly to them. Ethnic minority refers to an individual who self-identifies as Asian, Black, Mixed/multiple, or other ethnic minority group, in line with the UK Office for National Statistics classifications.

LGBT+

We are working to advance lesbian, gay, bisexual and transgender plus (LGBT+) inclusion within Shell and the communities where we work. We promote equal opportunity and create an environment where people feel included, regardless of sexual orientation or gender identity.

We benchmark our initiatives externally. In 2023, Shell was recognised as an "Advocate" in the 2023 Workplace Pride Global benchmark, which is the highest level awarded to companies that stand out as clear leaders in LGBTIQ+ workplace inclusion. In the USA, we have received a 100% score from the Human Rights Campaign Foundation's Corporate Equality 2023 Index and have been awarded top score every year since 2016.

Disability inclusion and enABLEment

We aim to create 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 and throughout their careers with Shell, including access to educational resources, training programmes and personal and professional development.

In 2023, we launched a Disability, Accessibility and Inclusion intranet site, which provides comprehensive guidance and tools to help line managers, leaders, people with disabilities and employees to be active allies. Our enABLE employee resource groups provide expertise and advice to Shell leaders and our businesses on accessibility, disability inclusion and enABLEment.

We also offer a workplace accessibility service at 79 locations in 37 countries. The team is supported by functions such as Shell Health, Human Resources, Real Estate, and IT.

We are also providing a better experience for our customers with physical disabilities through an app, delivered by fuelService, that allows any customer with a disability to alert stations in advance and request assistance. As of December 2023, Shell offered the service at more than 8,250 stations in 10 countries. Shell's partnership with fuelService has been renewed until 2026.

Learn more about diversity, equity and inclusion at Shell in our 2023 Annual Report and at www.shell.com/DEI.

Read our 2023 Diversity Pay Gap Report for the UK.

Our people in 2023 [A]

103,000
employees at December 31, 2023

>70
countries and territories in which we operate

42%
women on the Board of Directors

43%
women on the Executive Committee

32%
women in senior leadership positions

35%
women employees

295,000
training days for employees and joint-venture partners

9,209
experienced hires joined Shell (38% women, 62% men)

460
graduate hires joined Shell (40% women, 60% men)

[A] All metrics throughout this section exclude the employees in portfolio companies, except for the metrics reflecting total employee number by gender and region, percentage of women employees, and certain mandatory training courses.

Employee engagement and dialogue

Insight into employee needs and perspectives enables Shell to continually learn and improve our policies, processes and practices.

The Shell People Survey is our key measure of employee engagement, motivation, affiliation and commitment to Shell. Internal and external research shows that increased employee engagement results in better business performance and improved safety. In 2023, the response rate to the survey was 88% (up from 87% in 2022). The average employee engagement score was unchanged at 79% from the 2022 level, which is top quartile in comparison with external benchmarks. This score does not include responses from the joint-venture partners who participated voluntarily in the Shell People Survey.

Across Shell, employees have access to the Executive Committee, 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 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 senior management.

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 representatives at asset and country level, as well as with the Shell European Works Council. In 2023, all our employees had access to an independent channel to raise their employment concerns or grievances. This includes the Shell Global Helpline, unions and local employee forums.

More in this report Respecting human rights | Ethical leadership | Our Powering Progress targets
More on Shell websites Our approach | DE&I awards and recognition | Shell in the UK Diversity Pay Gap Report

Worker welfare

We 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 10 Building Responsibly Worker Welfare Principles.

We continue to take steps to improve our approach, and that of our industry, to worker welfare. In 2023, we worked closely with Ipieca to co-create a programme to improve ethical recruitment and worker engagement in the oil and gas industry, which will be piloted in 2024.

In 2023, we worked with bp, Equinor and Ørsted to improve the rights and welfare of migrant workers in our supply chains. As a first step, the companies drafted a set of principles and guidelines in consultation with suppliers and civil society organisations. The aim is to improve accommodation and transport for migrant workers; adopt the principle that the employer, not the worker, should pay the cost of recruitment; and implement effective grievance mechanisms. The next step, starting in 2024, is to pilot the principles and guidelines in fabrication yards in Singapore.

An important part of our activities is to encourage workers to speak freely about injustices or poor facilities, anonymously if they wish. At our Shell Energy and Chemicals Park Singapore, we conducted a survey of more than 400 workers employed by 15 contractor partners, which was held over four days in seven languages. The initiative resulted in improvements to dormitories and rest areas and the construction of safe bridges and walkways.

During the year, our senior leadership visited worksites and accommodation in Singapore, Oman, Qatar and many other countries to engage with and listen to contract workers. We have found that site visits by senior Shell leadership help create a culture of trust, care and inclusion, especially among migrant workers employed by our partner companies.

Two of the issues raised by contractor workers at some sites, and in our industry as a whole, are payment of recruitment fees and the late payment of salaries. In 2023, we remedied late payment of contractor workers' salaries in Nigeria. We continue to work on both issues.

In 2023, senior executives from Shell's 23 major global contractors joined Shell executives in Norway for our annual Contractor Safety Leadership workshop. Areas of discussion were worker welfare and human rights, mental health, and technology solutions for safer work at the frontline.

Also in 2023, leadership teams from 25 Shell joint ventures and companies newly acquired by Shell met in the Netherlands to discuss topics such as worker welfare and to affirm support for industry efforts on worker welfare. We believe that the welfare of our workers is vital to enable them to perform safely at their best.

Our efforts to improve worker welfare are under continuous development. We continue to work on our salient human rights issues, including labour rights in the workplace. Our aim is to be transparent about our progress as well as the challenges we face in our operations and supply chain.

Read more about worker welfare at www.shell.com/sustainability/communities/worker-welfare.

More in this report Working with our suppliers | Diversity, equity and inclusion | Our Powering Progress targets | Respecting human rights
More on Shell websites Our approach | Human rights | Shell's approach to human rights (pdf)

Respecting human rights

Our approach to 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 Shell Code of Conduct. Shell is committed to respecting human rights as set out in the 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 the UN guiding principles.

Salient human rights

In 2023, we continued to work on our 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.

Shell employees working in these focus areas need to complete mandatory human rights training. About 1,750 employees had completed the training between its launch in 2021 and the end of 2023, which is 94% of those assigned the training. We encourage all employees to do the course, regardless of their role, to build greater understanding of human rights across Shell.

See the table below for examples of our salient human rights issues in each focus area.

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

For each of these areas, we have systems to identify impacts and to avoid or mitigate them. For example, Shell's HSSE & SP Control Framework [A] contains requirements that set out how we identify, assess and manage our actual and potential impacts on communities where we operate, including any impact on human rights.

[A] We are transitioning from the HSSE & SP Control Framework to our new Safety, Environment and Asset Management (SEAM) Standards as part of the Shell Performance Framework. The SEAM Standards will come into effect in mid-2024.

Our Shell Supplier Principles state that we expect our contractors and suppliers to respect the human rights of their workforce and to manage the social impacts of their activities on Shell's neighbouring communities. When procuring solar panels and modules for our projects, for example, we engage extensively with our suppliers to promote transparency and understand human rights risks in our supply chain. (See the Worker Welfare and Indigenous Peoples sections.)

We also continue to track emerging human rights and environmental due diligence legislation, and advance our efforts to strengthen human rights-related controls in our supply chain. (See also A just transition).

Critical habitats and people

We assess the potential impacts of our activities to manage and reduce any adverse effects they may have on the environment and on communities. We apply stringent standards across all our projects, particularly when we operate in critical habitats that are rich in biodiversity and in areas of cultural significance or close to local communities, including Indigenous Peoples. (See the Biodiversity and ecosystems and Indigenous Peoples sections).

Modern slavery

Shell is opposed to all forms of modern slavery. Such exploitation is against our commitment to respect human rights as set out in the UN 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.

Read more about our approach in our statement under the UK Modern Slavery Act at www.shell.com/uk-modern-slavery-act.

Read Shell Australia's Joint Modern Slavery Statement, prepared under Australia's Modern Slavery Act 2018, at www.shell.com.au/sustainability/reporting.

Security practices

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 quickly and effectively if they occur.

Shell is a member of the Voluntary Principles on Security and Human Rights (VPSHR) initiative. This is a multi-stakeholder initiative of governments, extractive sector industries and non-governmental organisations that gives guidance on how to respect human rights, while providing security for business operations. Shell implements this guidance across its companies, concentrating on countries where the risks of working with state 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 against a range of criteria.

The Chief Human Resources and Corporate Officer, who sits on the Executive Committee, is accountable for security matters.

Read more about our approach to human rights and security at www.shell.com/sustainability/transparency/human-rights and more about our implementation of the VPSHR at www.shell.com/vpshr.

More in this report Working with our suppliers | Diversity, equity and inclusion | Our Powering Progress targets | A just transition
More on Shell websites Our approach | Shell's approach to human rights (PDF) | Worker welfare

Managing our impact on people

Engaging with communities

We engage with communities as part of our approach to respecting human rights, including providing access to remedy.

Our HSSE & SP Control Framework [A] helps us to operate responsibly and avoid or minimise potentially negative social impacts of our operations. The requirements set out in the framework also help us to maximise benefits arising from our presence, such as providing local employment and contractual opportunities. When we divest assets or exit areas, we apply well-established processes to guide our risk assessment with the aim of leaving a positive legacy.

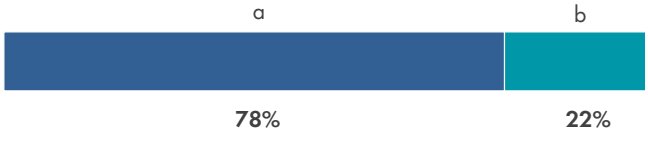
[A] We are transitioning from the HSSE & SP Control Framework to our new Safety, Environment and Asset Management (SEAM) Standards as part of the Shell Performance Framework. The SEAM Standards will come into effect in mid-2024.

We have community feedback mechanisms at our operations and projects to receive, track and respond to questions and complaints from community members. This enables us to capture and resolve concerns quickly in a transparent way, and to track our performance. We have been receiving and managing community feedback for more than 10 years, guided by the International Finance Corporation standards and then by the UN Guiding Principles for Business and Human Rights. In 2023, we received feedback at 80 sites in 26 countries.

Since 2020, we use our online community feedback tool to track and respond to questions, complaints and feedback that we receive. It allows our network of 148 community engagement practitioners to document feedback and outcomes. They are the face of Shell in the communities and act as a bridge between communities and our activities. In 2023, community engagement practitioners resolved 77% of the complaints, requests and questions we received. The rest were referred to other Shell functions or to higher management.

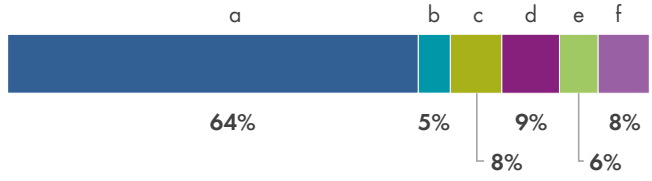
In 2023, 78% of feedback was received via the online tool, which gives us full visibility of the way the feedback was managed, including the time it took to resolve a complaint.

How feedback was received in 2023
Percentage



a Received via the online tool
b Received by other means

Time taken to resolve feedback in 2023
Percentage

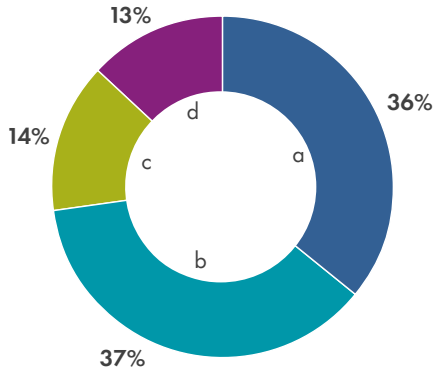


a Resolved in 7 days or sooner
b Resolved within 8 to 14 days
c Resolved within 15 to 30 days
d Resolved within 31 to 60 days
e Resolved within more than 60 days
f Complaints in progress at the end of December 2023

In larger facilities, we implement community feedback mechanisms aligned with the effectiveness criteria defined in the UN Guiding Principles on Business and Human Rights. In 2023, we increased the number of sites with community feedback mechanisms aligned with the criteria from 16 to 20. Several more sites have other procedures in place for managing feedback.

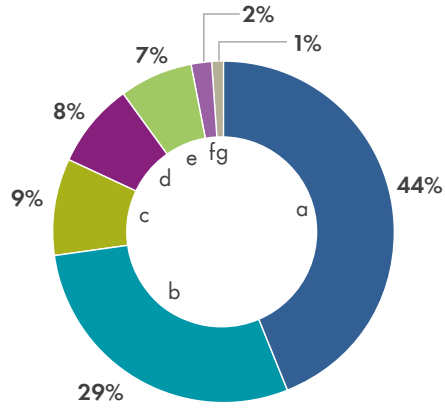
Read more about our work with communities at www.shell.com/sustainability/communities/working-with-communities.

Community feedback by type
Percentage



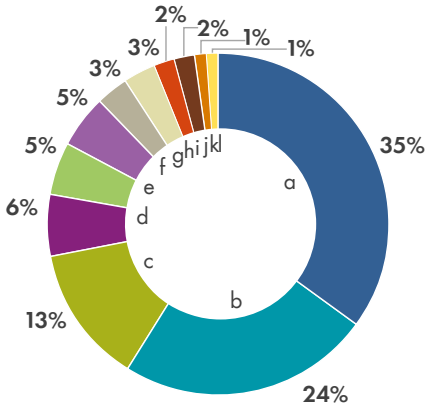
a Complaints
b Requests
c Questions
d Positive feedback

Complaints received globally by category
Percentage



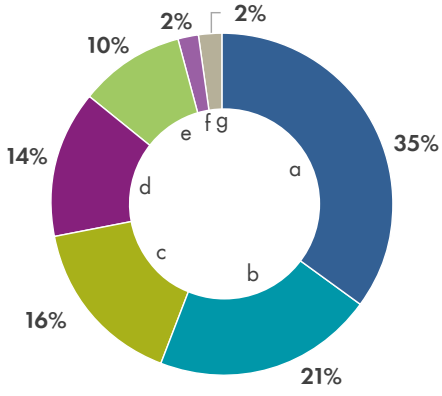
a Social
b Environment
c Safety
d Business integrity, contractual and commercial
e Health
f Unrelated to Shell
g Security

Environmental complaints by subcategory
Percentage



a Noise
b Odour
c Ecosystem, habitat, bio-diversity or natural amenity
d Dust
e Soil and water contamination
f Visual disturbance
g Flaring
h Impacts on water quantity
i Air quality
j Vibration
k Spill
l Light

Social complaints by subcategory
Percentage



a Infrastructure/Services
b Engagements
c Local content
d Land and resettlement
e Labour
f Economic/ Cost of living
g Social investments

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. 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 has a public position statement on Free Prior and Informed Consent (FPIC), a principle recognised in the UN Declaration on the Rights of Indigenous Peoples. It entails open dialogue, good-faith negotiations and, where appropriate, the development of agreements that address the needs of Indigenous Peoples.

For instance, in Peru, we are a partner in "Living Forests Forever", a REDD+ [A] project that Shell is funding and that is operated by Aider, a non-governmental organisation. The project aims to conserve Amazonian forests through communal forest management and strengthen local businesses to improve the quality of life of local Indigenous Peoples. Key principles that guide the project are the demarcation of indigenous territories and the inclusion of the indigenous communities in the project management committee along with Shell and Aider.

[A] REDD+ is a framework created by the UNFCCC Conference of the Parties to guide activities that reduce emissions from deforestation and forest degradation.

In Canada, Shell's Scotford Complex signed a Good Neighbour Agreement with its two closest indigenous communities, the Enoch Cree Nation and the Alexander First Nation. The agreement is a commitment to open doors, learn from one another, and build stronger commercial and cultural partnerships, including integrating First Nation businesses into Shell's supply chain (see Local content).

Read more about our approach to Indigenous Peoples at www.shell.com/sustainability/communities/working-with-communities.

More in this report Community skills and enterprise development | Respecting human rights | Contributing to communities
More on Shell websites Our approach | Local employment and enterprise | Human rights | Shell's approach to human rights (pdf)

Cultural heritage

Preserving cultural heritage is an important part of our efforts to manage our social impact. Cultural heritage refers to places of archaeological, historical, cultural, artistic and religious significance. It also includes the preservation of unique environmental features, cultural knowledge and traditional lifestyles.

Our approach starts with considering how to avoid or minimise our impact on cultural heritage. This can involve carrying out archaeological assessments to inform, among other things, project design and site selection. We then develop chance-find procedures to deal with previously unknown heritage resources that may be discovered during construction. We train staff and contractors to make them fully aware of these resources to give them the authority to halt work if necessary.

In Albania, for instance, where we began exploring for oil in 2019, our pre-drilling impact assessments identified unknown sites of cultural importance, some of which date back more than 2,000 years. We suspended our activities to allow local experts to excavate and find out more. This led to significant finds of importance for Albania's past. Read more at www.shell.com/inside-energy/preserving-albanias-past-while-building-for-its-future.

Read more about our approach to cultural heritage at www.shell.com/sustainability/communities/working-with-communities.

More in this report Community skills and enterprise development | Respecting human rights | Contributing to communities
More on Shell websites Our approach | Local employment and enterprise | Human rights | Shell's approach to human rights (pdf)

Involuntary resettlement

We sometimes require temporary or permanent access to areas of land or sea where people are living or working. We aim to avoid resettlement wherever possible. Where resettlement is unavoidable, we work with local communities to help them resettle and maintain, or improve, their standard of living in accordance with international standards for resettlement (notably the International Finance Corporation's Performance Standard 5 on land acquisition and involuntary resettlement). Our support may also include helping these communities to establish alternative livelihoods.

In Tanzania, Shell and Equinor – alongside their partners ExxonMobil, Pavilion Energy and MedcoEnergi – are supporting families that vacated a site in 2021 acquired by the national oil company for a proposed gas and liquefied natural gas development. The partners are providing in-kind support to supplement statutory government financial compensation and address residual impacts such as the loss of farmland. In 2023, the partners launched an agricultural assistance programme to help restore the living standards and livelihoods of the affected households. This was based on extensive surveys and the active involvement of the families, village leaders, regional and local authorities, and non-governmental organisations. Additional support measures are planned.

We understand that offshore activities can impact local fishermen and that action through the relevant industry associations is an effective way to manage and mitigate potential impacts. In 2023, we helped develop a new Ipieca guide for fishing baselines to identify, avoid or mitigate the potential impacts of offshore projects on fishing livelihoods and dependent communities.

Read more about our approach to involuntary resettlement at www.shell.com/sustainability/communities/working-with-communities.

More in this report Community skills and enterprise development | Respecting human rights | Contributing to communities
More on Shell websites Our approach | Local employment and enterprise | Human rights | Shell's approach to human rights (pdf)

A just transition

Shell recognises the importance of a just transition, which means a fairer distribution of the costs and benefits of the world's transition to a net-zero emissions energy system.

We aim to contribute to a just transition by working with governments and society to make a positive economic and social impact, while minimising negative effects, throughout our energy transition journey.

This is part of our work to power lives. In 2023, we made progress in supporting a just transition across a range of themes, including skills training, trialling a new model to share profits with local communities and improving energy access.

Skills for the future

As more jobs are created in renewable energy, people working in oil and gas may wish or need to acquire new skills.

In 2023, around 6,900 Shell employees – up from around 4,000 in 2022 – completed courses linked to the energy transition, including hydrogen production, carbon capture and storage, and greenhouse gas and energy management.

In the UK, we aim to help 15,000 people into jobs with a focus on the energy transition by 2035. Shell, along with its partners, is supporting the creation of two energy transition skills hubs in Scotland and one in Wales. The facilities, which are expected to open in 2024 and 2025, aim to provide people with skills for the future, such as in wind turbine maintenance and heat pump installation.

Communities

At our Pottendijk wind and solar power park in the Netherlands, which opened in 2023, we are sharing the proceeds of the renewable energy we generate. Over the next 16 years, we expect to pay around $2 million into a special community fund to be used as the community sees best.

In 2024, we pledged $200 million as part of a broader initiative to help people get access to energy in the near and medium term. The initiative aims to help millions of people in underserved communities in sub-Saharan Africa, India and South-east Asia get access to electricity and improved cooking conditions (as defined by the World Bank Multi-Tier Framework).

In Nigeria, Shell-funded investment company All On has agreed to invest $11 million in 25 mini-grid projects across the country. The company aims to finance affordable solar energy for communities that need it the most.

Human rights, governments and industry

Respecting human rights is an essential part of a just transition. 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 our commitment to managing human rights issues that are central to the just transition, including, but not limited to, the rights of Indigenous Peoples; Free, Prior and Informed Consent; and access to remedy.

We also work with organisations to review how we embed just transition principles across our businesses. Opportunities to collaborate will be an important part of our approach. We continue to be actively involved in Energy for a Just Transition, which is run by Business for Social Responsibility and The B Team, and Ipieca's Just Transition Task Force.

Learn how Shell's tax contribution to governments and proposal on fiscal frameworks for the energy transition can contribute to a just and equitable energy transition.

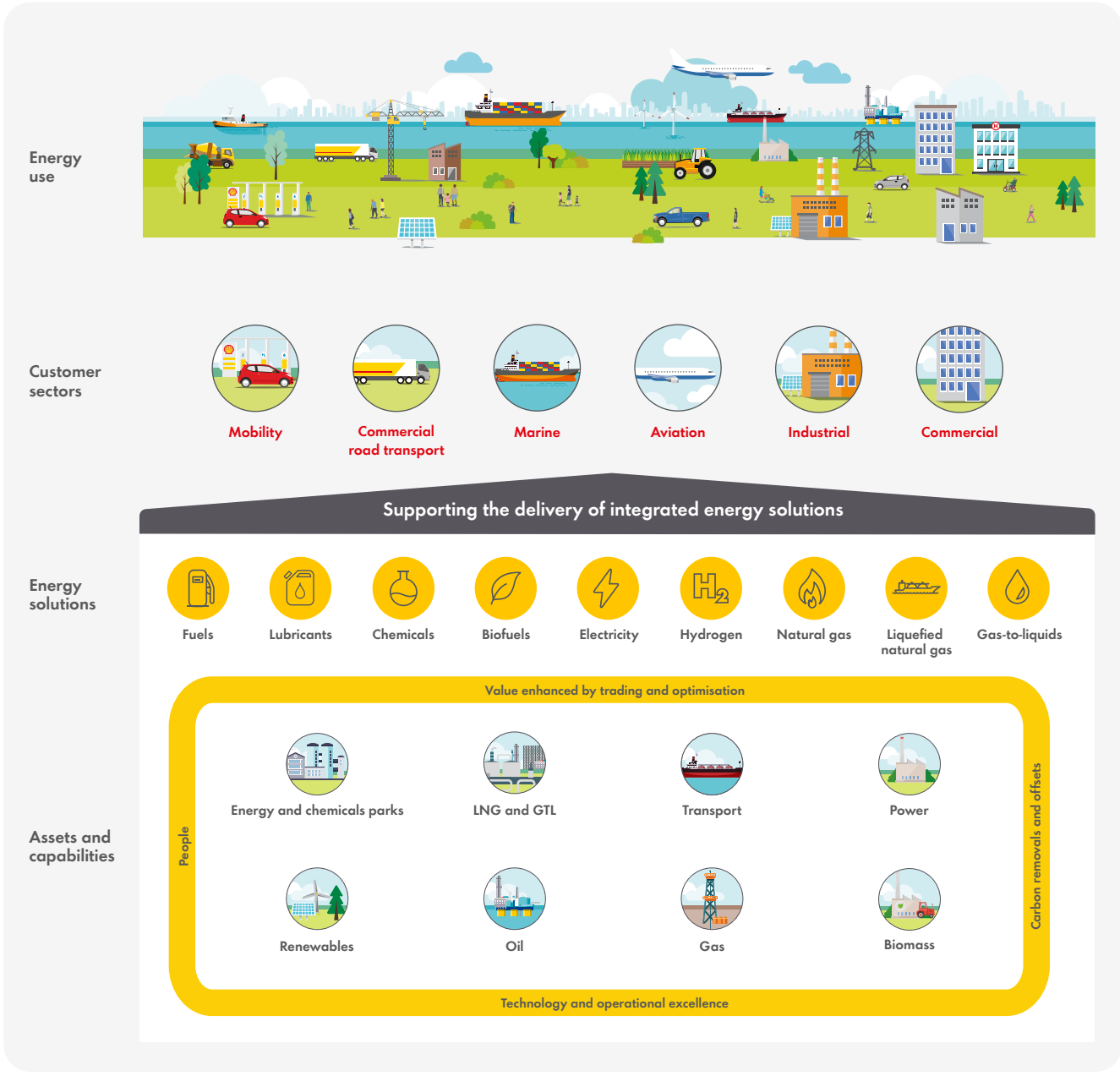
Read more about our approach at www.shell.com/justtransition.

Sustainability in our oil and gas activities

We aim to embed sustainability in the exploration, development and production of oil and gas.

65	Our business activities
66	Producing oil and natural gas
67	Embedding sustainability into our activities
68	Non-operated ventures
68	Acquisitions and divestments

Our business activities



More in this report Our Powering Progress targets | Letter from the CEO | Energy transition in action
More on Shell websites Our approach | What we do | Integrating sustainability into our activities

Producing oil and natural gas

Oil and gas will continue to play a crucial role in the energy system for several decades to come, with demand decreasing gradually over time. To maintain the secure supply of energy on which society relies, it is vital that the world does not dismantle the current energy system faster than it can build the energy system of the future.

Shell is investing in both low-carbon energy and oil and gas in a disciplined way, while finding sustainable and profitable ways to create value and transition to net zero.

We continue to make progress in reducing the greenhouse gas emissions from our oil and gas operations. In 2023, we implemented projects to reduce flaring at our Pearl GTL gas-to-liquids facility in Qatar, increase electrification of our sites in Canada and the Netherlands, and vent less methane at our QGC facility in Australia.

Read more about our approach at www.shell.com/what-we-do/oil-and-natural-gas and in our 2023 Annual Report.

Liquefied natural gas

Shell is a leading liquefied natural gas (LNG) supplier with diverse sources of LNG from different regions, alongside extensive shipping and storage assets and access to regasification plants.

LNG serves both energy security and the energy transition. Natural gas generates electricity, heating and cooling for industries, homes and businesses, and it provides grid stability and flexibility which enable continued growth for wind and solar energy in power generation.

LNG plays an important role in hard-to-electrify sectors like shipping and heavy-duty road transport, where it can reduce greenhouse gas emissions by up to 23% and 22% respectively from production to use compared with conventional fuels.

As one of the world's largest suppliers of LNG, we are able to ship natural gas to where it is needed most.

Shell has access to almost 40 million tonnes of capacity through its interests in 11 liquefaction plants. We are growing our portfolio by a third with around 11 million tonnes a year of new LNG capacity under construction, which will come on stream in the second half of this decade.

We are also working with our joint-venture partners to reduce the emissions intensity of our LNG projects. LNG Canada (Shell interest 40%), which is expected to start production later this decade, is designed to have the lowest carbon intensity of any large liquefaction facility currently operating anywhere in the world – about 60% lower than the average facility today and 35% lower than the best-performing facility.

We are partners in the North Field East and North Field South expansion projects in Qatar which will supply markets worldwide and include carbon capture and storage to reduce emissions.

Read more about liquefied natural gas at www.shell.com/what-we-do/oil-and-natural-gas/liquefied-natural-gas-lng..

Conventional oil and gas

We have conventional oil and gas operations in 15 countries, onshore and offshore, at various stages of the life cycle and with varying degrees of size and complexity. Our Upstream business aims to keep liquids production (crude oil and natural gas liquids) levels flat, while delivering lower-carbon oil.

In 2023, we delivered first gas from the Timi unmanned platform (Shell interest 75%) off the coast of Sarawak in Malaysia. Timi is powered by wind and solar energy and is around 60% lighter than a conventional wellhead platform powered by oil and gas.

Read more about our approach at www.shell.com/what-we-do/oil-and-natural-gas.

Deep water

Shell has a long history of using its knowledge, experience and proven deep-water technologies to unlock energy resources safely and efficiently.

In the US Gulf of Mexico, we are the leading operator and have one of the lowest greenhouse gas intensities in the world for producing oil, compared with other oil and gas producing members of the International Association of Oil & Gas Producers. Our latest Shell-operated development, Vito (Shell interest 63.1%), started production in 2023. Vito is a third the size of its original design, which is expected to reduce CO_2 emissions by around 80% over its operating life. We are using the same design concept for our Shell-operated Whale facility (Shell interest 60%) and Sparta project (Shell interest 51%) in the US Gulf of Mexico, which are expected to start production in late 2024 and 2028 respectively. Sparta will also feature all-electric topside compression equipment, significantly reducing greenhouse gas intensity and emissions from our own operations.

Read more about Shell's deep-water operations around the world at www.shell.com/what-we-do/oil-and-natural-gas/deep-water.

Shale oil and gas

Following the divestment of our Permian business in the USA in 2021, we have limited involvement in shale oil and gas production. We have shale production interests in Argentina and Canada.

Read more about shale oil and gas production at www.shell.com/what-we-do/oil-and-natural-gas/shale-oil-and-gas.

Arctic

We do not plan to pursue new frontier oil exploration leases in the Arctic.

Shell ended offshore exploration drilling operations in Alaska in 2015. We hold one licence interest in the North Slope area of Alaska. We also hold several licences from our previous activities in the Canadian Arctic, although we do not plan to develop these licences.

In Norway, Shell is a 10% partner in Irpa, an offshore natural gas discovery in the Norwegian Sea, which is ice-free all year round.

For more information visit www.shell.com/what-we-do/oil-and-natural-gas/exploration/arctic-regions.

More in this report Our Powering Progress targets | Letter from the CEO | Energy transition in action
More on Shell websites Our approach | Integrating sustainability into our activities | Embedding sustainability in our major projects

Embedding sustainability into our activities

Projects

Safety and the impact of our activities on the environment and communities are vital considerations when we plan, design and operate our projects and facilities. We want to help communities benefit from having us as their neighbour by generating jobs, supporting local businesses and promoting human rights and worker welfare.

The mandatory requirements in our Health, Safety, Security, Environment and Social Performance (HSSE & SP) Control Framework [A] help to ensure projects and facilities are designed and constructed safely, responsibly and in a consistent way.

[A] We are transitioning from the HSSE & SP Control Framework to our new Safety, Environment and Asset Management (SEAM) Standards as part of the Shell Performance Framework. The SEAM Standards will come into effect in mid-2024.

Respecting nature is embedded as a core business principle across our portfolio of projects globally. It extends across the entire lifespan of the facility, from design, engineering and construction to operation over many decades and decommissioning.

Assessing climate-related risks is an important part of our decision to invest in a project. Projects under development that are expected to have a material greenhouse gas impact must meet our internal carbon performance standards or industry benchmarks. This aims to ensure that our projects can compete and prosper in the energy transition.

Potential new projects are screened to determine if they are located in a critical habitat or result in deforestation. If we decide to proceed with a project located in a critical habitat, we develop a biodiversity action plan. This sets out actions needed to follow the mitigation hierarchy and, where there is impact, the actions needed to achieve a net positive impact.

In 2023, we started gas production at the unmanned Timi (Shell interest 75%) offshore platform in Malaysia, which is powered by solar and wind energy and is around 60% lighter than a conventional wellhead platform powered by oil and gas. In the US Gulf of Mexico, our latest Shell-operated development, Vito (Shell interest 63.1%), started production in 2023. Vito is a third the size of its original design, which is expected to reduce CO_2 emissions by around 80% over its operating life. We are using the same design concept for our Shell-operated Whale facility (Shell interest 60%) and Sparta project (Shell interest 51%) in the US Gulf of Mexico, which are expected to start production in late 2024 and 2028 respectively. Sparta will also feature all-electric topside compression equipment, significantly reducing greenhouse gas intensity and emissions from our own operations.

Read more about how we embed sustainability into the life of a project at www.shell.com/sustainability/embedding-sustainability-into-projects.

Read about our major projects at www.shell.com/about-us/major-projects.

Decommissioning and restoration

Decommissioning is part of the normal life cycle of every oil and gas structure. We work hard to close and dispose of installations in a safe, efficient, cost-effective and environmentally responsible manner. This includes restoring the surroundings of platforms and facilities in line with relevant legislation, while taking our own environmental standards into account.

We have decommissioning and restoration activities under way in Brazil, Brunei, India, the Netherlands, the UK and the USA. We seek to reuse, repurpose and recycle materials in decommissioning. At the end of 2023, we reported $19 billion on our balance sheet for current and non-current decommissioning and other provisions, which is how we account for future decommissioning expenses (see our 2023 Annual Report).

Shell invests in innovative decommissioning and restoration technologies, both in-house and by funding third parties. For instance, in the Netherlands, we have developed technology to deep-clean hazardous contaminants from unused pipelines. This allows us to sell the pipelines for reuse, such as for piping hydrogen, or recycle them and deliver on our ambitions of circularity.

Read more about Shell's approach to decommissioning at www.shell.com/sustainability/decommissioning-and-restoration.

More in this report Our Powering Progress targets | Letter from the CEO | Energy transition in action
More on Shell websites Our approach | Integrating sustainability into our activities | The Brent Story

Non-operated ventures

More than half of Shell's joint ventures are not operated by Shell. We do not have direct control over how these ventures embed sustainability in their operations. We seek instead to offer our support and exert a positive influence on their operations.

We expect a joint venture not operated by Shell to apply standards and processes, or principles, that are substantially equivalent to our own, specifically our:

- Shell General Business Principles;
- Shell Commitment and Policy on Health, Safety, Security, the Environment and Social Performance; and
- Statement on Risk Management (or a materially equivalent approach to risk and internal control).

In 2023, as part of our efforts to enhance transparency and the robustness of our methane emissions data reporting, we held sessions with several joint-venture partners to discuss the importance of methane emissions management, technical knowledge transfer and the benefits of the Oil & Gas Methane Partnership (OGMP) 2.0 reporting framework, of which we are a founding signatory. Several of our joint-venture partners subsequently joined the OGMP 2.0 programme. During the year, we were awarded Gold Standard status for our OGMP 2.0 reporting for the third consecutive year.

Shell is a non-operating partner in Basrah Gas Company (BGC, Shell interest 44%), an Iraqi joint venture that is one of the largest flare reduction projects in the world. BGC's sole purpose is to capture gas that would otherwise be flared from three giant oil fields operated by other companies. Since it started operations in 2013, BGC's gas capture has tripled to more than 1 billion cubic feet per day, which is 63% of the gas produced from the fields. The aim is to capture more than 90% of the gas by 2028.

For more information about how we work with our joint ventures, see www.shell.com/sustainability/integrating-sustainability-into-our-activities/working-with-nonoperated-ventures.

More in this report Sustainability at Shell | Our standards and policies | Methane emissions
More on Shell websites Our approach | Integrating sustainability into our activities

Acquisitions and divestments

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 health, safety, security and environmental performance; ethics and compliance; and where relevant, the effectiveness of its social performance programmes.

When applicable, we also share our emission reduction plans for divestments, including how we seek to comply with regulations and implement our commitments, for the buyer's consideration as they prepare to take over ownership.

Read more about how we acquire and divest at www.shell.com/sustainability/integrating-sustainability-into-our-activities/acquisitions-and-divestments.

More in this report Sustainability at Shell | Energy transition in action | Our standards and policies
More on Shell websites Our approach | Integrating sustainability into our activities

Our performance data

Each year, we measure our ESG performance and report on the safety of our operations, our impact on the environment and our contribution to communities.

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About our data

We began reporting voluntarily on our environmental, safety and social performance with the first Shell Report for 1997. We support transparency and share information and data in this report and on www.shell.com.

There are inherent limitations to the accuracy of environmental, safety and social performance data. We recognise that our data will be affected by these limitations, so we continue to improve data integrity by strengthening our internal controls.

We provide all non-financial data in this report on a 100% basis for companies and joint ventures where we are the operator unless otherwise stated, in line with industry practice. We believe that the operational control boundary best reflects existing regulatory requirements, as well as internal policies, for the management of potential health, safety, environmental and social impacts.

Our Scope 1 and 2 greenhouse gas emissions are calculated using two boundaries: operational control and equity. Under the operational control boundary, we report 100% of greenhouse gas emissions from the assets that we operate, regardless of how much equity we have in those assets. Under the equity boundary, we report the greenhouse gas emissions that correspond to our proportion of equity in both operated and non-operated assets. Scope 1 and 2 greenhouse gas emissions under the equity boundary for 2023 are expected to be published later in the year as an update to this report and on our corporate website.

Operations that we acquired or divested during 2023 are included only for the period in which we operated those assets.

Employees in portfolio companies are not included in most human resources data, except for the metrics reflecting total employee numbers, actual number of employees by geography, percentage of women employees, and certain mandatory training courses. We refer to the number of people employed on a full- and part-time basis. This includes people working in Shell subsidiaries, Shell-operated joint ventures and those seconded to non-Shell-operated joint operations, or ventures and associates.

Other data are collected from external sources, employee surveys and other internal sources as indicated. Some data in the social performance data table come from an internal survey completed by the senior Shell representative in each country. The accuracy of environmental and social data may be lower than that of data obtained through our financial systems.

We only include data in this report for 2023 that were confirmed by the end of February 2024. If incidents are reclassified or confirmed, or if significant data changes occur after preparation of this report, they will be updated the following year.

Assurance

We have clear standards and reporting requirements for our health, safety, security, environment and social performance (HSSE & SP) data. Shell companies are required to adopt these standards, which define management roles and responsibilities, the scope of data at facilities and how data are calculated and collected. These standards are part of our HSSE & SP Control Framework [A].

[A] We are transitioning to our new Safety, Environment and Asset Management (SEAM) Standards, which come into effect from July 1, 2024. The standards are part of the Shell Performance Framework, which is the overarching framework adopted by Shell to deliver on its strategy. Implementation of migration to the SEAM Standards, pursuant to guidance on expectations and process,will continue throughout 2024 into 2025.

To ensure we provide accurate information, our assurance process for HSSE & SP data is also a key element of the HSSE & SP Control Framework. Some examples of the assurance mechanisms in this process are:

- self-assessments at the facility level;
- internal audits at all levels of Shell;
- quarterly reviews and assessments of the data at all levels;
- an annual series of meetings between leaders at Group level and senior business managers to discuss outcomes and reporting parameters; and
- formal sign-off by Shell's senior country leaders.

The Carbon Reporting Committee, which was formed in 2021, is tasked with ensuring that Group-level greenhouse gas emission measures – absolute emissions and carbon intensity, and associated metrics – comply with all regulatory and legal requirements.

The Report Review Panel of independent experts helps to ensure our reporting is balanced, relevant and responsive to stakeholder interests.

LRQA has provided limited assurance of our net carbon intensity (measured and reported using the Net Carbon Footprint methodology), Scope 1 and Scope 2 greenhouse gas emissions data under operational control for 2023, and Scope 3 greenhouse gas emissions from energy products included in our net carbon intensity. Limited assurance means nothing has come to the verifier's attention that would indicate the greenhouse gas data and information, as presented in the Net Carbon Intensity Assertion and the Greenhouse Gas Statement/Assertion, were not materially correct. The most recent assurance statements are available at www.shell.com/ghg.

Conversions into US and Canadian dollars are based on the average exchange rates for 2023.

More in this report Our Powering Progress targets | Our standards and policies | Letter from the CEO
More on Shell websites Our approach | GHG assurance statements

Our standards and policies

Selected policies, standards and frameworks

We have a number of codes, policies, standards and frameworks that define how we aim to operate in socially and environmentally responsible ways. These include:

- Shell General Business Principles
- Shell Code of Conduct
- Shell Ethics and Compliance Manual
- Shell Code of Ethics for Executive Directors and Senior Financial Officers
- Shell Performance Framework
- Shell Supplier Principles
- Shell Health, Safety, Security, Environment & Social Performance Commitment and Policy
- Shell Health, Safety, Security, Environment & Social Performance Control Framework (to be replaced by the Safety, Environment and Asset Management (SEAM) Standards from mid-2024)
- Health, Safety, Security, Environment & Social Performance assurance
- Shell's Approach to Human Rights
- Voluntary Principles on Security and Human Rights
- Shell's ambition to be a net-zero emissions energy business
- Purchasing Policy Statement: Sustainable Sourcing of Biocomponents
- Corporate Political Engagement
- Shell's principles for producing tight/shale oil and gas

We also support a number of external voluntary codes.

Reporting standards and frameworks

Our reporting is informed by a number of standards such as the Ipieca Sustainability Reporting Guidance and the Global Reporting Initiative. In addition, we map our disclosures against the Sustainability Accounting Standards Board's Oil and Gas Exploration and Production Standard and are a founding member of and a signatory to the United Nations Global Compact. In our Annual Report, we set out our climate-related financial disclosures consistent with all of the Task Force on Climate-related Financial Disclosures' Recommendations and Recommended Disclosures. Organisations whose guidance we take into account include:

- Global Reporting Initiative
- Task Force on Climate-related Financial Disclosures
- Sustainability Accounting Standards Board
- Ipieca
- United Nations Global Compact
- United Nations Sustainable Development Goals

More in this report Our Powering Progress targets | Letter from the CEO | Ethical leadership
More on Shell websites Our approach | External voluntary codes | Voluntary reporting standards and ESG ratings

Our Powering Progress targets

0% **Net-zero emissions by 2050 [A], [D]**
(Scopes 1, 2 and 3)

2023 actual performance

Emissions from our own operations (Scope 1 and 2)

Target
Scope 1 and 2 emissions [B]
31%
reduction vs 2016

Target
Routine flaring
0.1 million
tonnes hydrocarbons flared

Target
Methane emissions [C]
0.05%

Emissions from the products we sell (Scope 3)

Target
Net carbon intensity (NCI)
6.3%
reduction (6–8% target)

Ambition
New ambition [F]
First performance metric to be reported in 2024
New

Metrics, targets and ambitions to 2050

Emissions from our own operations (Scope 1 and 2)

Target
Halving Scope 1 and 2 emissions by 2030 [B]
under operational control (2016 baseline)

Target
Eliminating routine flaring
from upstream operations by 2025 [E]

Target
Maintain methane emissions intensity below 0.2% and achieve near-zero methane emissions by 2030 [C]

Emissions from the products we sell (Scope 3)

Target
Net carbon intensity (NCI)
Introducing a range of 15–20% for our target to reduce NCI by 2030 (2016 baseline)
Updated

Ambition
Oil products ambition [F]
Reduce customer emissions from the use of our oil products by 15–20% by 2030, Scope 3 Category 11 (2021 baseline)
New

[A] We believe our total net absolute emissions peaked in 2018 at around 1.73 gigatonnes of carbon dioxide equivalent ($GtCO_2e$) per annum.
[B] Operational control boundary. Our 2030 and 2050 targets are on a net basis (i.e. inclusive of any future use of carbon credits).
[C] Covers all oil and gas assets for which Shell is the operator. Measured separately for assets with marketed gas (gas, LNG and GTL available for sale) and assets without marketed gas (oil and gas assets where gas is reinjected). 2023 actual performance relates to assets with marketed gas.
[D] Our targets for 2050 are based on mitigation activities undertaken by both Shell and our customers.
[E] Subject to completion of the sale of SPDC.
[F] In our Energy Transition Strategy 2024, we have 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. 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.

More in this report Sustainability at Shell | Our journey to net zero | Letter from the CEO
More on Shell websites Our approach | Our climate target | Shell Energy Transition Strategy

Safety performance data

Personal safety [A]

	Unit	2023	2022	2021	2020	2019	Ipieca	SASB	GRI
Fatalities [B]	Number	**5**	2	8	0	7	SHS-3	EM-EP-320a.1	403-9
Employees	Number	**0**	0	0	0	3	SHS-3	EM-EP-320a.1	403-9
Contractors [C]	Number	**5**	2	8	0	4	SHS-3	EM-EP-320a.1	403-9
Fatal accident rate	Number per 100 million hours	**1.1**	0.4	1.7	0.0	1.4	SHS-3	EM-EP-320a.1	403-9
Employees	Number per 100 million hours	**0.0**	0.0	0.0	0.0	1.6	SHS-3	EM-EP-320a.1	403-9
Contractors	Number per 100 million hours	**1.9**	0.7	2.9	0.0	1.2	SHS-3	EM-EP-320a.1	403-9
Serious injury, illness and fatality (SIF) [D][E]	Number	**12**	9	32	23	35	-	-	-
Employees	Number	**2**	0	5	5	9	-	-	-
Contractors	Number	**10**	9	27	18	26	-	-	-
Serious injury, illness and fatality frequency (SIF-F) [D][E]	Number per 100 million hours	**2.6**	2.0	6.9	6.0	7.5	-	-	-
Employees	Number per 100 million hours	**1.0**	0.0	2.7	2.7	4.9	-	-	-
Contractors	Number per 100 million hours	**3.7**	3.1	9.8	6.8	7.8	-	-	-
Total recordable case frequency (TRCF)	Number per million hours	**1.1**	1.0	0.9	0.7	0.9	SHS-3	EM-EP-320a.1	403-9
Employees	Number per million hours	**1.1**	0.8	0.5	0.4	0.6	SHS-3	EM-EP-320a.1	403-9
Contractors	Number per million hours	**1.1**	1.1	1.1	0.9	1.1	SHS-3	EM-EP-320a.1	403-9
Lost time injury frequency (LTIF)	Number per million hours	**0.5**	0.4	0.3	0.2	0.3	SHS-3	EM-EP-320a.1	403-9
Employees	Number per million hours	**0.6**	0.4	0.3	0.2	0.3	SHS-3	EM-EP-320a.1	403-9
Contractors	Number per million hours	**0.4**	0.4	0.4	0.3	0.3	SHS-3	EM-EP-320a.1	403-9

[A] In line with industry standards, we distinguish three contract modes. Mode 1: contractor/supplier performs work under Shell's HSSE Management System (HSSE MS); Mode 2: contractor/supplier performs work under its own HSSE MS, which is materially equivalent to Shell's HSSE MS; Mode 3: contractor/supplier performs work under its own HSSE MS. Also in line with industry standards, we report on safety performance only for contract modes 1 and 2. We have updated some of our historical figures following a review of the data.

[B] Includes fatal occupational injuries and illnesses except for those related to COVID-19. There were two COVID-19-related occupational illnesses in 2020 that resulted in death (0 employees, 2 contractors) and one COVID-19-related fatality in 2021 (0 employees, 1 contractor).

[C] Fatalities in 2023 include one contractor colleague who was injured in a 2023 incident and unfortunately succumbed to their injuries in February 2024.

[D] Defined as a serious work-related injury or illness, including those that resulted in fatality or a life-altering event. Life-altering event is defined as a long-term or permanent injury or illness with significant impact on daily activities. Examples of SIF include, but are not limited to, permanent total disability, amputation of a body part (full or partial), reduced bodily mobility (full or partial), third-degree burns, impaired vision, hearing, sense of taste or smell.

[E] The number of SIF cases for 2019 and 2020 reflects the best estimate. Combined workforce SIF frequency for 2019–20 was adjusted to account for some uncertainty in the number of SIF cases.

Road transport safety [A]

	Unit	2023	2022	2021	2020	2019	Ipieca	SASB	GRI
Road transport safety performance							SHS-4	-	-
Severe motor vehicle incident frequency rate [B]	Number of severe motor vehicle incidents per 100 million kilometres driven	**3.9**	3.3	1.7	2.1	3.3	SHS-4	-	-
Number of severe motor vehicle incidents [B]	Number	**18**	15	8	10	19	SHS-4	-	-
Number of road-transport-related fatalities (employees and contractors)	Number	**0**	1	0	0	2	SHS-4	-	-
Kilometres driven	Million km	**464**	456	473	471	578	SHS-4	-	-

[A] In line with industry standards, we distinguish three contract modes. Mode 1: contractor/supplier performs work under Shell's HSSE Management System (HSSE MS); Mode 2: contractor/supplier performs work under its own HSSE MS, which is materially equivalent to Shell's HSSE MS; Mode 3: contractor/supplier performs work under its own HSSE MS. Also in line with industry standards, we report on safety performance only for contract modes 1 and 2.

[B] Severe motor vehicle incident is defined as a motor vehicle incident resulting in a fatality, serious injury or a rollover of a vehicle.

Process safety [A]

	Unit	2023	2022	2021	2020	2019	Ipieca	SASB	GRI
Operational process safety events [B] [C] [D]	Number	**63**	66	103	104	131	SHS-6	EM-EP-540a.1	-
Tier 1	Number	**19**	15	38	34	41	SHS-6	EM-EP-540a.1	-
Integrated Gas and Upstream	Number	**3**	5	9	14	9	SHS-6	EM-EP-540a.1	-
Downstream, Renewables and Energy Solutions	Number	**15**	9	29	20	32	SHS-6	EM-EP-540a.1	-
Other	Number	**1**	1	0	0	0	SHS-6	EM-EP-540a.1	-
Tier 2	Number	**44**	51	65	70	90	SHS-6	EM-EP-540a.1	-
Integrated Gas and Upstream	Number	**13**	11	19	20	31	SHS-6	EM-EP-540a.1	-
Downstream, Renewables and Energy Solutions	Number	**30**	38	46	49	59	SHS-6	EM-EP-540a.1	-
Other	Number	**1**	2	0	1	0	SHS-6	EM-EP-540a.1	-

[A] We have updated some of our historical figures following a review of the data.

[B] Process safety events are classified according to guidance from the International Association of Oil & Gas Producers and the American Petroleum Institute.

[C] In 2023, there were two Tier 1 sabotage-related events (not included in the above data). The classification of sabotage-related process safety events is made on the best-endeavours basis.

[D] Operational process safety events for 2019 to 2022 have been restated to reflect the combination of the Integrated Gas and Upstream businesses into a single Integrated Gas and Upstream Directorate, and the Downstream and Renewables and Energy Solutions businesses into a new Downstream, Renewables and Energy Solutions Directorate in July 2023.

Health

	Unit	2023	2022	2021	2020	2019	Ipieca	SASB	GRI
Total recordable occupational illness frequency (TROIF) (employees only) [A]	Number per million hours	**0.5**	0.3	0.4	0.2	0.5	SHS-3	EM-EP-320a.1	403-10

[A] There were seven COVID-19 related employee occupational illnesses in 2023.

Security [A]

	Unit	2023	2022	2021	2020	2019	Ipieca	SASB	GRI
Using armed security	% of countries	**20**	16	14	14	20	SHS-7	-	-
Using armed company security	% of countries	**1**	1	3	1	1	SHS-7	-	-
Using armed contractor security	% of countries	**7**	9	8	8	11	SHS-7	-	-

[A] Data obtained from an internal survey completed by the senior Shell representative in each country.

More in this report Our Powering Progress targets | Greenhouse gas and energy data | Letter from the CEO
More on Shell websites Our approach | Our approach to safety | Transport safety

Greenhouse gas and energy data

Net carbon intensity (NCI)

	Unit	2023	2022	2021	2020	2019	Ipieca	SASB	GRI
NET CARBON INTENSITY [A] [B]									
Net carbon intensity	gCO_2e/MJ	**74**	76	77	75	78	-	-	-
Estimated total energy delivered by Shell	Trillion (10^12) MJ	**16.07**	16.29	17.89	18.40	21.05	-	-	-
Share of energy delivered per energy product type [C] [D] [E]									
Oil products and gas-to-liquids	%	**44**	44	45	47	56	-	-	-
Gas	%	**20**	22	25	21	17	-	-	-
Liquefied natural gas	%	**21**	20	18	19	18	-	-	-
Biofuels	%	**1**	1	1	1	1	-	-	-
Power	%	**14**	12	12	12	9	-	-	-
Total estimated greenhouse gas emissions covered by the net carbon intensity calculation [F] [G]	Million tonnes CO_2e	**1,185**	1,240	1,375	1,384	1,646	-	-	-
Carbon intensity of energy products type [H] [I]									
Oil products and gas-to-liquids	gCO_2e/MJ	**91**	91	91	89	89	-	-	-
Gas	gCO_2e/MJ	**66**	65	66	67	66	-	-	-
Liquefied natural gas	gCO_2e/MJ	**70**	70	70	70	71	-	-	-
Biofuels	gCO_2e/MJ	**39**	39	41	38	39	-	-	-
Power	gCO_2e/MJ	**49**	58	66	48	57	-	-	-

[A] The net carbon intensity calculation uses Shell's energy product sales volume data, as disclosed in the Annual Report and Sustainability Report. This excludes certain contracts held for trading purposes and is reported net rather than gross. Business-specific methodologies for net volumes have been applied to 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 also excluded from the scope of Shell's net carbon intensity metric.

[B] Acquisitions and divestments are included in the actual performance tracking with the target and baseline year unchanged. Note that acquisitions and divestments could have a material impact on meeting the targets.

[C] Percentage of delivered energy may not add up to 100% because of rounding.

[D] Total volume of energy products sold by Shell, aggregated on an energy basis, with electricity represented as fossil equivalents. This value is derived from energy product sales figures disclosed by Shell in the Annual Report and the Sustainability Report.

[E] Lower heating values are used for the energy content of the different products. A fossil-equivalence approach is used to account for electrical energy, in order to assess electrical energy on the same basis as our other energy products.

[F] Total CO_2e emissions estimated using Shell's Net Carbon Footprint value and the estimate of total delivered energy. Note, this estimated value is calculated from the portfolio average intensity value, which is determined in Shell's Net Carbon Footprint calculation. Total CO_2e emissions are only intended to give an indication of the scope of the emissions included within Shell's Net Carbon Footprint and do not represent an inventory of emissions. Carbon offsets were included in the total estimated GHG emissions covered by the Net Carbon Footprint calculation.

[G] These numbers include well-to-wheel emissions associated with energy products sold by Shell, on an equity boundary basis; they also include the well-to-tank emissions associated with the manufacturing of energy products by others that are sold by Shell. Emissions associated with the manufacturing and use of non-energy products are excluded.

[H] Emissions included in the carbon intensity of power have been calculated using the market-based method.

[I] The carbon intensity of biofuels reflects the global average for biofuels sold by Shell for 2023.

Scope 1 GHG emissions (operational control) [A] [B] [C] [D]

	Unit	2023	2022	2021	2020	2019	Ipieca	SASB	GRI
Direct GHG emissions (Scope 1)	Million tonnes CO_2e	**50**	51	60	63	70	CCE-4	EM-EP-110a.1	305-1
Carbon dioxide (CO_2)	Million tonnes	**49**	49	58	61	67	CCE-4	EM-EP-110a.1	305-1
Methane (CH_4)	Thousand tonnes	**41**	40	55	67	91	CCE-4	EM-EP-110a.1	305-1
Nitrous oxide (N_2O)	Thousand tonnes	**1**	1	1	1	1	CCE-4	EM-EP-110a.1	305-1
Hydrofluorocarbons (HFCs)	Tonnes	**19**	26	25	30	29	CCE-4	EM-EP-110a.1	305-1
Sulphur hexafluoride (SF_6)	Tonnes	**0.01**	0.01	0.01	0.01	0.01	CCE-4	EM-EP-110a.1	305-1
Perfluorocarbons (PFC)	Tonnes	**0**	0	0	0	0	CCE-4	EM-EP-110a.1	305-1
Nitrogen trifluoride (NF_3)	Tonnes	**0**	0	0	0	0	CCE-4	EM-EP-110a.1	305-1
Scope 1 emissions by business [E]									
Integrated Gas and Upstream	Million tonnes CO_2e	**22.7**	22.6	27.0	26.8	29.3	CCE-4	EM-EP-110a.1	305-1
Downstream, Renewables and Energy Solutions	Million tonnes CO_2e	**27.1**	27.9	32.8	36.0	40.2	CCE-4	EM-EP-110a.1	305-1
Refining [F]	Million tonnes CO_2e	**14.6**	14.8	20.1	23.4	28.0	CCE-4	EM-EP-110a.1	305-1
Chemicals	Million tonnes CO_2e	**10.8**	11.5	11.0	10.8	10.5	CCE-4	EM-EP-110a.1	305-1
Other Downstream [G]	Million tonnes CO_2e	**1.7**	1.6	1.6	1.8	1.8	CCE-4	EM-EP-110a.1	305-1
Other [H]	Million tonnes CO_2e	**0.1**	0.2	0.2	0.1	0.2	CCE-4	EM-EP-110a.1	305-1
Scope 1 emissions by country									
USA	Million tonnes CO_2e	**10.0**	10.0	12.9	15.8	19.4	CCE-4	EM-EP-110a.1	305-1
Middle East	Million tonnes CO_2e	**9.0**	8.0	8.9	8.9	8.5	CCE-4	EM-EP-110a.1	305-1
Netherlands	Million tonnes CO_2e	**6.0**	7.0	7.3	7.1	7.0	CCE-4	EM-EP-110a.1	305-1
Singapore	Million tonnes CO_2e	**4.0**	4.0	5.4	5.6	5.9	CCE-4	EM-EP-110a.1	305-1
Australia	Million tonnes CO_2e	**5.0**	5.0	5.0	3.9	6.6	CCE-4	EM-EP-110a.1	305-1
Canada	Million tonnes CO_2e	**5.0**	4.0	5.0	5.0	5.8	CCE-4	EM-EP-110a.1	305-1
Nigeria	Million tonnes CO_2e	**2.0**	3.0	5.0	4.7	4.2	CCE-4	EM-EP-110a.1	305-1
Germany	Million tonnes CO_2e	**3.0**	3.0	3.2	3.2	3.3	CCE-4	EM-EP-110a.1	305-1
Malaysia	Million tonnes CO_2e	**2.0**	2.0	2.3	2.6	2.4	CCE-4	EM-EP-110a.1	305-1
United Kingdom	Million tonnes CO_2e	**2.0**	2.0	1.7	2.0	2.1	CCE-4	EM-EP-110a.1	305-1
International waters	Million tonnes CO_2e	**1.0**	1.0	1.1	1.2	1.6	CCE-4	EM-EP-110a.1	305-1
Rest of the world	Million tonnes CO_2e	**1.0**	1.0	2.2	2.8	2.8	CCE-4	EM-EP-110a.1	305-1

	Unit	2023	2022	2021	2020	2019	Ipieca	SASB	GRI
Scope 1 emissions by source									
CO_2 emissions	Million tonnes	**49**	49	58	61	67	CCE-4	EM-EP-110a.2	305-1
Combustion	Million tonnes	**40**	41	47	50	53	CCE-4	EM-EP-110a.2	305-1
Flaring	Million tonnes	**4**	4	5	4	7	CCE-4	EM-EP-110a.2	305-1
Venting and process	Million tonnes	**4**	4	6	6	8	CCE-4	EM-EP-110a.2	305-1
Fugitives	Million tonnes	**0**	0	0	0	0	CCE-4	EM-EP-110a.2	305-1
CH_4 emissions	Thousand tonnes	**41**	40	55	67	91	CCE-4	EM-EP-110a.2	305-1
Combustion	Thousand tonnes	**4**	6	7	11	13	CCE-4	EM-EP-110a.2	305-1
Flaring	Thousand tonnes	**10**	12	19	15	19	CCE-4	EM-EP-110a.2	305-1
Venting and process	Thousand tonnes	**22**	16	22	29	44	CCE-4	EM-EP-110a.2	305-1
Fugitives	Thousand tonnes	**5**	6	7	12	15	CCE-4	EM-EP-110a.2	305-1
Other greenhouse gases	Million tonnes CO_2e	**0.2**	0.2	0.2	0.3	0.3	CCE-4	EM-EP-110a.2	305-1
Methane (CH_4) emissions									
Methane emissions in CO_2 equivalent [I]	Million tonnes CO_2e	**1.1**	1.0	1.4	1.7	2.3	CCE-4	EM-EP-110a.1	305-1
Methane emissions intensity - assets with marketed gas	%	**0.05**	0.05	0.06	0.06	0.08	CCE-4	EM-EP-110a.1	305-1
Methane emissions intensity - assets without marketed gas	%	**0.001**	0.01	0.01	0.01	0.01	CCE-4	EM-EP-110a.1	305-1
Upstream flaring [J]									
GHG emissions from flaring	Million tonnes CO_2e	**2.8**	3.0	4.5	3.8	5.9	CCE-4	EM-EP-110a.2	305-1
Total hydrocarbons flared	Million tonnes	**0.7**	0.8	1.3	1.1	1.8	CCE-4	EM-EP-110a.2	305-1
Nigeria	Million tonnes	**0.4**	0.4	0.8	0.6	0.7	CCE-4	EM-EP-110a.2	305-1
Rest of the world	Million tonnes	**0.3**	0.4	0.4	0.5	1.2	CCE-4	EM-EP-110a.2	305-1
Total hydrocarbons flared - routine	Million tonnes	**0.1**	0.1	0.2	0.3	0.5	-	-	-
Total hydrocarbons flared - non-routine	Million tonnes	**0.6**	0.7	1.0	0.8	1.4	-	-	-
Upstream flaring intensity [K]	%	**0.5**	0.6	0.8	0.6	0.9	-	-	-
GHG emissions from exported energy [L]	Million tonnes CO_2e	**1.9**	2.0	3.0	3.0	3.0	CCE-4	EM-EP-110a.2	305-1

[A] Greenhouse gas emissions (GHG) comprise carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulphur hexafluoride and nitrogen trifluoride. The data are calculated using locally regulated methods where they exist. Where there is no locally regulated method, the data are calculated using the 2021 API Compendium, which is the recognised industry standard under the GHG Protocol Corporate Accounting and Reporting Standard. There are inherent limitations to the accuracy of such data. Oil and gas industry guidelines (Ipieca, API and IOGP) indicate that several sources of uncertainty can contribute to the overall uncertainty of a corporate emissions inventory. We have estimated the overall uncertainty for our direct GHG emissions to be around 4% for 2023.

[B] 2023 GHG emissions were calculated using global warming potential (GWP) factors from the IPCC Fifth Assessment Report. Data from prior years were calculated using GWP factors from the IPCC Fourth Assessment Report. For comparison, our Scope 1 emissions would have been 50 million tonnes in 2023 if we were to use GWPs from the IPCC Fourth Assessment Report.

[C] GHG emissions in this table do not include carbon credits.

[D] Split by business or country may not add up to the total due to rounding.

[E] Scope 1 emissions by business for 2019 to 2022 have been restated to reflect the combination of the Integrated Gas and Upstream businesses into a single Integrated Gas and Upstream Directorate, and the Downstream and Renewables and Energy Solutions businesses into a new Downstream, Renewables and Energy Solutions Directorate in July 2023.

[F] Includes the Scotford Upgrader and Quest carbon capture and storage. Excludes CO_2 captured and sequestered by Quest, but Scope 1 and 2 GHG emissions from operating Quest are included.

[G] Includes emissions from other downstream assets and activities (e.g. shipping, lubricants, Trading and Supply, and Renewables and Energy Solutions).

[H] Includes emissions from assets and activities reported by the Projects & Technology business and Global Functions.

[I] 2023 methane emissions were converted to CO_2 equivalents using GWPs from the IPCC Fifth Assessment Report. Data from prior years were calculated using GWP factors from the IPCC Fourth Assessment Report. For comparison, our methane emissions would have been 1.0 million tonnes in CO_2 equivalents in 2023 if we were to use GWPs from the IPCC Fourth Assessment Report.

[J] Includes Upstream and Integrated Gas businesses.

[K] Calculated as total hydrocarbons flared divided by the sum of total oil and gas wellhead production, LNG and GTL production x 100%.

[L] GHG emissions related to energy production (in the form of electricity, heat or steam) exported to another facility or the public grid. This metric is a subset of our Scope 1 GHG emissions.

Scope 2 GHG emissions (operational control) [A] [B]

	Unit	2023	2022	2021	2020	2019		Ipieca	SASB	GRI
Scope 2 emissions - market-based method	Million tonnes CO_2e	**7**	7	8	8	10		CCE-4	-	305-2
Scope 2 emissions - location-based method	Million tonnes CO_2e	**8**	8	9	10	11		CCE-4	-	305-2
Scope 2 emissions by business (market-based method) [C]										
Integrated Gas and Upstream	Million tonnes CO_2e	**1.9**	1.9	2.0	2.1	2.7	3.7	CCE-4	-	305-2
Downstream, Renewables and Energy Solutions	Million tonnes CO_2e	**5.1**	5.4	5.5	6.0	6.9	6.8	CCE-4	-	305-2
Other	Million tonnes CO_2e	**0.1**	0.1	0.1	0.1	0.2	0.3	CCE-4	-	305-2
Scope 2 emissions by country (market-based method)										
USA	Million tonnes CO_2e	**2.2**	2.3	2.6	3.0	3.1		CCE-4	-	305-2
Netherlands	Million tonnes CO_2e	**1.1**	1.5	1.5	1.4	1.7		CCE-4	-	305-2
Australia	Million tonnes CO_2e	**1.6**	1.4	1.3	1.4	1.6		CCE-4	-	305-2
Canada	Million tonnes CO_2e	**1.1**	1.0	1.2	1.3	2.3		CCE-4	-	305-2
Singapore	Million tonnes CO_2e	**0.5**	0.6	0.5	0.5	0.5		CCE-4	-	305-2
Germany	Million tonnes CO_2e	**0.3**	0.2	0.2	0.3	0.3		CCE-4	-	305-2
Rest of the world	Million tonnes CO_2e	**0.2**	0.2	0.2	0.2	0.3		CCE-4	-	305-2
Scope 2 emissions by business (location-based method) [C]										
Integrated Gas and Upstream	Million tonnes CO_2e	**2.7**	2.8	3.2	3.3	3.8	3.6		-	305-2
Downstream, Renewables and Energy Solutions	Million tonnes CO_2e	**5.2**	5.4	5.5	6.2	7.1	6.8		-	305-2
Other	Million tonnes CO_2e	**0.1**	0.2	0.2	0.2	0.2	0.2		-	305-2
Scope 2 emissions by country (location-based method)										
USA	Million tonnes CO_2e	**2.2**	2.3	2.6	3.1	3.2	3.4	CCE-4	-	305-2
Australia	Million tonnes CO_2e	**2.2**	2.3	2.5	2.6	2.6	2.4	CCE-4	-	305-2
Netherlands	Million tonnes CO_2e	**1.3**	1.3	1.4	1.3	1.6	1.7	CCE-4	-	305-2
Canada	Million tonnes CO_2e	**1.1**	1.0	1.2	1.4	2.3	2.0	CCE-4	-	305-2
Singapore	Million tonnes CO_2e	**0.5**	0.6	0.5	0.5	0.5	0.5	CCE-4	-	305-2
Germany	Million tonnes CO_2e	**0.3**	0.2	0.2	0.3	0.4	0.3	CCE-4	-	305-2
Rest of the world	Million tonnes CO_2e	**0.4**	0.3	0.3	0.4	0.4	0.4	CCE-4	-	305-2

[A] Split by business or country may not add up to the total due to rounding.

[B] We estimated the uncertainty of our 2023 Scope 2 GHG emissions to be around 8% for the market-based method and 7% for the location-based method.

[C] Scope 2 emissions by business for the market and location-based methods for 2019 to 2022 have been restated to reflect the combination of the Integrated Gas and Upstream businesses into a single Integrated Gas and Upstream Directorate, and the Downstream and Renewables and Energy Solutions businesses into a new Downstream, Renewables and Energy Solutions Directorate in July 2023.

GHG intensities (operational control)

	Unit	2023	2022	2021	2020	2019	Ipieca	SASB	GRI
Upstream and Integrated Gas GHG intensity [A]	Tonne CO_2e/tonne production	**0.180**	0.179	0.172	0.159	0.168	CCE-4	-	305-4
Upstream and Integrated Gas GHG intensity [B]	kg CO_2e/boe	**23**	23	22	21	22	CCE-4	-	305-4
Refinery GHG intensity [C]	Tonne CO_2e/ UEDC™	**0.98**	0.98	1.05	1.05	1.06	CCE-4	-	305-4
Chemical GHG intensity [D]	Tonne CO_2e/tonne production	**1.00**	1.00	0.95	0.98	1.04	CCE-4	-	305-4

[A] In tonnes of Scope 1 and Scope 2 GHG emissions per tonne of oil and gas available for sale, liquefied natural gas and gas-to-liquids production in Integrated Gas and Upstream. The figure for 2021 does not include Prelude floating liquefied natural gas.

[B] In kilograms of Scope 1 and Scope 2 GHG emissions per boe of oil and gas available for sale, liquefied natural gas and gas-to-liquids production in Integrated Gas and Upstream. The figure for 2021 does not include Prelude floating liquefied natural gas.

[C] Utilised equivalent distillation capacity (UEDC) is a proprietary metric of Solomon Associates. It is a complexity-weighted normalisation parameter that reflects the operating cost intensity of a refinery based on size and configuration of its particular mix of process and non-process facilities.

[D] Chemical GHG intensity refers to high-value chemicals, which include olefin products (ethylene and propylene) plus the contained butadiene, benzene, acetylene and high-purity hydrogen production.

Scope 1 and 2 GHG emissions (equity boundary) [A] [B]

	Unit	2023	2022	2021	2020	2019	Ipieca	SASB	GRI
Direct GHG emissions (Scope 1)	Million tonnes CO_2e	**81**	82	91	98	105	CCE-4	EM-EP-110a.1	305-1
Integrated Gas and Upstream	Million tonnes CO_2e	**38.4**	39.8	42.8	44.3	47.7	CCE-4	EM-EP-110a.1	305-1
Downstream, Renewables and Energy Solutions	Million tonnes CO_2e	**42.3**	42.1	47.8	53.4	57.3	CCE-4	EM-EP-110a.1	305-1
Other	Million tonnes CO_2e	**0.1**	0.2	0.2	0.1	0.2	CCE-4	EM-EP-110a.1	305-1
Scope 2 emissions (market-based method)	Million tonnes CO_2e	**8**	8	9	9	11	CCE-4	-	305-2
Integrated Gas and Upstream	Million tonnes CO_2e	**1.8**	1.8	1.8	1.8	2.3	CCE-4	-	305-2
Downstream, Renewables and Energy Solutions	Million tonnes CO_2e	**6.0**	6.3	6.7	7.1	8.0	CCE-4	-	305-2
Other	Million tonnes CO_2e	**0.1**	0.1	0.1	0.1	0.2	CCE-4	-	305-2
Scope 2 emissions (location-based method)	Million tonnes CO_2e	**8**	9	10	10	12	-	-	-
Integrated Gas and Upstream	Million tonnes CO_2e	**2.2**	2.3	2.6	2.5	3.0	CCE-4	-	305-2
Downstream, Renewables and Energy Solutions	Million tonnes CO_2e	**6.1**	6.5	7.0	7.6	8.3	CCE-4	-	305-2
Other	Million tonnes CO_2e	**0.1**	0.2	0.1	0.2	0.2	CCE-4	-	305-2

[A] Split by business may not add up to the total due to rounding.

[B] Emissions by business for 2019 to 2022 have been restated to reflect the combination of the Integrated Gas and Upstream businesses into a single Integrated Gas and Upstream Directorate, and the Downstream and Renewables and Energy Solutions businesses into a new Downstream, Renewables and Energy Solutions Directorate in July 2023.

Scope 3 GHG emissions [A] [B]

	Unit	2023	2022	2021	2020	2019	Ipieca	SASB	GRI
Purchased goods and services (Category 1)									
Third-party products [C]	Million tonnes CO_2e	**154**	144	147	147	178	CCE-4	-	305-3
Fuel and energy-related activities (not included in Scope 1 or Scope 2) (Category 3)									
Third-party power [D]	Million tonnes CO_2e	**112**	115	136	103	102	CCE-4	-	305-3
Downstream transport and distribution (Category 9)									
Sold own energy products [E]	Million tonnes CO_2e	**3**	5	6	–	–	-	-	305-3
Use of sold products (Category 11)									
Use of sold products [F]	Million tonnes CO_2e	**878**	910	1,010	1,054	1,271	CCE-4	-	305-3
Own production [G]	Million tonnes CO_2e	**319**	332	380	452	564	CCE-4	-	305-3
Third-party products [H]	Million tonnes CO_2e	**559**	578	630	602	708	CCE-4	-	305-3

[A] The values in this table reflect estimated Scope 3 emissions included in our net carbon intensity. This excludes certain contracts held for trading purposes and reported net rather than gross. Business-specific methodologies for net volumes have been applied to 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 also excluded from the scope of Shell's carbon intensity metric.

[B] Estimated emissions from other Scope 3 categories are published on www.shell.com/ghg. Data for 2023 will be available around June 2024.

[C] This category includes estimated well-to-tank emissions from purchased third-party refined oil products, natural gas, liquefied natural gas, crude oil and biofuels.

[D] This category includes estimated well-to-wire emissions from the generation of purchased power included in our net carbon intensity.

[E] Estimated emissions from the transport and distribution of sold own oil products, crude oil, liquefied natural gas, gas-to-liquids, natural gas and biofuels.

[F] This category includes estimated emissions from the sales volumes of oil products, natural gas, liquefied natural gas, gas-to-liquids and biofuels.

[G] This category includes estimated emissions from our refinery production, natural gas, liquefied natural gas, gas-to-liquids and biofuel products.

[H] Estimated as the difference between own production and total sold products.

Other greenhouse gas data (operational control) [A]

	Unit	2023	2022	2021	2020	2019	Ipieca	SASB	GRI
Carbon capture and storage and CO_2 transfer out									
CO_2 captured and stored	Million tonnes	**1.00**	0.97	1.05	0.94	1.13	CCE-3	EM-EP-530a.1	305-5
CO_2 transferred out [A]	Million tonnes	**0.25**	0.35	0.39	0.30	0.43	CCE-3	EM-EP-530a.1	305-5
Biogenic CO_2									
Biogenic CO_2 [B]	Thousand tonnes	**19.21**	7.94	3.60	0.27	0.00	-	-	-

[A] CO_2 captured and transferred to another organisation (for example, sold or given for free) as product or feedstock, which is not included in our Scope 1 emissions.

[B] Direct biogenic CO_2, which is not included in our Scope 1 emissions.

Carbon credits

	Unit [B]	2023	2022	2021	2020	2019	Ipieca	SASB	GRI
Total carbon credits [A][B]									
Included in Shell's net carbon intensity metric [C]	Million carbon credits	**20.0**	4.1	5.1	3.9	2.2	-	EM-EP-530a.1	305-5
Excluded from Shell's net carbon intensity metric [C]	Million carbon credits	**1.8**	1.7	1.3	0.4	0.5	-	EM-EP-530a.1	305-5

[A] One carbon credit represents the avoidance or removal of 1 metric tonne of CO_2 equivalent.
[B] Excludes carbon credit transactions.
[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.

Energy use (operational control) [A]

	Unit	2023	2022	2021	2020	2019	Ipieca	SASB	GRI
Total energy use [B]	Million MWh	**205**	209	238	251	272	CCE-6	-	302-1
Own energy generated	Million MWh	**185**	187	218	229	244	CCE-6	-	302-1
Imported electricity	Million MWh	**18**	18	20	22	27	CCE-6	-	302-1
Imported steam and heat	Million MWh	**13**	14	13	14	17	CCE-6	-	302-1
Exported electricity	Million MWh	**9**	7	11	12	10	CCE-6	-	302-1
Exported steam and heat	Million MWh	**2**	3	2	2	6	CCE-6	-	302-1
Consumption of energy from renewable sources									
Renewable sources - onsite energy generation consumed	Million MWh	**0.021**	0.017	0.005	0.005	n/c	CCE-6	-	302-1
Renewable sources - purchased electricity	Million MWh	**2.8**	2.2	2.2	1.8	1.5	CCE-6	-	302-1
Renewable sources - purchased steam	Million MWh	**0.00**	0.00	0.00	0.00	n/c	CCE-6	-	302-1
Renewable sources - electricity exported to grid	Million MWh	**4.6**	1.9	0.4	0.4	0.4	CCE-6	-	302-1
Energy intensity									
Upstream excl. oil sands, LNG and GTL	GJ/tonne production	**1.18**	1.19	1.14	1.15	1.07	CCE-6	-	302-3
Refineries: Refinery Energy Index [C]	Index	**98.7**	95.6	96.9	96.1	94.2	CCE-6	-	302-3
Chemical plants: Chemicals Energy Intensity	GJ/tonne production	**20.3**	19.3	18.1	18.7	19.4	CCE-6	-	302-3

n/c = not collected
[A] We have updated some of our historical figures following a review of the data.
[B] Split by energy category may not add up to the total due to rounding.
[C] Data are indexed to 2002, based on Solomon Associates Energy Intensity Index methodology.

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Other environmental data

Air emissions [A] [B]

	Unit	2023	2022	2021	2020	2019	Ipieca	SASB	GRI
Acid gases and volatile organic compounds									
Sulphur oxides (SO_x)	Thousand tonnes	**31**	37	32	37	65	ENV-5	EM-EP-120a.1	305-7
Integrated Gas and Upstream	Thousand tonnes	**4**	6	6	9	18	ENV-5	EM-EP-120a.1	305-7
Downstream, Renewables and Energy Solutions	Thousand tonnes	**27**	31	26	29	47	ENV-5	EM-EP-120a.1	305-7
Other	Thousand tonnes	**0**	0	0	0	0	ENV-5	EM-EP-120a.1	305-7
Nitrogen oxides (NO_x)	Thousand tonnes	**88**	93	106	118	107	ENV-5	EM-EP-120a.1	305-7
Integrated Gas and Upstream	Thousand tonnes	**56**	61	69	72	53	ENV-5	EM-EP-120a.1	305-7
Downstream, Renewables and Energy Solutions	Thousand tonnes	**33**	32	36	46	54	ENV-5	EM-EP-120a.1	305-7
Other	Thousand tonnes	**0**	0	1	0	1	ENV-5	EM-EP-120a.1	305-7
Volatile organic compounds (VOCs)	Thousand tonnes	**36**	37	48	47	54	ENV-5	EM-EP-120a.1	305-7
Integrated Gas and Upstream	Thousand tonnes	**15**	17	26	25	31	ENV-5	EM-EP-120a.1	305-7
Downstream, Renewables and Energy Solutions	Thousand tonnes	**20**	20	22	22	23	ENV-5	EM-EP-120a.1	305-7
Other	Thousand tonnes	**0**	0	0	0	0	ENV-5	EM-EP-120a.1	305-7
Ozone-depleting emissions									
CFCs/halons/trichloroethane	Tonnes	**0.0**	0.0	0.0	0.0	0.0	ENV-5	-	305-6
Hydrochlorofluorocarbons (HCFCs)	Tonnes	**2**	2	2	6	8	ENV-5	-	305-6

[A] Split by business may not add up to the total due to rounding.

[B] Emissions by business for 2019 to 2022 have been restated to reflect the combination of the Integrated Gas and Upstream businesses into a single Integrated Gas and Upstream Directorate, and the Downstream and Renewables and Energy Solutions businesses into a new Downstream, Renewables and Energy Solutions Directorate in July 2023.

Spills of more than 100 kg to the environment

	Unit	2023	2022	2021	2020	2019	Ipieca	SASB	GRI
Spills [A]									
Sabotage spills – number [B]	Number	**140**	75	106	122	156	ENV-6	EM-EP-160a.2	306-3
Sabotage spills – total volume [B]	Thousand tonnes	**1.4**	0.6	3.3	1.5	2.3	ENV-6	EM-EP-160a.2	306-3
Sabotage spills - recovered volume	Thousand tonnes	**1.2**	0.3	3.0	1.0	n/c	ENV-6	EM-EP-160a.2	306-3
Operational spills – number	Number	**70**	55	42	71	69	ENV-6	EM-EP-160a.2	306-3
Nigeria [C] [D]	Number	**9**	10	9	12	8	ENV-6	EM-EP-160a.2	306-3
Rest of the world	Number	**61**	45	33	59	61	ENV-6	EM-EP-160a.2	306-3
Operational spills - total volume [E]	Thousand tonnes	**0.37**	0.06	0.06	0.4	0.22	ENV-6	EM-EP-160a.2	306-3
Nigeria [C]	Thousand tonnes	**0.005**	0.01	0.03	0.03	0.05	ENV-6	EM-EP-160a.2	306-3
Rest of the world	Thousand tonnes	**0.37**	0.06	0.04	0.4	0.2	ENV-6	EM-EP-160a.2	306-3
Operational spills - recovered volume	Thousand tonnes	**0.13**	0.04	0.03	0.1	n/c	ENV-6	EM-EP-160a.2	306-3
Nigeria [C]	Thousand tonnes	**0.003**	0.001	0.02	0.01	n/c	ENV-6	EM-EP-160a.2	306-3
Rest of the world	Thousand tonnes	**0.13**	0.04	0.01	0.1	n/c	ENV-6	EM-EP-160a.2	306-3
Hurricane spills – number [F]	Number	**0**	0	2	0	0	ENV-6	EM-EP-160a.2	306-3
Hurricane spills – total volume [F]	Thousand tonnes	**0.00**	0.00	0.03	0	0	ENV-6	EM-EP-160a.2	306-3
Hurricane spills - recovered volume	Thousand tonnes	**0.00**	0.00	0.01	0	n/c	ENV-6	EM-EP-160a.2	306-3

n/c - not collected

[A] All spill volumes and numbers are for hydrocarbon spills of more than 100 kilograms to the environment (land or water). We have updated some of our historical figures following a review of the data.

[B] All sabotage- and theft-related spills in 2019-23 occurred in Nigeria except for one in 2023 in Australia.

[C] Nigeria includes SPDC onshore operations and SNEPCo offshore operations.

[D] Nigeria includes SPDC onshore operations (nine operational spills in 2023) and SNEPCo offshore operations (no operational spills in 2022).

[E] Split between Nigeria and the rest of the world may not add up to the total due to rounding.

[F] This category reflects the spills caused by exceptional natural events, such as hurricanes and earthquakes. Data for 2021 reflect the impact of Hurricane Ida.

Water use and discharge

	Unit	2023	2022	2021	2020	2019	Ipieca	SASB	GRI
Water use and discharge [A]									
Fresh water withdrawn	Million cubic metres	**162**	148	166	171	192	ENV-1	EM-EP-140a.1	303-3
Fresh water consumed	Million cubic metres	**111**	103	122	127	145	ENV-1	EM-EP-140a.1	303-5
Fresh water consumed in highly water-stressed areas [B]	Million cubic metres	**17**	18	22	22	25			
Fresh water returned [C]	Million cubic metres	**50**	45	44	45	46	ENV-1	EM-EP-140a.1	303-3
Fresh water withdrawn by business [D]									
Integrated Gas and Upstream	Million cubic metres	**8**	11	13	10	12	ENV-1	EM-EP-140a.1	303-3
Downstream, Renewables and Energy Solutions	Million cubic metres	**152**	135	151	159	177	ENV-1	EM-EP-140a.1	303-3
Other	Million cubic metres	**2**	2	2	3	3	ENV-1	EM-EP-140a.1	303-3
Fresh water withdrawn by country									
USA	Million cubic metres	**83**	71	84	92	108	ENV-1	EM-EP-140a.1	303-3
Canada	Million cubic metres	**21**	20	21	21	23	ENV-1	EM-EP-140a.1	303-3
Singapore	Million cubic metres	**16**	17	20	19	22	ENV-1	EM-EP-140a.1	303-3
Netherlands	Million cubic metres	**14**	15	16	16	17	ENV-1	EM-EP-140a.1	303-3
Germany	Million cubic metres	**18**	13	13	13	12	ENV-1	EM-EP-140a.1	303-3
Rest of the world	Million cubic metres	**9**	12	12	10	11	ENV-1	EM-EP-140a.1	303-3
Fresh water withdrawn by source									
Surface	Million cubic metres	**82**	84	91	94	98	ENV-1	EM-EP-140a.1	303-3
Ground	Million cubic metres	**26**	22	18	18	18	ENV-1	EM-EP-140a.1	303-3
Public utilities [E]	Million cubic metres	**54**	42	57	60	76	ENV-1	EM-EP-140a.1	303-3
Other [F]	Million cubic metres	**0**	0	0	0	0	ENV-1	EM-EP-140a.1	303-3
Produced water disposed	Million cubic metres	**58**	**58**	**81**	**88**	**92**	ENV-1	EM-EP-140a.2	–
Produced water reinjected	Million cubic metres	**2**	2	17	21	21	ENV-1	EM-EP-140a.2	–
Produced water discharged	Million cubic metres	**40**	40	47	51	51	ENV-1	EM-EP-140a.2	–
Produced water exported for disposal or reuse	Million cubic metres	**16**	16	16	16	19	ENV-1	EM-EP-140a.2	–
Oil in effluents to surface environment	Thousand tonnes	**1.0**	**0.9**	**1.0**	**1.4**	**1.3**	ENV-2	EM-EP-140a.2	–
Oil in produced water	Thousand tonnes	**0.7**	0.6	0.7	0.9	0.9	ENV-2	EM-EP-140a.2	–

[A] Fresh-water figures do not include once-through cooling water. Breakdown may not add up to the total due to rounding.

[B] At the end of 2022, four of our major facilities were located in areas where there is a high level of water stress based on analysis using water stress tools, including the World Resources Institute's Aqueduct Water Risk Atlas and a local assessment. The facilities are: Pearl GTL gas-to-liquids facility in Qatar, Shell Energy and Chemicals Park Singapore, the Jurong Island chemical plant in Singapore, and the Tabangao import terminal in the Philippines.

[C] Defined as fresh water returned to a fresh-water source.

[D] Fresh water withdrawn by for 2019 to 2022 has been restated to reflect the combination of the Integrated Gas and Upstream businesses into a single Integrated Gas and Upstream Directorate, and the Downstream and Renewables and Energy Solutions businesses into a new Downstream, Renewables and Energy Solutions Directorate in July 2023.

[E] Includes imported steam.

[F] Includes harvested rainwater and surface run-off collected for use.

Waste management [A] [B]

	Unit	2023	2022	2021	2020	2019	Ipieca	SASB	GRI
Waste									
Total waste disposed	Thousand tonnes	**2,251**	2,012	1,928	2,022	2,128	ENV-7	-	306-5
Hazardous waste disposed	Thousand tonnes	**631**	878	820	537	708	ENV-7	-	306-5
Integrated Gas and Upstream	Thousand tonnes	**73**	132	146	129	154	ENV-7	-	306-5
Downstream, Renewables and Energy Solutions	Thousand tonnes	**546**	654	654	403	552	ENV-7	-	306-5
Other	Thousand tonnes	**12**	91	20	5	2	ENV-7	-	306-5
Non-hazardous waste disposed	Thousand tonnes	**1,619**	1,135	1,108	1,484	1,420	ENV-7	-	306-5
Integrated Gas and Upstream	Thousand tonnes	**99**	169	222	233	284	ENV-7	-	306-5
Downstream, Renewables and Energy Solutions	Thousand tonnes	**1,388**	906	831	1,236	1,116	ENV-7	-	306-5
Other	Thousand tonnes	**133**	60	55	15	20	ENV-7	-	306-5
Waste beneficially reused, recycled or recovered [C]	Thousand tonnes	**654**	493	356	443	441	ENV-7	-	306-4
Integrated Gas and Upstream	Thousand tonnes	**92**	103	72	107	83	ENV-7	-	306-4
Downstream, Renewables and Energy Solutions	Thousand tonnes	**545**	384	277	332	354	ENV-7	-	306-4
Other	Thousand tonnes	**17**	6	7	4	4	ENV-7	-	306-4

[A] Split by business may not add up to the total due to rounding.

[B] Waste by business for 2019 to 2022 has been restated to reflect the combination of the Integrated Gas and Upstream businesses into a single Integrated Gas and Upstream Directorate, and the Downstream and Renewables and Energy Solutions businesses into a new Downstream, Renewables and Energy Solutions Directorate in July 2023.

[C] Not included in the total waste disposed.

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Social performance data

Our people

	2023	2022	2021	2020	2019	Ipieca	SASB	GRI
Employees (thousand) [A]	**103**	93	83	88	87	-	-	2-7
Our people by geographical area [A]								
Africa	**4**	4	4	4	4	-	-	2-7
Asia	**38**	32	30	31	31	-	-	2-7
Europe	**31**	30	27	28	27	-	-	2-7
North America	**24**	23	18	20	21	-	-	2-7
Oceania	**4**	3	2	3	2	-	-	2-7
South America	**2**	1	1	2	2	-	-	2-7
Staff forums and grievance procedures								
% countries with staff access to staff forum, grievance procedure or other support system [B][C]	**100**	100	100	100	100	SOC-12	EM-EP-210a.3	103-2
Integrity								
Code of Conduct violations [D]	**254**	183	181	216	263	GOV-1	EM-EP-540a.2	102-17

[A] The employee numbers for 2019–21 reflect headcount in the Shell Human Resources (HR) system and full-time equivalent numbers for portfolio companies, which maintain their own HR systems.

[B] This includes the Shell Global Helpline, trade unions and staff forums and council.

[C] Data obtained from an internal survey completed by the senior Shell representative in each country.

[D] Code of Conduct violations represent the number of reported incidents in the Shell Global Helpline (excluding queries or customer service queries) that have been investigated and closed during the relevant period and where the allegation was found to be (at least partially) true.

Training

	2023	2022	2021	2020	2019	Ipieca	SASB	GRI
Training days for employees and joint-venture partners (thousand) [A]	**295**	266	271	234	373	SOC-7	-	404-1
Respect in the Workplace training completion rate % [B]	**99.6**	99.0	97.7	–	–	-	-	-
Conscious Inclusion training completion rate % [B]	**99.6**	98.0						

[A] The training days metric excludes the employees in portfolio companies, which maintain their own human resource systems.

[B] These are the mandatory courses on diversity, equity and inclusion that must be taken annually for two years by all employees, including portfolio companies and contractors. Completion rate refers to 100% of the nominated participants minus the percentage of nominated participants that did not complete their training within the designated period as at December 31.

Diversity, equity and inclusion [A]

	2023	2022	2021	2020	2019	Ipieca	SASB	GRI
Gender								
Board of Directors (% women)	**42**	55.0	50.0	38.0	42.0	SOC-5	-	405-1
Board of Directors (% men)	**58**	45.0	50.0	62.0	58.0	SOC-5	-	405-1
Executive Committee (% women)	**43.0**	22.2	25.0	12.5	12.5	SOC-5	-	405-1
Executive Committee (% men)	**57.0**	77.8	75.0	87.5	87.5	SOC-5	-	405-1
In senior executive leadership positions (% women) [B] (Ambition: 30%, then gender equality)	**27.8**	25.4	27.3	–	–	SOC-5	-	405-1
In senior executive leadership positions (% men)	**72.2**	74.6	72.7	–	–	SOC-5	-	405-1
In senior leadership positions (% women) [C] (Ambition: 35% by 2025; 40% by 2030)	**32.0**	30.4	29.5	27.8	26.4	SOC-5	-	405-1
In senior leadership positions (% men)	**68.0**	69.6	70.5	72.2	73.6	SOC-5	-	405-1
In management positions (% women)	**29.0**	27.9	27.2	25.5	24.5	SOC-5	-	405-1
In management positions (% men)	**71.0**	72.1	72.8	74.5	75.5	SOC-5	-	405-1
In professional positions (% women)	**35.5**	35.1	34.3	33.1	30.8	SOC-5	-	405-1
In professional positions (% men)	**64.5**	64.8	65.7	66.9	69.2	SOC-5	-	405-1
Employees overall (% women) [A]	**35.0**	33.0	33.0	32.0	31.0	SOC-5	-	405-1
Employees overall (% men) [A]	**65.0**	67.0	67.0	68.0	69.0	SOC-5	-	405-1
Graduate hires (% women) (Ambition: 50% every year) [D]	**40.4**	49.1	55.1	51.3	44.8	SOC-5	-	401-1; 405-1
Graduate hires (% men) [D]	**59.6**	50.9	44.9	48.7	55.2	SOC-5	-	401-1; 405-1
Experienced hires (% women) [E]	**38.3**	40.3	43.5	39.4	38.9	SOC-5	-	401-1; 405-1
Experienced hires (% men) [E]	**61.6**	59.6	56.5	60.6	61.1	SOC-5	-	401-1; 405-1
Promotions (% women)	**40.8**	40.1	43.7	38.6	39.8	SOC-5	-	-
Promotions (% men)	**59.2**	59.9	56.3	61.4	60.2	SOC-5	-	-
Turnover (% voluntary resignation)	**3.3**	5.0	4.4	2.6	3.5	SOC-6	-	401-1
Turnover (% women voluntary resignation of total women employees)	**3.9**	6.2	5.7	3.4	4.7	SOC-6	-	401-1
Turnover (% men voluntary resignation of total men employees)	**2.9**	4.5	3.8	2.3	3.0	SOC-6	-	401-1
Race and ethnicity [F]								
Board of Directors (Ambition: Maintain or exceed Parker Review recommendation of one director by 2021)	**3**	1	1	–	–	-	-	405-1
Executive Committee (number of ethnic minority) [G]	**1**	1						
Employees (USA only) [H]								
Asian %	**14.2**	13.7	13.0	–	–	SOC-5	-	405-1
Black or African American %	**9.0**	8.7	8.4	–	–	SOC-5	-	405-1
Hispanic Latino %	**12.3**	11.9	11.8	–	–	SOC-5	-	405-1
White %	**62.4**	63.5	65.0	–	–	SOC-5	-	405-1
Other racial and ethnic groups % [I]	**2.2**	2.2	1.8	–	–	SOC-5	-	405-1

	2023	2022	2021	2020	2019	Ipieca	SASB	GRI
In senior leadership positions (USA only) [C]						SOC-5	-	405-1
Asian %	**9.8**	10.1	10.5	–	–	SOC-5	-	405-1
Black or African American %	**10.3**	8.8	7.9	–	–	SOC-5	-	405-1
Hispanic Latino %	**5.6**	5.7	7.5	–	–	SOC-5	-	405-1
White %	**73.1**	74.0	73.2	–	–	SOC-5	-	405-1
Other racial and ethnic groups % [I]	**1.2**	1.3	0.8	–	–	SOC-5	-	405-1
Employees (UK only) % of those who self-identified [J] [K]								
Asian %	**15.4**	14.5	13.1	–	–	SOC-5	-	405-1
Black %	**3.9**	3.7	3.4	–	–	SOC-5	-	405-1
Mixed %	**2.4**	2.4	2.4	–	–	SOC-5	-	405-1
White %	**75.2**	76.5	78.5	–	–	SOC-5	-	405-1
Other ethnic minority background %	**3.1**	3.0	2.6	–	–	SOC-5	-	405-1
In senior leadership positions (UK only) % of those who self-identified [C][L]								
Asian %	**11.7**	12.3	10.8	–	–	SOC-5	-	405-1
Black %	**2.3**	1.5	1.1	–	–	SOC-5	-	405-1
Mixed %	**2.3**	2.0	1.7	–	–	SOC-5	-	405-1
White %	**81.7**	81.8	83.5	–	–	SOC-5	-	405-1
Other ethnic minority background %	**1.9**	2.5	2.8	–	–	SOC-5	-	405-1
LGBT+								
Global Workplace Pride Benchmark - measures LGBTIQ+ inclusion practices of internationally active employers	**Advocate [N]**	Ambassador [M]	Advocate [N]	Advocate [N]	Advocate [N]	-	-	-
Human Rights Campaign Foundation's Corporate Equality Index - Rating Workplaces on equality and inclusion for LGBTQ+ employees (USA only) (% of 100)	**100**	100	100	100	100	-	-	-
Disability inclusion and enABLEment								
Workplace accessibility (number of locations)	**79**	81	86	83	83	–	-	–
Age group (employees)								
Under 30 years old %	**14**	14.0	13.0	14.0	14.0	SOC-5	-	405-1
Between 30-50 years old %	**64**	64.0	65.0	64.0	71.0	SOC-5	-	405-1
Above 50 years old %	**22**	22.0	22.0	22.0	15.0	SOC-5	-	405-1

	2023	2022	2021	2020	2019	Ipieca	SASB	GRI
Average pay gap - gender and ethnicity								
Average gender pay gap (UK) [O]	**from -3.7% to 18.7%**	from 11.7% to 20.7%	17.8	18	18.7	SOC-5	-	405-2
Average ethnicity pay gap (UK) [P]	**from -4.0% to 21.4%**	from -1.3% to 18.7%	21.9	8.5	–	SOC-5	-	-
Parental leave								
Global minimum standard for maternity leave of 16 weeks	**Yes**	Yes	Yes	Yes	Yes	SOC-5	-	401-3
Employee sentiment - diversity, equity and inclusion (DE&I) indicator [Q]								
Shell People Survey DE&I Index (out of 100 points) / compared to top-quartile benchmark for the relevant year	**83/84**	82 / 84	80 / 84	–	–	-	-	-

[A] All metrics throughout this section exclude the employees in portfolio companies except for the percentage of employees by gender.
[B] The total number of senior executive leadership positions may change from year to year. We focus on representation as a percentage of this total group. Senior executive leadership positions include the Executive Committee.
[C] The total number of senior leadership positions may change from year to year. We focus on representation as a percentage of this total group. Senior leadership is a Shell measure based on salary group levels.
[D] All graduate hires provided data or declared their gender in 2023.
[E] 0.1% of experienced hires did not provide data or chose not to declare in 2023. Experienced hires include all types of hiring except graduate hires.
[F] In addition to Board representation, we have included race and ethnicity data for the USA and UK in line with our powering lives commitments.
[G] As ethnic declaration is voluntary, six out of seven Executive Committee members declared their race and ethnicity.
[H] Employees in the USA at Compensation Grade 10 and above.
[I] "Other racial and ethnic groups" includes the following: American Indian or Alaskan Native; Native Hawaiian or other Pacific Islander; two or more races.
[J] Employees in the UK at Compensation Grade 10 and above.
[K] As ethnic declaration is voluntary, ethnicity declaration rate is not 100% and all calculations are based on a declaration rate of 83.1% in the UK as of December 2023. The 16.9% of our workforce who have not provided data or have chosen not to declare their ethnicity were not included in our calculations.
[L] As ethnic declaration is voluntary, ethnicity declaration rate is not 100% and all calculations are based on a declaration rate of 76.6% for employees in senior leadership positions in the UK as of December 2023. The 23.4% of our senior leadership workforce who have not provided data or have chosen not to declare their ethnicity were not included in our calculations.
[M] "Ambassador" organisations are defined by Workplace Pride as well advanced in their LGBTIQ+ Workplace Inclusion journeys.
[N] "Advocate" organisations are defined by Workplace Pride as breaking new ground for LGBTIQ+ inclusion in their activities around the world and setting the tone for change beyond the workplace in society at large.
[O] The average pay of all men and all women for "Shell in the UK", which includes Shell Energy Retail Limited, is defined in the Shell UK 2023 Diversity Pay Gap report. It excludes bonuses using methodology consistent with the UK's Advisory, Conciliation and Arbitration Service managing gender pay reporting guidance. The guidance was updated in February 2019, and the data snapshot was taken on April 5, 2023. This is different to equal pay which means paying men and women the same salary for performing equivalent work. Shell in the UK has had equal pay for many years, and we conduct regular pay equity analysis to monitor this on an ongoing basis. Please read the Shell in the UK 2023 Diversity Pay Gap for full context. For 2023, separate figures for each employing company in scope are reported, rather than a single aggregated figure.
[P] The difference in average pay between "Ethnic Minority" and "non-Ethnic Minority" employees is expressed as a percentage of average "non-Ethnic Minority" pay for "Shell in the UK", which includes Shell Energy Retail Limited. It excludes bonuses following the same methodology as our UK gender pay gap reporting. Please read the Shell in the UK 2023 Diversity Pay Gap for full context. For 2023, separate figures for each employing company in scope are reported, rather than a single aggregated figure.
[Q] The response rate for Shell People Survey was 88% in 2023, 87% in 2022, 83% in 2021, 86% in 2020 and 85% in 2019.

Human rights

	2023	2022	2021	2020	2019	Ipieca	SASB	GRI
Child labour (% countries with procedures in place)								
Own operations	**100**	100	100	100	100	SOC-4	EM-EP-210a.3.	408-1
Contractors and suppliers	**100**	100	100	100	100	SOC-4	EM-EP-210a.3.	408-1
Forced labour (% countries with procedures in place)								
Own operations	**100**	100	100	100	100	SOC-2	EM-EP-210a.3	409-1
Contractors and suppliers	**100**	100	100	100	100	SOC-2	EM-EP-210a.3	409-1

[A] Data obtained from an internal survey completed by the senior Shell representative in each country.

Contracting and procurement

	2023	2022	2021	2020	2019	Ipieca	SASB	GRI
Estimated expenditure on goods and services in lower-income countries spent with local suppliers (%) [A] [B]	**90**	90	88	84		SOC-14	-	204-1

[A] Estimated expenditure in countries where gross national income amounts to less than $15,000 a year per person (source: UN Development Programme's Human Development Index 2021).
[B] This figure only includes the amount spent on goods and services by Shell Group companies.

Social investment [A]

	2023	2022	2021	2020	2019	Ipieca	SASB	GRI
[$] Estimated voluntary social investment (equity share) ($ million)	**128**	182	94	156	116	SOC-13	-	203-1
[$] Estimated social investment spend (equity share) in lower-income countries ($ million) [B]	**85**	92	72	87	84	SOC-13	-	203-1

[A] Social investment spending varies from year to year depending on business climate, locations and types of activities under way. This is voluntary social investment and does not include social investments made through contractual agreements with host governments, voluntary work by Shell employees or donations of equipment.
[B] Estimated voluntary social investment spending in countries where gross national income amounts to less than $15,000 a year per person (source: UN Development Programme's Human Development Index 2021).
[$] Social investment and contracting and procurement data collected via our financial system.

Tax and other payments to governments

	2023	2022	2021	2020	2019	Ipieca	SASB	GRI
Total taxes paid and collected ($ billion)	**67.4**	68.2	58.7	47.3	61.3	GOV-4	-	201-1
Corporate income taxes [A]	**14.1**	13.4	6.0	3.4	7.8	GOV-4	-	201-1
Royalties [B]	**6.1**	8.2	6.6	3.5	5.9	GOV-4	-	201-1
Excise duties, sales taxes and similar levies [C]	**47.2**	46.2	46.1	40.4	47.6	GOV-4	-	201-1
Total other payments to governments ($ billion) [D]	**13.65**	17.9	12.8	8.2	12.5	GOV-4	-	201-1
Production entitlements	**11.4**	15.1	10.5	7	10.3	GOV-4	-	201-1
Bonuses	**0.05**	0.22	0.15	0.02	0.3	GOV-4	-	201-1
Fees	**2.2**	2.6	2.1	1.2	1.9	GOV-4	-	201-1

[A] We paid $13.7 billion in corporate income taxes and accrued $0.4 billion of witholding taxes. Withholding tax is part of "Other" of ($0.5) billion in the Consolidated Statement of Cash Flows in our Annual Report and Accounts.
[B] Royalties is part of Purchases of $212.9 billion as included in the Consolidated Statement of Income in our Annual Report and Accounts.
[C] This amount has been derived from regulatory filings submitted to the relevant governments.
[D] Other payments to governments are derived from our Report on Payments to Governments for the year 2023. This report is prepared in accordance with the UK's Reports on Payments to Governments Regulations 2014 (amended December 2015).

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Reconciliation of non-GAAP financial measures

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 3rd party/supplier 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 and is disclosed annually in the Sustainability Report.

The calculation of Total spend on goods and services has changed, 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

	2023	2022	2021
Capital Expenditure	**22,993**	22,600	19,000
Add: Underlying Operating Expenditure [A]	**39,201**	39,456	35,309
Less: Employee costs [B]	**13,629**	13,971	12,092
Total spend on goods and services	**48,565**	48,085	42,217

[A] See "Operating expenses and underlying operating expenses" table.
[B] See Note 32 to the "Consolidated Financial Statements" in our Annual Report and Accounts 2023.

Taxes paid and collected

Taxes paid and collected represents the total taxes paid to governments as disclosed in the annual Tax Contribution Report. It comprises Corporate income tax and government royalties as well as excise duties, sales taxes and similar levies on our fuel and products that are collected on behalf of the governments.

Taxes paid and collected

$ million

	2023	2022	2021
Corporate income tax [A]	**14,134**	13,411	5,956
Royalties [B]	**6,073**	8,189	6,551
Excise duties, sales taxes and similar levies [C]	**47,160**	46,642	46,104
Taxes paid and collected	**67,367**	68,242	58,611

[A] We paid $13.7 billion in corporate income taxes and accrued $0.4 billion of withholding taxes. Withholding tax charge is part of "Other" of ($0.5) billion in the Consolidated Statement of Cash Flows in our Annual Report and Accounts 2023.
[B] Royalties is part of Purchases of $212.9 billion as included in the Consolidated Statement of Income in our Annual Report and Accounts 2023.
[C] This amount has been derived from regulatory filings submitted to the relevant governments.

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.

Cash capital expenditure – 2023

$ million

	Integrated Gas	Upstream	Marketing	Chemicals and Products	Renewables and Energy Solutions	Corporate	Total
Capital expenditure	3,491	8,249	5,563	3,106	2,314	270	22,993 [A]
Investments in joint ventures and associates	705	94	49	84	261	9	1,202 [A]
Investments in equity securities	–	–	–	2	106	89	197 [A]
Cash capital expenditure*	4,196	8,343	5,612	3,192	2,681	368	24,392

[A] See Consolidated Statement of Cash Flows.
* Non-GAAP measure.

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

	2023	2022	2021
Operating expenses, of which:	**39,960**	39,476	35,965
Production and manufacturing expenses	**25,240**	25,518	23,822
Selling, distribution and administrative expenses	**13,433**	12,883	11,328
Research and development expenses	**1,287**	1,075	815
Of which identified items:			
Redundancy and restructuring (charges)/reversal	**(325)**	46	(226)
(Provisions)/reversal	**(434)**	77	(254)
Other	**–**	(143)	(175)
Identified items	**(758)**	(21)	(655)
Underlying operating expenses	**39,201**	39,456	35,309

Cautionary note

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 where references are made to 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 term "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.

Forward-looking statements

This report contains forward-looking statements (within the meaning of the U.S. Private Securities Litigation Reform Act of 1995) 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"; "believe"; "commit"; "commitment"; "could"; "estimate"; "expect"; "goals"; "intend"; "may"; "milestones"; "objectives"; "outlook"; "plan"; "probably"; "project"; "risks"; "schedule"; "seek"; "should"; "target"; "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; (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 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, such as the COVID-19 (coronavirus) outbreak, regional conflicts, such as the Russia-Ukraine war, and a significant cybersecurity breach; and (n) changes in trading conditions. 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. Additional risk factors that may affect future results are contained in Shell plc's Form 20-F for the year ended December 31, 2023 (available at www.shell.com/investors/news-and-filings/sec-filings and www.sec.gov). These risk factors also expressly qualify all forward-looking statements contained in this report and should be considered by the reader. Each forward-looking statement speaks only as of the date of this report, March 19, 2024. Neither Shell plc 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.

Shell's Net Carbon Intensity

Also, in this report we may refer to Shell's "Net Carbon Intensity" (NCI), which 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 are for convenience only and not intended to suggest these emissions are those of Shell plc or its subsidiaries.

Shell's net-zero emissions target

Shell's operating plan, outlook and budgets are forecasted for a ten-year period and are updated every year. They reflect the current economic environment and what we can reasonably expect to see over the next ten years. Accordingly, they reflect our Scope 1, Scope 2 and NCI targets over the next ten years. However, Shell's operating plans cannot reflect our 2050 net-zero emissions target, as this target is currently outside our planning period. In the future, as society moves towards net-zero emissions, we expect Shell's operating plans 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.

Forward-looking non-GAAP measures

This report may contain 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 contents of websites referred to in this report do not form part of this report.

We may have used certain terms, such as resources, in this report that the United States Securities and Exchange Commission (SEC) strictly prohibits us from including in our filings with the SEC. Investors are urged to consider closely the disclosure in our Form 20-F, File No 1-32575, available on the SEC website www.sec.gov.

Additional information

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.

CO_2 compensation does not imply that there is no environmental impact from the production and use of the product as associated emissions remain in the atmosphere. CO_2 compensation is not a substitute for switching to lower-emission energy solutions or reducing the use of fossil fuels. Shell businesses focus first on emissions that can be avoided or reduced and only then, compensate the remaining emissions.

"Carbon neutral" or "CO_2 compensated" indicates that Shell will engage in a transaction where an amount of CO_2 equivalent to the value of the remaining CO_2e emissions associated with the raw material extraction, transport, production, distribution and usage/end-of-life (if Lubricants or other non-energy product) of the product are compensated through the purchase and retirement of carbon credits generated from CO_2 compensation projects. Although these carbon credits have been generated in accordance with international carbon standards, the compensation may not be exact.

CO_2e (CO_2 equivalent) refers to CO_2, CH_4, N_2O.

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- Detailed information on Shell's taxes
- Report on our progress in contributing to sustainable development
- Report on how Shell has progressed with its energy transition
- Energy Transition Strategy 2024