



POWERING PROGRESS

ANNUAL REPORT AND ACCOUNTS
FOR THE YEAR ENDED DECEMBER 31, 2020
ROYAL DUTCH SHELL PLC



CONTENTS

INTRODUCTION

iii About this Report
iv Terms and abbreviations
1 Powering Progress

STRATEGIC REPORT

4 Chair's message
6 Chief Executive Officer's review
8 Selected financial data
10 Shell story
18 Strategy and outlook
22 Section 172(1) statement
28 Risk factors
38 Market overview
41 Summary of results
43 Performance indicators
46 Integrated Gas
53 Upstream
61 Oil and gas information
70 Oil Products
77 Chemicals
80 Corporate
81 Liquidity and capital resources
85 Environment and society
94 Climate change and energy transition
108 Our people

GOVERNANCE

Directors' Report

114 The Board of Royal Dutch Shell plc
122 Senior Management
124 Introduction from the Chair
126 Statement of compliance with the UK Corporate Governance Code
128 Governance framework
130 Board activities and evaluation
134 Understanding and engaging with our stakeholders
138 Workforce engagement
140 Nomination and Succession Committee
143 Safety, Environment and Sustainability Committee
145 Audit Committee Report
153 Directors' Remuneration Report
157 Annual Report on Remuneration
173 Directors' Remuneration Policy
182 Other regulatory and statutory information

FINANCIAL STATEMENTS

AND SUPPLEMENTS

192 Independent Auditor's Report related to the Consolidated and Parent Company Financial Statements
216 Consolidated Financial Statements
265 Supplementary information – oil and gas (unaudited)
283 Parent Company Financial Statements
292 Independent Auditors' Reports related to the Royal Dutch Shell Dividend Access Trust Financial Statements
294 Royal Dutch Shell Dividend Access Trust Financial Statements

ADDITIONAL INFORMATION

300 Shareholder information
305 Non-GAAP measures reconciliations
308 Appendix 1: significant subsidiaries and other related undertakings (audited)
324 Appendix 2: five-year financial dataset

Design and production: Friend www.friendstudio.com
Print: Opmeer papier pixels projecten www.opmeerbv.nl



ABOUT THIS REPORT

The Royal Dutch Shell plc Annual Report (this Report) serves as the Annual Report and Accounts in accordance with UK requirements for the year ended December 31, 2020, for Royal Dutch Shell plc (the Company) and its subsidiaries (collectively referred to as Shell). This Report presents the Consolidated Financial Statements of Shell (pages 216-264), the Parent Company Financial Statements of Shell (pages 283-291) and the Financial Statements of the Royal Dutch Shell Dividend Access Trust (pages 294-297). Except for these Financial Statements, the numbers presented throughout this Report may not sum precisely to the totals provided and percentages may not precisely reflect the absolute figures due to rounding.

The financial statements contained in this Report have been prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the IASB. IFRS as defined above includes interpretations issued by the IFRS Interpretations Committee. Financial reporting terms used in this Report are in accordance with IFRS.

This Report contains certain following 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 the company, 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 Royal Dutch Shell plc's consolidated financial statements.

The companies in which Royal Dutch Shell plc directly or indirectly owns investments are separate legal entities. In addition to the term "Shell", in this Report "Shell Group", "we", "us" and "our" are also used to refer to the Company 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" and "Shell subsidiaries" refer to those entities over which the Company has control, either directly or indirectly. Entities and unincorporated arrangements over which Shell has joint control are generally referred to as "joint ventures" and "joint operations", respectively. "Joint ventures" and "joint operations" are collectively referred to as "joint arrangements". Entities over which Shell has significant influence but neither control nor joint control are referred to as "associates". 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. Shell subsidiaries' data include their interests in joint operations.

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.

This Report references Shell's Sky and new Sky 1.5 scenarios, specifically within the Climate change and energy transition section (pages 94-107). Unlike Shell's previously published Mountains and Oceans exploratory scenarios, the Sky scenario is based on the assumption that society reaches the Paris Agreement's goal of holding the rise in global average temperatures this century to well below two degrees Celsius (2°C) above pre-industrial levels. Unlike Shell's Mountains and Oceans scenarios which unfolded in an open-ended way based upon plausible assumptions and quantifications, the Sky scenario was specifically designed to reach the Paris Agreement's goal in a technically possible manner.

Sky 1.5 scenario starts with data from Shell's Sky scenario but is more aggressive and challenging in its assumptions about energy transitions as the pace of change is accelerated. As in Sky, this scenario is normative, meaning we assumed that society achieves the 1.5 degrees Celsius stretch goal of the Paris Agreement, and we worked back in designing how this could occur. Of course, there are many possible paths that society could take to achieve this goal. This will be extremely challenging, but as of today, we believe there is still a technically possible path while maintaining a growing global economy. However, we believe the window for success is quickly closing.

These scenarios are a part of an ongoing process used in Shell for over 40 years to challenge executives' perspectives on the future business environment. They are designed to stretch management to consider even events that may only be remotely possible. Scenarios, therefore, are not intended to be predictions of likely future events or outcomes. Shell's scenarios also are not intended to be projections or forecasts of the future. Shell's scenarios, including the scenarios referenced in this Report, are not Shell's strategy or business plan. When developing Shell's strategy, our scenarios are one of many variables that we consider. Ultimately, whether society meets its goals to decarbonise is not within Shell's control. While we intend to travel this journey in step with society, only governments can create the framework for success.

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, Shell's operating plans, outlooks, budgets and pricing assumptions do not reflect our net-zero emissions target. In the future, as society moves towards net-zero emissions, we expect Shell's operating plans, outlooks, budgets and pricing assumptions to reflect this movement.

Shell's "Net Carbon Footprint" referred to in this Report includes Shell's carbon emissions from the production of our energy products, our suppliers' carbon emissions in supplying energy for that production, and our customers' carbon emissions associated with their use of the energy products we sell. Shell only controls its own emissions. The use of the term "Net Carbon Footprint" is for convenience only and not intended to suggest these emissions are those of Shell or its subsidiaries.

Except where indicated, the figures shown in the tables in this Report are in respect of subsidiaries only, without deduction of any non-controlling interest. However, the term "Shell share" is used for convenience to refer to the volumes of hydrocarbons that are produced, processed or sold through subsidiaries, joint ventures and associates. All of a subsidiary's production, processing or sales volumes (including the share of joint operations) are included in the Shell share, even if Shell owns less than 100% of the subsidiary. In the case of joint ventures and associates, however, Shell-share figures are limited only to Shell's entitlement. In all cases, royalty payments in kind are deducted from the Shell share.

Except where indicated, the figures shown in this Report are stated in US dollars. As used herein all references to "dollars" or "\$" are to the US currency.

This Report contains forward-looking statements concerning the financial condition, results of operations and businesses of Shell. All statements other than statements of historical fact are, or may be deemed to be, forward-looking statements. Forward-looking statements are statements of future expectations that are based on management's current expectations and assumptions and involve known and unknown risks and uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied in these statements. Forward-looking statements include, among other things, statements concerning the potential exposure of Shell to market risks and statements expressing management's expectations, beliefs, estimates, forecasts, projections and assumptions. These forward-looking statements are identified by their use of terms and phrases such as "aim", "ambition", "anticipate", "believe", "could", "estimate", "expect", "goals", "intend", "may", "objectives", "outlook", "plan", "probably", "project", "risks", "schedule", "seek", "should", "target", "will" 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, 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; and (n) changes in trading conditions. Also see "Risk factors" on pages 28-37 for additional risks and further discussion. No assurance is provided that future dividend payments will match or exceed previous dividend payments. All forward-looking statements contained in this Report are expressly qualified in their entirety by the cautionary statements contained or referred to in this section. Readers should not place undue reliance on forward-looking statements. Each forward-looking statement speaks only as of the date of this Report. Neither the Company nor any of its subsidiaries undertake any obligation to publicly update or revise any forward-looking statement as a result of new information, future events or other information. In light of these risks, results could differ materially from those stated, implied or inferred from the forward-looking statements contained in this Report.

This Report contains references to Shell's website, the Shell Sustainability Report, Tax Contribution Report, Industry Associations Climate Review and our report on Payments to Governments. These references are for the readers' convenience only. Shell is not incorporating by reference into this report any information posted on www.shell.com or in the Shell Sustainability Report, Tax Contribution Report, Industry Associations Climate Review or our report on Payments to Governments.

Shell V-Power and Shell LiveWire are Shell trademarks.

DOCUMENTS ON DISPLAY

This Report is also available, free of charge, at www.shell.com/annualreport or at the offices of Shell in The Hague, the Netherlands and London, United Kingdom. Copies of this Report also may be obtained, free of charge, by mail.

TERMS AND ABBREVIATIONS

Currencies

\$	US dollar
€	euro
£	sterling

Units of measurement

acre	approximately 0.004 square kilometres
b/d	barrels (per day)
boel/d	barrels of oil equivalent (per day); natural gas volumes are converted into oil equivalent using a factor of 5,800 scf per barrel
kboe/d	thousand barrels of oil equivalent (per day); natural gas volumes are converted into oil equivalent using a factor of 5,800 scf per barrel
MMBtu	million British thermal units
megajoule	a unit of energy equal to one million joules
mtpa	million tonnes per annum
per day	volumes are converted into a daily basis using a calendar year
scf/d	standard cubic feet (per day)

Products

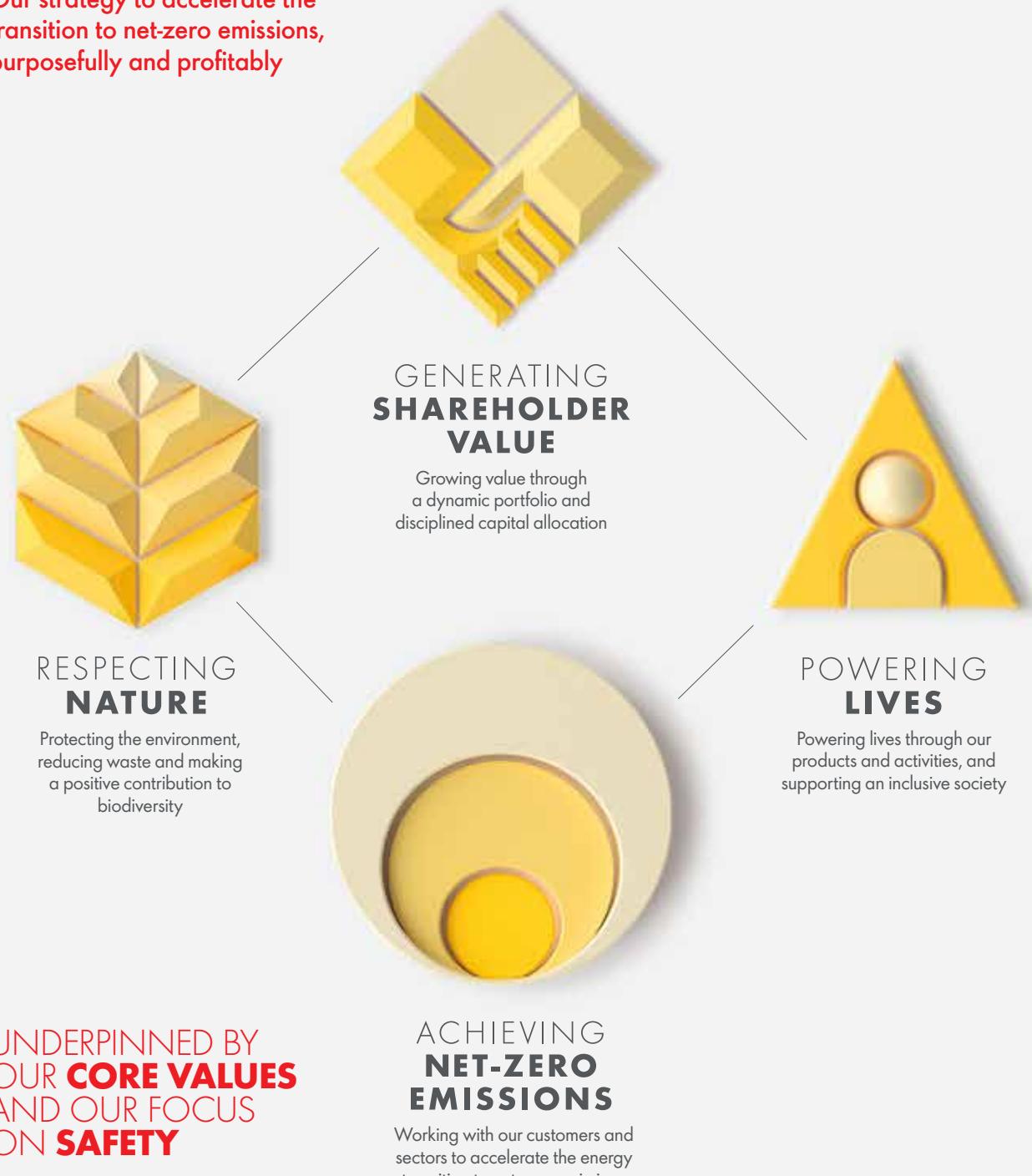
GTL	gas-to-liquids
LNG	liquefied natural gas
LPG	liquefied petroleum gas
NGL	natural gas liquids

Miscellaneous

ADS	American Depository Share
AGM	Annual General Meeting
API	American Petroleum Institute
CCS	carbon capture and storage
CCS earnings	earnings on a current cost of supplies basis
CO ₂	carbon dioxide
EMTN	Euro medium-term note
EPS	earnings per share
FCF	free cash flow
FID	final investment decision
GAAP	generally accepted accounting principles
GHG	greenhouse gas
HSSE	health, safety, security and environment
IAS	International Accounting Standard
IEA	International Energy Agency
IFRS	International Financial Reporting Standard(s)
IOGP	International Association of Oil & Gas Producers
IPIECA	International Petroleum Industry Environmental Conservation Association (global oil and gas industry association for environmental and social issues)
LTIP	Long-term Incentive Plan
OECD	Organisation for Economic Co-operation and Development
OML	oil mining lease
OPEC	Organization of the Petroleum Exporting Countries
OPL	oil prospecting licence
PSC	production-sharing contract
PSP	Performance Share Plan
REMCO	Remuneration Committee
SEC	US Securities and Exchange Commission
TRCF	total recordable case frequency
TSR	total shareholder return
WTI	West Texas Intermediate

POWERING PROGRESS

Our strategy to accelerate the transition to net-zero emissions, purposefully and profitably



COVER IMAGES

The images on the front cover represent the four goals of Shell's Powering Progress strategy, (clockwise from top): generating shareholder value; achieving net-zero emissions; respecting nature; and powering lives.

Powering Progress is designed to create value for shareholders, customers and wider society. The strategy seeks to accelerate Shell's transformation into a provider of net-zero emissions energy products and services, powered by growth in its customer-facing businesses.

STRATEGIC REPORT

4	Chair's message
6	Chief Executive Officer's review
8	Selected financial data
10	Shell story
18	Strategy and outlook
22	Section 172(l) statement
28	Risk factors
38	Market overview
41	Summary of results
43	Performance indicators
46	Integrated Gas
53	Upstream
61	Oil and gas information
70	Oil Products
77	Chemicals
80	Corporate
81	Liquidity and capital resources
85	Environment and society
94	Climate change and energy transition
108	Our people





ACHIEVING **NET-ZERO EMISSIONS**

CHAIR'S MESSAGE

COURAGE AND COVID-19: HOW OUR PEOPLE STEPPED UP

**CHAD HOLLIDAY**

Chair

In 2020, the world faced exceptional adversity in the form of the COVID-19 pandemic. Adversity reveals character. It forces us to find strength we never knew we had.

For the good of all, many people volunteered for medical trials. Scientists and doctors from around the world shared knowledge. Vaccines were developed at a speed no one thought possible. Just imagine what humanity might achieve if it could direct such public-spirited co-operation towards other challenges, like poverty, or climate change.

PEOPLE AND PRODUCTIVITY

If the pandemic revealed humanity's collective strength, it also showed the resilience of Shell. As I prepare to stand down as Chair of the Royal Dutch Shell plc Board in 2021, I am convinced Shell has a bright future. I am also convinced we have a compelling investment case.

The strength and clarity of our strategy will enable us to succeed as a business in the energy transition. We will continue to power progress by generating value for shareholders and investing in energy projects to help meet demand. In turn, this will support supply chains and boost local economies.

My confidence in Shell is made even stronger by the quality of our people. During my 10 years on the Board, I have seen so many colleagues who inspired me as they helped Shell to succeed. When COVID-19 struck, and lockdowns spread, our people rose to the challenge. They continued to produce and deliver vital energy supplies. They helped to power hospitals and fuel ambulances, to keep homes lit and to maintain essential businesses. They showed ingenuity as well as resilience. They put technology to work. For instance, using crawler robots on the roofs of refinery tanks freed our inspectors from having to work at height. The

inspectors could stay in the safety of their homes, focus on analysing the data gathered by the robots, and offer expert opinion. By innovating in such challenging times, we also improved safety and productivity.

And I was struck by the courage and dedication that so many of our people showed in the face of the virus. I heard remarkable personal stories. In Iraq, Niki Jackson and his colleagues at the Basrah Gas Company (BGC) sweated through a summer where temperatures rose to 50 degrees Celsius and COVID-19 spread through the surrounding area. Niki knew he risked catching the virus, despite all the precautions taken by BGC, a joint venture between Shell, the Iraqi government and Mitsubishi. But Niki, from Aberdeen, Scotland, wanted to be on the ground with his colleagues. How else could he be effective in his job as asset services director, responsible for maintenance and engineering operations? His words are worth repeating: "I saw the pride of my Iraqi colleagues, a pride that comes from being able to tell your family: 'I am helping to ensure that everyone around us has electricity, and gas for cooking.'

"I made my decision: 'Am I still happy doing this? Too right I am. Let's get on with it.'"

Krishna Gupta, a shift superintendent, went out during lockdown to Shell Energy India's regasification facility in Hazira, Gujarat. How did he explain this to his 11-year-old son? He told him: "If I don't go to the facility, our gas can't get to those who need it."

ADAPTING TO THE ENERGY TRANSITION

People like Krishna and Niki give me confidence about Shell's future. So too does our strategy. I have seen the progress we have made, and continue to make, towards becoming fully able to play a role in the transition to a low-carbon future.

We are helped by long experience of serving the needs of our customers. Our global network of around 46,000 service stations, for example, gives us insights into the nature of consumer demand for everything from groceries to electric vehicle charging points. It helps us to understand what we must do to be in step with society in the energy transition.

As our business customers work to reduce carbon dioxide emissions, Shell will increasingly provide the low-carbon energy and products to help. We already have the kind of portfolio that other companies are trying to build. We can invest where we will be competitive, for example, in integrated power, hydrogen and low-carbon biofuels. We will also continue to supply oil and gas because the world will need both for years to come. Our Upstream business will help give us the financial strength to invest in low-carbon sources of energy.

OUR MOST DIFFICULT DECISION

This year has shown how Shell must expect the unexpected and be resilient enough to cope with it. The recession of 2020 was unprecedented. US oil prices briefly turned negative for the first time in history.

In April, we faced a perfect storm. With vaccines not yet on the horizon, no one could predict how bad things might get. That was the backdrop to the most difficult decision I have experienced on a company board: the vote to rebase the dividend. It was historic for Shell. More importantly, it was human. This was about the people who invest in us, whose belief in Shell is partly rewarded by the dividend. The grim reality was there was only one thing worse than rebasing the dividend: not rebasing the dividend.

We could have borrowed to keep the dividend at the same level. But in our view that would have been a mistake. By taking the decisive action to rebase the dividend significantly as we did, I believe we ensured that Shell could emerge from the impact of COVID-19 in strong shape.

In October, we were able to raise the dividend by a modest amount, and signal our intention to have annual dividend increases, subject to Board approval. The fundamentals remain intact. Despite the global economic havoc wreaked by the pandemic, Shell continues to make strategic progress.

FINDING A WAY

Ben van Beurden, the Chief Executive Officer of Royal Dutch Shell, deserves credit for this progress. Over the years, he has listened to those urging Shell to do more to help tackle climate change. He saw we could create new businesses serving new customers and new markets for low-carbon energy products. And the more governments act on climate change, the more successful these businesses can become, and the better it will be for the planet.

We are also making progress in other ways. We hope that in May, shareholders will agree to appoint a Board which, for the first time in Shell's history, will consist equally of men and women. Greater diversity brings greater understanding of people, and better decision-making.

Shell has set challenging emissions targets. In 2020, we announced our target to become a net-zero emissions energy business by 2050 in step with society. We intend to meet our customers' demand for cleaner energy, keeping pace with society's progress towards tackling climate change. As this suggests, we cannot stand still. When necessary, we must be as fast-moving as we were when the pandemic hit. We must also strive constantly to increase productivity, to continue to build financial strength.

In the worst of times, you often see the best of people. In 2020, our people showed great character in adversity. I thank every one of them. I firmly believe their efforts mean Shell will continue to succeed, to deliver energy and to power progress.

CHAD HOLLIDAY

Chair

Adapting to the energy transition

Shell can invest in areas where we will be competitive, such as hydrogen.



Working together across Shell during the COVID-19 global pandemic

Below (clockwise from top left): Shell made innovative use of robots during lockdowns; our people kept service stations open; Krishna Gupta; Niki Jackson.



POWERING PROGRESS AND FACING A PANDEMIC



BEN VAN BEURDEN

Chief Executive Officer

In 2020, the COVID-19 pandemic affected us all. Sadly, it claimed the lives of 20 of our Shell colleagues. I heard the stories behind these tragedies, and the cruelty of the pandemic really hit home.

The virus also wreaked havoc with the global economy, dramatically suppressing energy demand. Our income went from \$16.4 billion in 2019 to a loss of \$21.5 billion in 2020, which included non-cash impairments of \$28.1 billion. In April, with oil prices falling rapidly, Shell took swift, decisive action to preserve cash and stay resilient. We rebased the dividend, lowering it by 66%.

It was a very difficult decision to make, but the right thing to do.

Our dividend payments went from \$15.2 billion in 2019 to \$7.4 billion in 2020. We combined rebasing the dividend with the discipline to reduce cash capital expenditure from \$23.9 billion in 2019 to \$17.8 billion in 2020. We reduced net debt from \$79.1 billion in 2019 to \$75.4 billion at the end of 2020.

In October, with global energy demand looking more robust, we raised the dividend by 4% and signalled our intention to have annual dividend increases, subject to Board approval.

Our industry-leading cash flows from operations confirm Shell's underlying strength. Despite the unprecedented challenges, we delivered cash flow from operating activities of \$34.1 billion in 2020, compared with \$42.2 billion in 2019.

Once we have reduced net debt to \$65 billion, we will target total shareholder distributions of 20-30% of cash flow from operations.

In 2020 we began implementing our new safety approach, which places greater emphasis on increasing the chances of people emerging unharmed even if there is an incident. For the first year in our history, there were zero fatal accidents in Shell-operated facilities. I want this achievement to spur us on so that we keep working hard on safety.

THE GOALS OF POWERING PROGRESS

We worked towards refreshing our strategy in 2020, and in February 2021, we announced Powering Progress. It is what I believe Shell does. It is what I believe Shell should continue to do.

Our Powering Progress strategy combines our ambitions under four goals: generating shareholder value, achieving net-zero emissions, powering lives and respecting nature. This will help us accelerate our progress towards becoming a net-zero emissions energy business by 2050, in step with society.

We will lower emissions from our operations, including the energy consumed in running them, and help our customers to reduce their emissions from using our products. Importantly, this will include emissions from oil and gas that others produce and we then sell in our products – an industry-leading approach.

Shell will deal with any of its remaining emissions using carbon capture and storage (CCS) technology, or offsets where plants absorb carbon dioxide.

We expect our total oil production to reduce by 1-2% a year until 2030, taking into account divestments and natural decline. But we expect Upstream oil and gas production to deliver strong cash flows into the 2030s, underpinning our returns to shareholders and helping to fund the low-carbon investments that will transform Shell's energy mix. In all these ways, Shell will change as the world adopts the low-carbon energy system needed to tackle climate change.

WINNING IN A TRANSFORMED ENERGY SYSTEM

Customers and the choices they make will define the nature of the future energy system.

I think the winning energy companies will be those, like Shell, who are best placed to serve customers.

We serve more than 1 million commercial and industrial customers, and 30 million customers at 46,000 retail service stations every day.

We have the leading market positions. We have strong starting positions in products and services that customers are going to want more and more: biofuels, electric-vehicle charging networks, and hydrogen.

Powering Progress

The Powering Progress strategy combines our ambitions under four goals (from top): generating shareholder value; achieving net-zero emissions; powering lives; and respecting nature.



We can work with our customers to develop the low-carbon markets of the future. In this way, Shell would generate value for shareholders while working towards its net-zero carbon emissions target. Society would benefit from reduced emissions.

Take the CrossWind consortium, a joint venture between Shell and Eneco that in 2020 won the tender for the Hollandse Kust (noord) wind farm off the Dutch coast. Shell's plan is to use the wind farm's renewable electricity for powering the industrial-scale production of low-carbon hydrogen by electrolysis, a process that splits water into oxygen and hydrogen.

We will then work with hauliers and truck manufacturers to develop a market for hydrogen as a low-carbon fuel for heavy goods transport.

THE VALUE OF STRATEGIC RELATIONSHIPS

Hollandse Kust (noord) is helping Shell to form other important strategic relationships. In February 2021, Amazon signed an agreement to buy renewable electricity from the wind farm.

Through its air cargo fleet, Amazon also has a growing interest in aviation, one of those sectors that will be hard to decarbonise. Shell has one of the world's most extensive aircraft refuelling networks. We can work with customers, suppliers and regulators to develop a commercially viable and profitable market for sustainable aviation fuel (SAF). We have agreed to supply Amazon with up to six million gallons of blended SAF for its cargo aircraft. This biofuel, produced by the company World Energy using agricultural waste fats and oils, has lower life-cycle carbon emissions than conventional jet fuel.

We also formed a strategic alliance with Microsoft in 2020. Shell is supplying Microsoft with renewable energy, supporting it towards its goal of using 100% renewable energy by 2025. Both businesses will develop digital tools to help Shell's customers decarbonise.

We are working on more of these strategic relationships, generating value while helping sectors to reduce their carbon emissions.

In 2020 we announced a major reorganisation which will take effect from August 2021. We believe this will make us more responsive to customers, as a nimbler organisation with lower costs.

We expect to reduce between 7,000 and 9,000 jobs as we make these changes. It will mean saying goodbye to many people who have shown us great loyalty. We will do this in the spirit of our core values of honesty, integrity and respect for people.

As we prepare for the years ahead, we can draw confidence from how we rose to the challenges of 2020.

What struck me was how our people combined ingenuity with determination to do the right thing: in applying financial discipline, in supplying energy during lockdowns, in making donations to help their communities fight COVID-19. In such hard times, our people generated value for society, and Shell.

They fill me with confidence for the future. With a strong strategy and good people, Shell will power progress for decades to come.

BEN VAN BEURDEN

Chief Executive Officer

SELECTED FINANCIAL DATA

The selected financial data set out below are derived, in part, from the "Consolidated Financial Statements". These data should be read in conjunction with the "Consolidated Financial Statements" and related Notes, as well as with this Strategic Report.

Consolidated Statement of Income and Statement of Comprehensive Income data

180,543	(21,534)	146
Revenue (\$ million)	(Loss)/income for the period (\$ million)	Income attributable to non-controlling interest (\$ million)
(21,680)	(23,512)	
(Loss)/income attributable to Royal Dutch Shell plc shareholders (\$ million)	Comprehensive (loss)/income attributable to Royal Dutch Shell plc shareholders (\$ million)	

\$ million	2020	2019	2018	2017	2016
Revenue	180,543	344,877	388,379	305,179	233,591
(Loss)/income for the period	(21,534)	16,432	23,906	13,435	4,777
Income attributable to non-controlling interest	146	590	554	458	202
(Loss)/income attributable to Royal Dutch Shell plc shareholders	(21,680)	15,842	23,352	12,977	4,575
Comprehensive (loss)/income attributable to Royal Dutch Shell plc shareholders	(23,512)	13,773	24,475	18,828	(1,374)

Consolidated Balance Sheet data

379,268	108,014	651
Total assets (\$ million)	Total debt (\$ million)	Share capital (\$ million)
155,310	75,386	3,227
Equity attributable to Royal Dutch Shell plc shareholders (\$ million)	Net debt (\$ million)	Non-controlling interest (\$ million)

\$ million	2020	2019	2018	2017	2016
Total assets	379,268	404,336	399,194	407,097	411,275
Total debt [A]	108,014	96,424	76,824	85,665	92,476
Net debt [A]	75,386	79,093	51,428	65,944	73,346
Share capital	651	657	685	696	683
Equity attributable to Royal Dutch Shell plc shareholders	155,310	186,476	198,646	194,356	186,646
Non-controlling interest	3,227	3,987	3,888	3,456	1,865

[A] Total debt and net debt figures for 2018 and earlier periods are on an IAS 17 basis.

Consolidated Statement of Cash Flows data [A]

34,105

Cash flow from operating activities (\$ million)

16,585

Capital expenditure (\$ million)

13,278

Cash flow from investing activities (\$ million)

7,424

Cash dividends paid to Royal Dutch Shell plc shareholders (\$ million)

1,702

Repurchases of shares (\$ million)

\$ million	2020	2019	2018	2017	2016
Cash flow from operating activities	34,105	42,178	53,085	35,650	20,615
Capital expenditure	16,585	22,971	23,011	20,845	22,116
Cash flow from investing activities	13,278	15,779	13,659	8,029	30,963
Cash dividends paid to Royal Dutch Shell plc shareholders	7,424	15,198	15,675	10,877	9,677
Repurchases of shares	1,702	10,188	3,947	—	—

[A] With the exception of Cash flow from operating activities, which are cash inflows, all other items are cash outflows.

Earnings per share

(2.78)

Basic earnings per €0.07 ordinary share (\$)

(2.78)

Diluted earnings per €0.07 ordinary share (\$)

\$	2020	2019	2018	2017	2016
Basic earnings per €0.07 ordinary share	(2.78)	1.97	2.82	1.58	0.58
Diluted earnings per €0.07 ordinary share	(2.78)	1.95	2.80	1.56	0.58

Dividend per share

0.65

Dividend per share (\$)

\$	2020	2019	2018	2017	2016
Dividend per share	0.65	1.88	1.88	1.88	1.88

Shares

7,795.6

Basic weighted average number of A and B shares (million)

7,795.6

Diluted weighted average number of A and B shares (million)

Million	2020	2019	2018	2017	2016
Basic weighted average number of A and B shares	7,795.6	8,058.3	8,282.8	8,223.4	7,833.7
Diluted weighted average number of A and B shares	7,795.6	8,112.5	8,348.7	8,299.0	7,891.7

SHELL STORY: WHO WE ARE

Shell is a global group of energy and petrochemical companies with 87,000 employees in more than 70 countries.

We have expertise in the exploration, production, refining, marketing and trading of oil and natural gas, and the manufacturing and marketing of chemicals.

We use advanced technologies and take an innovative approach to help build a sustainable energy future. We also invest in power, including from renewable sources such as wind and solar, and new fuels for transport, such as advanced biofuels and hydrogen.

We serve more than 30 million customers at almost 46,000 retail service stations every day.

Our strategy is to accelerate the transition of our business to net-zero emissions, purposefully and profitably.

OUR CONTEXT

The rising standard of living of a growing global population is likely to continue to drive demand for energy, including oil and gas, for years to come. At the same time, technological changes and the need to tackle climate change mean there is a transition under way to a lower-carbon, multi-source energy system with increasing customer choice.

OUR STAKEHOLDERS INCLUDE:

- Our investor community
- Our customers
- Our employees/workforce/pensioners
- Our strategic partners/suppliers
- Communities
- NGOs/civil society stakeholders/academia/think-tanks
- Governments/regulators

 See "Section 172(1) statement" on pages 22-27, "Environment and society" on pages 85-93, "Our people" on pages 108-111 and "Governance" on pages 112-189 for more detailed discussions around our context and stakeholders.

OUR PURPOSE

We power progress together by providing more and cleaner energy solutions.

 See "Strategy and outlook" on page 18 for more detailed discussion around our purpose.

OUR CORE VALUES

- Honesty
- Integrity
- Respect for people

The Shell General Business Principles, Code of Conduct, and Code of Ethics help everyone at Shell to act in line with these values and comply with relevant laws and regulations. We also strive to build and maintain a diverse and inclusive culture within our company.

 See "Our people" on pages 108-111 for more detailed discussion around our core values.

THE SHELL INVESTMENT CASE

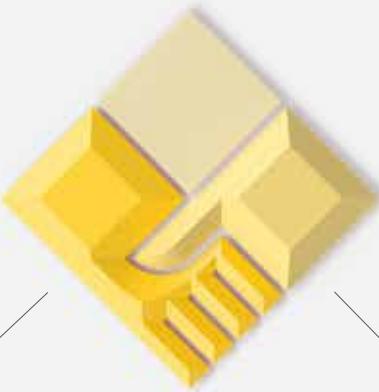
POWERING PROGRESS

Our strategy to accelerate the transition to net-zero emissions, purposefully and profitably



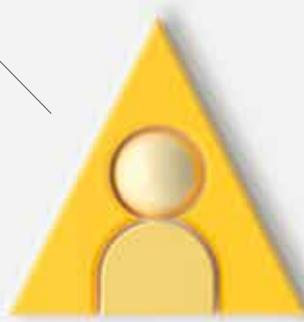
RESPECTING NATURE

Protecting the environment, reducing waste and making a positive contribution to biodiversity



GENERATING SHAREHOLDER VALUE

Growing value through a dynamic portfolio and disciplined capital allocation



POWERING LIVES

Powering lives through our products and activities, and supporting an inclusive society



ACHIEVING NET-ZERO EMISSIONS

Working with our customers and sectors to accelerate the energy transition to net-zero emissions

UNDERPINNED BY
OUR **CORE VALUES**
AND OUR FOCUS
ON **SAFETY**

SHELL STORY: WHAT WE DO

We aim to meet the world's growing need for more and cleaner energy solutions in ways that are economically, environmentally and socially responsible.

OUR INPUTS [A] >

FINANCIAL

276,719 2019: 291,142

Average capital employed (\$ million)

17,827 2019: 23,919

Cash capital expenditure (\$ million)

 [Read more in "Performance indicators" on pages 43-45 and "Non-GAAP measures reconciliations" on pages 305-306.](#)

OPERATIONS

95.5% 2019: 90.8%

Refinery and chemical plant availability

48% 2019: 90%

Project delivery on schedule

104% 2019: 99%

Project delivery on budget

 [Read more in "Performance indicators" on pages 43-45.](#)

INNOVATION

907 2019: 962

Investments in research and development (\$ million)

8,480 2019: 9,449

Patents [B]

 [Read more in "Technology and Innovation" on page 17.](#)

HUMAN CAPITAL

87,000 2019: 87,000

Employees [B]

234,000 2019: 373,000

Training days

 [Read more in "Our people" on pages 108-111.](#)

RELATIONSHIPS

Customers

Joint arrangements

Government relations

Suppliers

>70 2019: >70

Operating countries [B]

 [Read more in "Section 172\(l\) statement" on pages 22-27, "Environment and society" on pages 85-93 and "Governance" on pages 112-189.](#)

NATURAL RESOURCES

9,124 2019: 11,096

Proved oil and gas reserves (million boe) [B]

1,239 2019: 1,338

Oil and gas production available for sale (million boe)

171 2019: 192

Fresh water withdrawn (million cubic metres)

 [Read more in "Oil and gas information" on pages 61-69 and "Environment and society" on pages 85-93.](#)

OUR BUSINESS MODEL >

We seek to create shareholder value by:

- exploring for crude oil and natural gas worldwide;
- developing new crude oil and natural gas supplies from major fields and extracting bitumen from oil sands;
- cooling natural gas to produce liquefied natural gas (LNG) and converting gas to liquids (GTL);
- supplying, marketing and trading oil, gas and other energy-related products, such as electricity and carbon-emission rights as part of our integrated business model;
- having a portfolio of refineries and chemical plants producing a wide range of products including gasoline, diesel, aviation and marine fuel, lubricants and petrochemicals;
- marketing lubricants, aviation fuels, bitumen, sulphur, retail mobility fuels and convenience products and services, as well as low-carbon fuels to customers;
- capturing carbon dioxide using carbon capture and storage (CCS) technology; and
- investing in nature-based solutions that avoid or reduce carbon dioxide emissions.

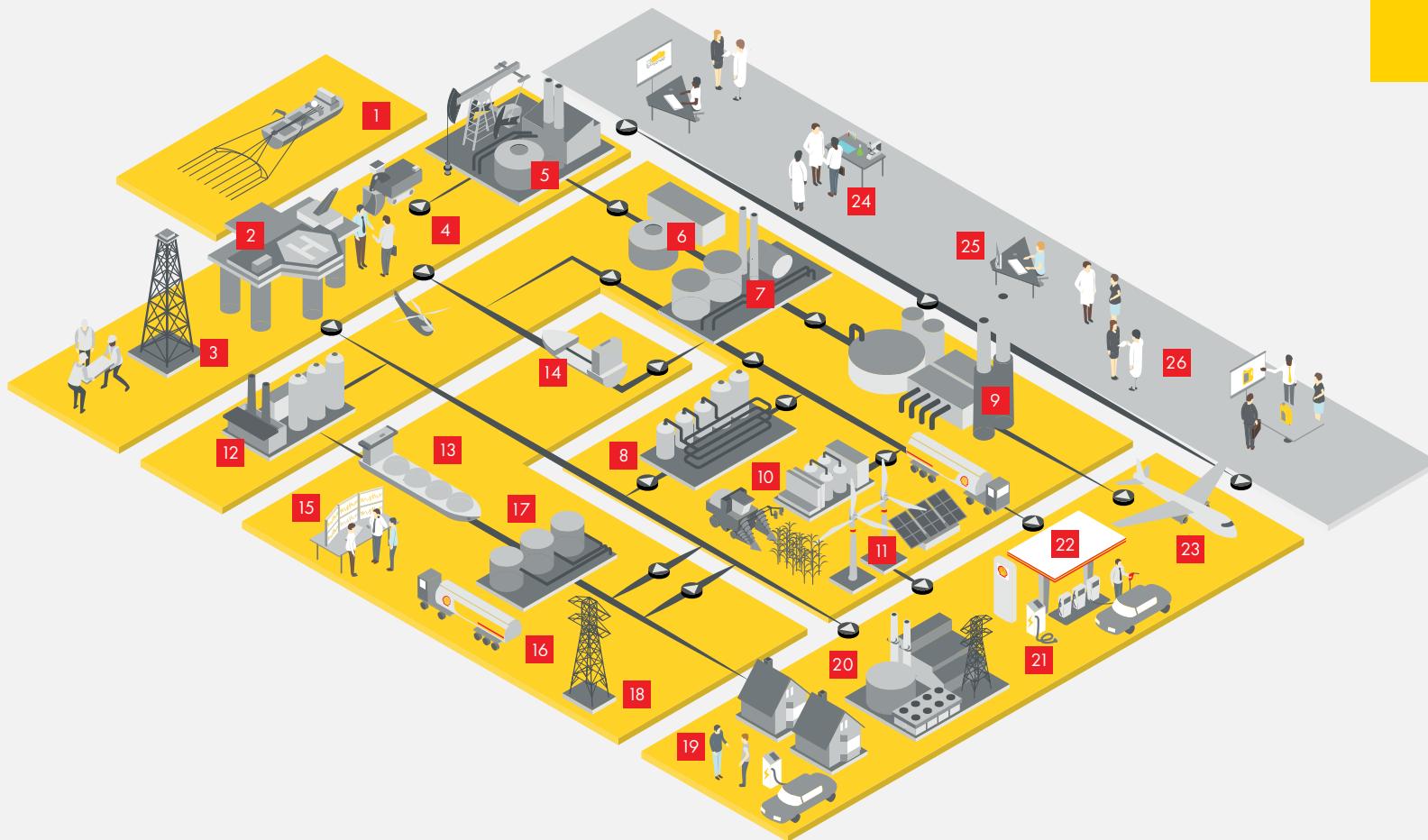
The integration of our businesses is one of our competitive advantages, allowing optimisations across our global portfolio.

[A] In 2020 unless stated otherwise.

[B] At 31.12.2020.

OUR BUSINESS MODEL EXPLAINED

BUSINESS ACTIVITIES



EXPLORATION

- Exploring for oil and gas onshore and offshore

DEVELOPMENT AND EXTRACTION

- Developing onshore and offshore fields
- Producing conventional, deep-water and shale oil and gas
- Capturing carbon dioxide and storing it safely underground
- Extracting bitumen

MANUFACTURING AND ENERGY PRODUCTION

- Upgrading bitumen
- Refining oil into fuels and lubricants
- Producing gas-to-liquids (GTL) products
- Producing petrochemicals
- Producing biofuels
- Generating renewable power
- Producing liquefied natural gas (LNG)

TRANSPORT AND TRADING

- Shipping gas to where it is needed
- Shipping oil to where it is needed
- Trading oil and gas
- Supply and distribution of LNG for transport applications
- Regasifying LNG
- Trading power

SALES AND MARKETING

- Supplying domestic electricity
- Supplying products to businesses, including gas for cooking, heating and electrical power
- Progressing electric vehicle and hydrogen refuelling infrastructure
- Providing mobility solutions for customers, including fuels and lubricants
- Supplying aviation fuel

TECHNICAL AND BUSINESS SERVICES

- Researching and developing new technology solutions
- Managing the delivery of major projects
- Providing technical and supporting services

Our Powering Progress strategy is designed to create value for our shareholders, customers and wider society.

OUR OUTCOME AND IMPACT [A]

ENERGY TRANSITION AND CLIMATE CHANGE

75 2019: 78

Net Carbon Footprint
(grams of CO₂ equivalent
per megajoule)

63 2019: 70

Direct greenhouse gas (GHG)
emissions (million tonnes of
CO₂ equivalent)

 Read more in "Climate change and energy transition" on pages 94-107.

ENVIRONMENTAL IMPACTS

68 2019: 67

Operational spills of more
than 100 kg

0.4 2019: 0.2

Weight of operational spills
(in '000 tonnes)

 Read more in "Environment and society" on pages 85-93.

[A] In 2020 unless stated otherwise.

FINANCIAL PERFORMANCE

(6.8)% 2019: 6.7%	9,126 2019: 25,386
Return on average capital employed (ROACE)	Shareholder distributions (\$ million)

 Read more in "Performance indicators" on pages 43-45 and "Non-GAAP measures reconciliations" on pages 305-306.

RESILIENCE OF BUSINESS MODEL

20,828 2019: 26,399	75,386 2019: 79,093
Free cash flow (\$ million)	Net debt (\$ million)

 Read more in "Performance indicators" on pages 43-45 and "Liquidity and capital resources" on pages 81-84.

TRUST AND TRANSPARENCY

42.2 2019: 47.5	1,425 2019: 1,686
Brand value (\$ billion) [C]	Shell Global Helpline (reports to the helpline)
Publication of the second Shell Tax Contribution Report	

 Read more in "Corporate" on page 80 and "Our people" on pages 108-111.

HEALTH, SAFETY AND SECURITY

0.7 2019: 0.9	103 2019: 130
Total recordable case frequency (injuries per million working hours)	Operational Tier 1 and 2 process safety events

 Read more in "Environment and society" on pages 85-93.

CONTRIBUTION TO COUNTRIES OF OPERATION

47.3 2019: 61.3	39.3 2019: 44.9
Taxes paid and collected (\$ billion)	Total spend on goods and services (\$ billion)

 Read more in "Environment and society" on pages 85-93.

OUR PEOPLE

27.8% 2019: 26.4%	78 2019: 78
Women in senior leadership positions [B]	Average employee engagement score (points)

 Read more in "Our people" on pages 108-111.

[B] At 31.12.2020.

[C] Source: Brand Finance Global 500 2021 Report.

OUR ORGANISATION ➤

We describe below how our activities are organised. Integrated Gas, Upstream and Downstream focus on our three business pillars (see “Strategy and outlook” on page 18). Our Projects & Technology organisation manages the delivery of Shell’s major projects and drives research and innovation to develop new technology solutions.

INTEGRATED GAS (INCLUDING NEW ENERGIES)

Integrated Gas manages LNG activities and the conversion of natural gas into GTL fuels and other products. It includes natural gas exploration and extraction, and the operation of upstream and midstream infrastructure necessary to deliver gas to market. It markets and trades natural gas, LNG, electricity and carbon-emission rights and also markets and sells LNG as a fuel for heavy-duty vehicles and marine vessels.

In New Energies, which was rebranded to Renewables and Energy Solutions in 2021, we are exploring emerging opportunities and investing in those where we believe sufficient commercial value is available. We focus on new fuels for transport, such as advanced biofuels, hydrogen and charging for battery-electric vehicles; and power, including from natural gas and low-carbon sources such as wind and solar.

UPSTREAM

Upstream manages the exploration for and extraction of crude oil, natural gas and natural gas liquids. It also markets and transports oil and gas, and operates infrastructure necessary to deliver them to market.

DOWNSTREAM

Downstream manages different Oil Products and Chemicals activities as part of an integrated value chain that trades and refines crude oil and other feedstocks into a range of products which are moved and marketed around the world for domestic, industrial and transport use. The products we sell include gasoline, diesel, heating oil, aviation fuel, marine fuel, biofuel, lubricants, bitumen and sulphur. We also produce and sell petrochemicals for industrial use worldwide. Our Downstream organisation also manages Oil Sands activities (the extraction of bitumen from mined oil sands and its conversion into synthetic crude oil).

PROJECTS & TECHNOLOGY

Our Projects & Technology organisation manages the delivery of our major projects and drives research and innovation to develop new technology solutions. It provides technical services and technology capability for our Integrated Gas, Upstream and Downstream activities. It is also responsible for providing functional leadership across Shell in the areas of safety and environment, contracting and procurement, wells activities and greenhouse gas management.

Our future hydrocarbon production depends on the delivery of large and integrated projects (see “Risk factors” on pages 28-37). Systematic management of life-cycle technical and non-technical risks is in place for each opportunity, with assurance and control activities embedded throughout the project life cycle. We focus on the cost-effective delivery of projects through commercial agreements, supply-chain management, and construction and engineering productivity through effective planning and simplification of delivery processes. Development of our employees’ project management competencies is underpinned by project principles, standards and processes. A dedicated competence framework, training, standards and processes exist for various technical disciplines. We also provide governance support for our non-Shell-operated ventures or projects.



SEGMENTAL REPORTING

Our reporting segments are Integrated Gas, Upstream, Oil Products, Chemicals and Corporate. Integrated Gas, Upstream, Oil Products and Chemicals include their respective elements of our Projects & Technology organisation. The Corporate segment comprises our holdings and treasury organisation, self-insurance activities, and headquarters and central functions. See Note 4 to the "Consolidated Financial Statements" on pages 230-232.

With effect from January 1, 2020, additional contracts were classified as held for trading purposes and consequently revenue is reported on a net rather than gross basis.

Revenue by business segment (including inter-segment sales) [A]

	2020	2019	2018
Integrated Gas			
Third parties	33,287	41,322	43,764
Inter-segment	3,410	4,280	5,031
Total	36,697	45,602	48,795
Upstream			
Third parties	6,767	9,482	9,459
Inter-segment	21,564	35,735	37,125
Total	28,330	45,217	46,584
Oil Products			
Third parties	128,717	280,460	316,409
Inter-segment	6,213	7,819	10,613
Total	134,930	288,279	327,022
Chemicals			
Third parties	11,721	13,568	18,704
Inter-segment	2,850	3,917	4,864
Total	14,571	17,485	23,568
Corporate			
Third parties	51	45	43
Total	51	45	43

[A] Historical comparatives are based on prevailing foreign exchange rates for respective years.

Revenue by geographical area (excluding inter-segment sales) [A]

	2020	2019	2018
Europe	50,138	98,455	118,960
Asia, Oceania, Africa	65,139	139,916	153,716
USA	50,856	83,212	89,876
Other Americas	14,410	23,294	25,827
Total	180,543	344,877	388,379

[A] Historical comparatives are based on prevailing foreign exchange rates for respective years.

TECHNOLOGY AND INNOVATION

Technology and innovation are essential to our efforts to meet the world's energy needs in a competitive way. If we do not develop the right technology, do not have access to it or do not deploy it effectively, this could have a material adverse effect on the delivery of our strategy and our licence to operate (see "Risk factors" on pages 28-37). We continually look for technologies and innovations of potential relevance to our business. Our Chief Technology Officer oversees the development and deployment of new and differentiating technologies and innovations across Shell, seeking to align business and technology requirements throughout our technology maturation process.

In 2020, research and development expenses were \$907 million, compared with \$962 million in 2019, and \$986 million in 2018. Our main technology centres are in India, the Netherlands and the USA, with other centres in Brazil, China, Germany, Oman, and Qatar. A strong patent portfolio underlies the technology that we employ in our various businesses. In total, we have around 8,480 granted patents and pending patent applications.

OUR STRATEGY

In February 2021, Shell launched Powering Progress which sets out our strategy to accelerate the transition of our business to net-zero emissions, in step with society, purposefully and profitably.

CONTEXT

Our strategy is founded on our outlook for the energy sector and the chance to grasp opportunities arising from the substantial changes in the world around us. We believe the rising standard of living of a growing global population will continue to drive demand for energy for years to come. The world will need to find a way to meet this growing demand, while transitioning to a net-zero emissions energy system to counter climate change.

POWERING PROGRESS

In February 2021, Shell launched Powering Progress, which sets out our strategy to accelerate the transition of our business to net-zero emissions, in step with society, purposefully and profitably.

We will build a strong and resilient business by putting customers at the centre of our strategy, innovating the products and solutions customers need on their journey to net zero. This includes partnering with others to reduce carbon emissions, especially in sectors that are hard to decarbonise. We aim to deliver value through our integrated assets and supply chains, optimising value and managing risk for Shell and our customers as we produce, buy, trade, transport and sell energy products across the world. This is a strategy that combines our financial strength and discipline with a dynamic approach to our portfolio of assets and products, so that we are ready to seize the significant opportunities that exist for us in the energy transition.

POWERING PROGRESS

GENERATING SHAREHOLDER VALUE

Growing value through a dynamic portfolio and disciplined capital allocation



ACHIEVING NET-ZERO EMISSIONS

Working with our customers and across sectors to accelerate the transition to net-zero emissions



Powering Progress generates value for our shareholders, customers and wider society. It has four main goals which integrate sustainability with our business strategy. These goals support Shell's purpose, to power progress together by providing more and cleaner energy solutions. They are underpinned by our core values of honesty, integrity and respect for people, and our focus on safety.

Generating shareholder value: We aim to create the conditions for share price appreciation by preparing our business for the future and accessing the opportunities that the future of energy holds. We will do this while providing sustainable distributions today through our progressive dividend policy. The changing energy landscape means that Shell must take a dynamic approach to its portfolio of assets and products. That means continuing to provide the energy the world needs today, and increasing our investments in cleaner energy. We will keep a disciplined approach to capital investment, and a strong balance sheet, so that our organisation remains strong and resilient. In this way, we will achieve our aim of being a compelling investment case for our shareholders.

Achieving net-zero emissions: Tackling climate change is an urgent challenge. That is why we have set a target to become a net-zero emissions energy business by 2050, in step with society. We are transforming our business and finding new opportunities – selling more low-carbon products such as biofuels, electricity generated by solar and wind power, hydrogen and charging for electric vehicles. We are partnering with customers, businesses and governments to address the energy transition and reduce emissions sector by sector. This includes in sectors that are harder to decarbonise, such as aviation, shipping,

commercial road freight, power, heating and certain parts of industry. We also support government policies to reduce carbon emissions in the economy, sector by sector.

Powering lives: Shell helps to power lives and livelihoods by providing vital energy for homes, businesses and transport. The supply of affordable, reliable and sustainable energy is also crucial for addressing global challenges, including those related to poverty and inequality. Our operations support livelihoods by providing employment and training in the communities where we operate. We are working to become one of the most diverse and inclusive companies in the world, a place where everyone feels valued and respected. We are focusing on four areas: gender, race and ethnicity, LGBT+ and disability. We respect human rights in all parts of our business.

Respecting nature: We are stepping up our environmental ambitions, shaping them to reflect the UN Sustainable Development Goals. Our environmental ambitions include protecting and enhancing biodiversity. We are also focusing on using water and other resources more efficiently across all our activities, reusing as much of them as we can. We are reducing waste from our operations and increasing recycling of plastics. We are helping to improve air quality by reducing emissions from our operations and providing cleaner ways to power transport and industry.

Working with our partners and suppliers and developing new collaborations is key. We will join with others across industry, governments, our customers and supply chains to protect nature.

POWERING LIVES

Powering lives through our products and activities, and by supporting an inclusive society



RESPECTING NATURE

Protecting the environment, reducing waste and making a positive contribution to biodiversity



BUSINESS PILLARS

Powering Progress is a strategy that combines our financial strength and discipline with a dynamic approach to our portfolio of assets and products, so that we are ready to seize the significant opportunities that exist for us in the energy transition. Shell will reshape its portfolio of assets and products to meet the cleaner energy needs of its customers in the coming decades. We will deliver our strategy through three business pillars: Growth, Transition, and Upstream.

Through these three areas, we are creating flexibility in investment opportunities while enabling growth in our customer-facing businesses. Our strategy delivers additional value through trading and optimisation.

Achieving our strategy depends on how we respond to competitive forces. We continually assess the external environment – the markets and the underlying economic, political, social and environmental drivers that shape them – to evaluate changes in competitive forces and business models. We use multiple future scenarios to assess the resilience of our strategy. We regularly review the markets where we operate, assessing our competitive position by analysing trends, uncertainties, and the strengths and weaknesses of our traditional and non-traditional competitors.

To support the delivery of our strategy, we are redesigning Shell to put customers at the centre. That means organising ourselves to help economic sectors to decarbonise, by providing integrated, lower-carbon energy solutions, sector by sector.

We maintain business strategies and plans that focus on actions and capabilities to create and sustain competitive advantage. We maintain a risk management framework that regularly assesses our response to, and risk appetite for, identified risks.

 See "Risk factors" on page 28 and "Governance" on page 112.

Our Executive Directors' remuneration is linked to the successful delivery of our strategy, based on performance indicators that are aligned with shareholder interests. Long-term incentives form the majority of the Executive Directors' remuneration for above-target performance. In 2020, the Long-term Incentive Plan (LTIP) included cash generation, capital discipline, value created for shareholders, and an energy transition condition. For 2021, the weighting of the energy transition condition in the LTIP has been increased to 20%.

 See the "Directors' Remuneration Report" on page 153.

 For more details on how the strategic pillars are embedded into our businesses, see "Shell story" on pages 10-17.

DELIVERING THE STRATEGY: OUR VISION FOR THE FUTURE OF ENERGY

GROWTH PILLAR: THE FUTURE OF ENERGY

MARKETS



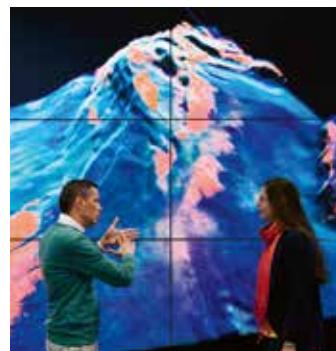
TRANSITION PILLAR: ENABLING OUR STRATEGY

ASSETS



UPSTREAM PILLAR: FUNDING OUR STRATEGY

RESOURCES



Enhanced value delivery through trading and optimisation

OUTLOOK FOR 2021 AND BEYOND

We believe that our integrated business model is key to driving our strategy. It means that our portfolio is greater than the sum of its parts. This competitive portfolio has a solid track record on cash generation, where Shell is leading its peer group. We intend to evolve our portfolio of assets and the mix of energy that we sell to meet the cleaner energy needs of our customers in the coming decades, while delivering value for our shareholders.

Delivering our strategy will require clear and deliberate capital allocation choices. We approach capital allocation at three levels: enterprise, portfolio and project. The enterprise level is about how we make choices between increasing distributions to our shareholders, investing in our business and/or strengthening our balance sheet. The portfolio level is about how we allocate capital between our three business pillars – Growth, Transition and Upstream. The project level is about how we evaluate and prioritise investment opportunities.

At the enterprise level, we look to achieve the right balance between shareholder distributions today and investing for value-enhancing growth.

For cash capital expenditure, we plan to spend between \$19 and 22 billion per annum in the near term. In addition, we expect operating costs to be no higher than \$35 billion and to deliver a divestment programme totalling around \$4 billion a year in this period. We remain committed to our progressive dividend policy and focused on targeting AA-equivalent credit metrics through the cycle.

Subject to Board approval, we aim to grow the dividend per share by around 4 percent every year. Once our net debt level has reached \$65 billion, we will target the distribution of 20-30% of cash flow from operations to shareholders, and may choose to return cash to shareholders through a combination of dividends and share buybacks.

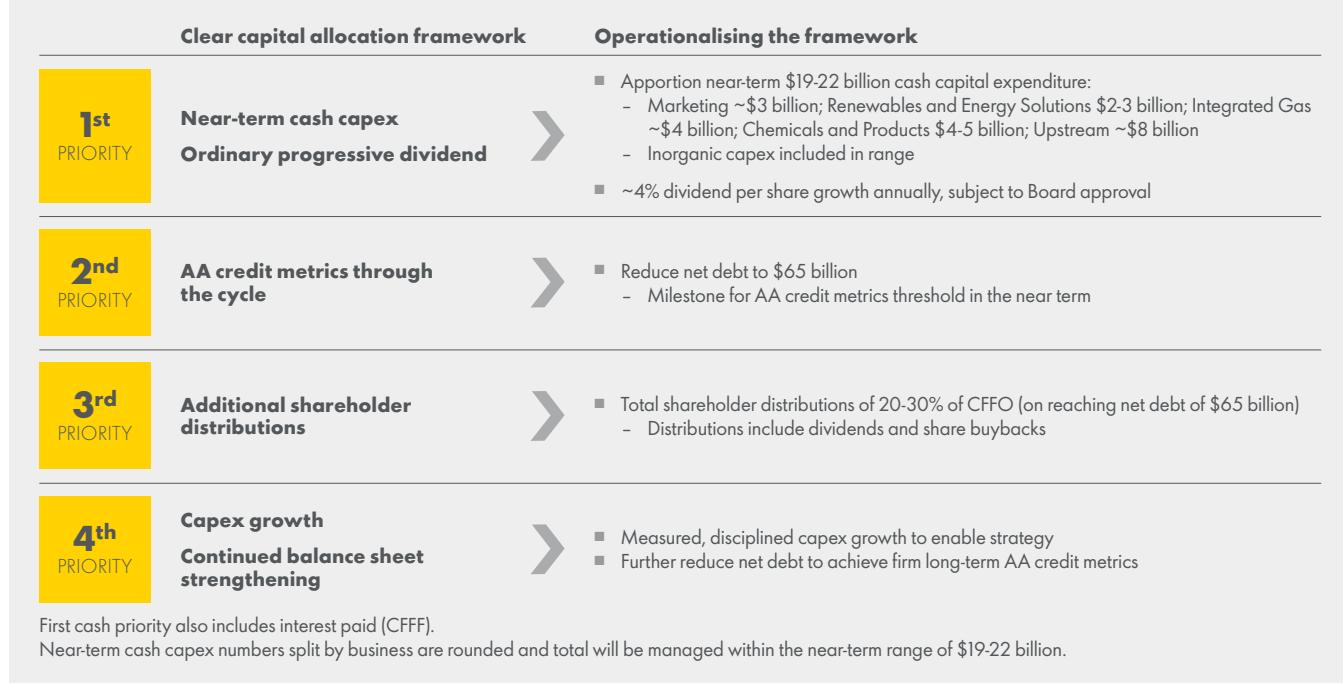
Once we have achieved this level of shareholder distributions, additional surplus cash will be allocated between further disciplined capital investments to deliver our strategy and further debt reduction to strengthen the balance sheet.

We fully support the Paris Agreement's goal to keep the rise in global average temperature this century to well below two degrees Celsius above pre-industrial levels and to pursue efforts to limit temperature increase even further to 1.5 degrees Celsius. We announced a long-term target to become a net-zero emissions energy business by 2050, in step with society. This includes a target to be net zero on all emissions from the manufacture of all our products – (our Scope 1 and 2 emissions) – by 2050, and also net zero from the end use of all the energy products we sell (Scope 3 emissions). We aim to reduce the net carbon intensity of energy sold by 6-8% by 2023, 20% by 2030, 45% by 2035 and 100% by 2050, in comparison with 2016. We expect that our total carbon emissions from energy sold will stay below 2018 levels. Further details are in the "Climate change and energy transition" section on page 94.

As a result of COVID-19, there continues to be significant uncertainty in the macroeconomic conditions with an expected negative impact on demand for oil, gas and related products. Demand or regulatory requirements and/or constraints in infrastructure may cause Shell to take measures to curtail or reduce oil and/or gas production, LNG liquefaction and utilisation of refining and chemicals plants. Sales volumes could be similarly affected. Such measures could impact our earnings, cash flow and financial condition.

The statements in this "Strategy and outlook" section, including those related to our growth strategies and our expected or potential future cash flow from operations, organic free cash flow, share buybacks, capital investment, divestments, production and Net Carbon Footprint, are based on management's current expectations and certain material assumptions and, accordingly, involve risks and uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied herein. See "About this Report" on page iii and "Risk factors" on pages 28-37.

CAPITAL ALLOCATION: TARGET SHAREHOLDER DISTRIBUTIONS OF 20-30% OF CFFO



SECTION 172(1) STATEMENT

The Companies (Miscellaneous Reporting) Regulations 2018 (2018 MRR) require Directors to explain how they considered the interests of key stakeholders and the broader matters set out in Section 172(1) (a) to (f) of the Companies Act 2006 (S172) when performing their duty to promote the success of the Company under S172. This includes considering the interests of other stakeholders which may affect the long-term success of the company. This S172 statement explains how Shell Directors:

- have engaged with employees, suppliers, customers and others; and
- have considered employee interests, the need to foster business relationships with suppliers, customers and others, and the effects of those considerations, including on the principal decisions taken during the financial year.

The S172 statement focuses on matters of strategic importance to Shell, and the level of information disclosed is consistent with the size and the complexity of Shell's businesses.

GENERAL CONFIRMATION OF DIRECTORS' DUTIES

Shell's Board has a clear framework for determining the matters within its remit and has approved Terms of Reference for the matters delegated to its Committees. Certain financial and strategic thresholds have been set, in order to identify matters requiring Board consideration and approval. The Manual of Authority sets out the delegation and approval process across the broader business. More information on Shell's controls and procedures can be found in "Other regulatory and statutory information" on page 182.

When making decisions, each Director ensures that (s)he acts in the way he or she considers, in good faith, would most likely promote Shell's success for the benefit of its members as a whole, and in doing so has regard (among other matters) to the issues set out below.

S172(1) (a) "THE LIKELY CONSEQUENCES OF ANY DECISION IN THE LONG TERM"

The Directors understand the business and the evolving environment in which we operate, including the challenges of navigating through the energy transition. Based on Shell's purpose to power progress together by providing more and cleaner energy solutions, the strategy set by the Board is intended to strengthen our position as a leading energy company by providing oil, gas and low-carbon energy products and services that meet our customers' cleaner energy needs as the global energy system transforms, while keeping safety and social responsibility fundamental to our business approach.

As outlined in "Our context" in the "Shell story" section on pages 10-17, the rising standard of living of a growing global population is likely to continue to drive demand for energy, including oil and gas, for years to come. At the same time, tackling climate change requires an orderly transition to a lower-carbon, multi-source energy system that is enabled by technological changes and facilitates increasing customer choice. Shell's strategic ambitions have been set in that context. We want to increase long-term value for shareholders, recognising that the long-term success of our business depends on our stakeholders and the effects of our business activities on wider society.

In 2020, we had to operate in the unprecedented context created by the COVID-19 pandemic, the resulting macroeconomic conditions and the imbalance between supply and demand in the oil and gas market.

To retain focus on achieving the strategic ambitions, in 2020 the Board determined a cash allocation framework designed to enable debt reduction, increase shareholder distributions, and facilitate disciplined growth as Shell reshapes its business for the future of energy. Shell also announced the reshaping of its portfolio of assets and products to meet its customers' cleaner energy needs in the coming decades. The key elements of Shell's strategic direction include:

- setting a target to be a net-zero emissions energy business by 2050, in step with society;
- growing its leading marketing business, further developing the integrated power business and commercialising hydrogen and biofuels to support customers' efforts to achieve net-zero emissions;
- transforming its refining portfolio from the current 13 sites into six high-value energy and chemicals parks, integrated with Chemicals. Growth in Chemicals will shift to more performance chemicals and recycled feedstocks;
- extending leadership in liquefied natural gas (LNG) to enable decarbonisation of key markets and sectors;
- focusing on value over volume by simplifying Upstream to nine significant core positions, which will generate more than 80% of Upstream's cash flow from operations; and
- enhancing value delivery through trading and optimisation.

The Directors recognise that there are differing societal views about our operations and that some Board decisions taken today may not align with all stakeholder interests. Given the complexity of the evolving energy transition, the Directors have taken the decisions they believe best support Shell's strategic ambitions.

S172(1) (b) "THE INTERESTS OF THE COMPANY'S EMPLOYEES"

The Directors recognise that Shell employees are fundamental and core to our business and the delivery of our strategic ambitions. The success of our business depends on attracting, retaining and motivating talented employees. The Directors consider and assess the implications of decisions on employees and the wider workforce, where relevant and feasible. The Directors seek to ensure that Shell remains a responsible employer, including with respect to pay and benefits, health and safety issues, and the workplace environment. The Directors recognise that our pensioners, though no longer employees, also remain important stakeholders.

More information on this can be found in "Workforce engagement" on page 138.

S172(1) (c) "THE NEED TO FOSTER THE COMPANY'S BUSINESS RELATIONSHIPS WITH SUPPLIERS, CUSTOMERS AND OTHERS"

Delivering our strategy requires strong mutually beneficial relationships with suppliers, customers, governments, national oil companies and joint-venture partners. Shell seeks to promote and apply certain general principles in such relationships. The ability to promote these principles effectively is an important factor in the decision to enter into or remain in such relationships. This standard and others are described in the Shell General Business Principles, which are based upon our core values of honesty, integrity and respect for people (i.e. our stakeholders). The Board periodically reviews and approves the Shell General Business Principles. The Directors take account of the General Business Principles and core values when exercising their duties and making Board decisions. "Core Value Moments" are built into Board agendas and provide the Board with opportunities to reflect on the importance of the General Business

Principles and Core Values. The Board also reviews and approves Shell's approach to suppliers, which is set out in the Shell Supplier Principles. The businesses continually assess the priorities related to customers and those with whom we do business. The Board engages with the businesses on these topics, for example, within the context of business strategy updates and investment proposals.

The Directors also receive updates on a variety of topics that indicate how these stakeholders have been engaged.

These updates include information provided by the Projects & Technology function on suppliers and joint-venture partners, with respect to items such as project updates and supplier contract management. Businesses also provide information on customers and joint-venture partners in relation to business strategies, projects, and investment or divestment proposals.

S172(1) (d) "THE IMPACT OF THE COMPANY'S OPERATIONS ON THE COMMUNITY AND THE ENVIRONMENT"

This aspect is inherent in our strategic ambitions. The Board receives information on various topics to help it make decisions relating, for example, to issues such as the Net Carbon Footprint target, the COVID-19 pandemic's impact on Shell, country-entry considerations, proposals to invest or divest, and business strategy reviews. The information also goes into Group-level overviews, such as updates on safety and environment performance, reports from the Chief Ethics & Compliance Officer, and reports from the Chief Internal Auditor. In 2020, certain Board committees and Non-executive Directors conducted site visits of various Shell operations and overseas offices and held external stakeholder engagements, where feasible. The physical site visits were not as extensive as in past years because of travel and other restrictions imposed by governments in response to COVID-19. Despite the challenges presented by COVID-19 in terms of international travel and face-to-face meetings, the Board maintained a strong interface with businesses and staff through virtual engagements, making best use of the technology available.

More information on this, including details of face-to-face visits held pre-COVID-19, can be found in "Understanding and engaging with our stakeholders" on page 134, or in the reports of each Board committee.

S172(1) (e) "THE DESIRABILITY OF THE COMPANY MAINTAINING A REPUTATION FOR HIGH STANDARDS OF BUSINESS CONDUCT"

Shell aims to meet the world's growing need for more and cleaner energy solutions in economically, environmentally and socially responsible ways. The Board periodically reviews and approves clear frameworks, such as The Shell General Business Principles, Shell's Code of Conduct, specific Ethics and Compliance manuals, the Ethical Decision-Making Framework, and its Modern Slavery Statements, to ensure that its high standards are maintained in Shell businesses and in Shell's business relationships. This, complemented by the ways the Board is informed and monitors compliance with relevant governance standards, helps to ensure that Board decisions and the actions of Shell companies promote high standards of business conduct.

S172(1) (f) "THE NEED TO ACT FAIRLY AS BETWEEN MEMBERS OF THE COMPANY"

After weighing up all relevant factors, the Directors consider which course of action best enables delivery of our strategy through the long term, taking into consideration the effect on stakeholders. In doing so, our Directors act fairly as between the Company's members but are not required to balance the Company's interest with those of other stakeholders. This can sometimes mean that certain stakeholder interests may not be fully aligned.

CULTURE

The Board recognises that it plays an important role in assessing and monitoring that our desired culture is embedded in our values, attitudes and behaviours, including in our activities and stakeholder relationships. The Board has established honesty, integrity and respect for people as Shell's core values. The General Business Principles, Code of Conduct, and Code of Ethics help everyone at Shell to act in line with these values and comply with relevant laws and regulations. The Shell Commitment and Policy on Health, Safety, Security, Environment & Social Performance applies across Shell and is designed to help protect people and the environment. In 2020, we refreshed our approach to safety to avoid fatalities and life-changing injuries by building on existing strong foundations, with an increased and deliberate focus on "human performance". "Human performance" is the way people, culture, equipment, work systems and processes interact as a system. It remains our ambition to achieve Goal Zero, no harm and no leaks across all our operations.

Shell has an ambitious strategy to achieve net-zero emissions by 2050 in step with society, while generating shareholder value. This also includes medium- and long-term targets of 20% by 2030, 45% by 2035, and 100% by 2050 (compared with 2016). To achieve our strategic goals, we need to adapt our mindset and behaviours as we navigate the increasing complexity in the world around us. "Who we are" captures the mindset and behaviours needed to succeed in the coming years, including:

- applying a learner mindset: everyone has the ability to grow, learn from mistakes and successes, and speak up openly in a safe environment. We encourage curiosity, humility, openness, helping each other to make better decisions and create more value;
- maximising our performance: we collaborate across boundaries and speak up when we see things that can be improved. We enable people to deliver, and we work in an integrated way with discipline, clear focus on priorities, and tangible outcomes in order to reach our full potential;
- increasing trust in Shell: we aim to be a valued member of the communities in which we operate, and to make a positive contribution to society. We seek to listen carefully and with humility and we have a strong desire to understand, and, where possible, adapt to the changing needs and expectations of society, especially as they relate to the environment. We build strong and trusted relationships with customers and partners which are fundamental to our collective success;
- living by our values and Goal Zero: we live by our values and do the right things in respect to ethics, safety and the environment; and
- inspiring and engaging: we aspire to a situation where everyone feels connected to what we stand for. We build trusting and effective teams where everyone feels ownership and has a voice in how work gets done. We strive to maintain a diverse and inclusive culture.

The Board considers the Shell People Survey to be an important tool for measuring employee engagement, motivation, affiliation and commitment to Shell. It provides insights into employee views and has a consistently high response rate. It also helps the Board to understand how the survey's outcomes are being used to strengthen Shell culture and values. The Board has noted that although staff surveys offer insight, limitations exist. The surveys may lack sufficient detail on how culture is embedded. As a result, a more rigorous approach to Board oversight of culture will be adopted in the year ahead to establish more effective ways of monitoring and assessing culture and how it aligns with purpose, values and strategy.

SECTION 172(1) STATEMENT continued

The Board recognises the important role Shell has in society and is deeply committed to public collaboration and stakeholder engagement. This commitment is at the heart of Shell's strategic ambitions. The Board strongly believes that Shell will only succeed by working together with customers, governments, business partners, investors and other stakeholders.

Working together is critical, particularly at a time when society, including businesses, governments and consumers, faces issues as complex and challenging as climate change.

We continue to build on our long track record of working with others, such as investors, industry and trade groups, universities, governments, non-governmental organisations (NGOs) and, in some appropriate instances, our competitors through our joint-venture operations or industry bodies. We believe that working together and sharing knowledge and experience with others offers us greater insight into our business. We also appreciate our long-term relationships with our investors and acknowledge the positive impact of ongoing engagement and dialogue.

STAKEHOLDER ENGAGEMENT (INCLUDING EMPLOYEE ENGAGEMENT)

The guidance on preparing information, proposals or discussion items for the Board asks for these materials to include considerations of the views, interests and concerns of stakeholders and how management addressed them. This helps to strengthen the Board's knowledge of how the broader business undertakes significant levels of stakeholder engagement. Board minutes have also reflected key points on stakeholder considerations, where appropriate. The Terms of Reference for our Safety, Environment and Sustainability Committee also include, within the Committee's remit, the review and consideration of external stakeholder perspectives and how major issues of public concern that could affect Shell's reputation and licence to operate were, or are being addressed.

The Board also engaged with certain stakeholders directly, to understand their views. The Board also leverages its very substantial in-house expertise by receiving input from economics and policy experts on key political and economic themes periodically, with some updates being presented to the Board each quarter. More on this engagement is provided in "Understanding and engaging with our stakeholders" on page 134.

Information on how the Directors have engaged with employees can be found on page 138 and in the "Our people" section on pages 108. The tables below includes examples of how Directors have considered the interests of Shell employees and the resulting outcomes.

PRINCIPAL DECISIONS

In the table below, we outline some of the principal decisions made by the Board over the year, explain how the Directors have engaged with, or in relation to, the different key stakeholder groups and how stakeholder interests were considered in decision-making.

To remain concise, we have categorised our key stakeholders into seven groups. Where appropriate, each group is considered to include both current and potential stakeholders. The groups are:

- Ⓐ investor community;
- Ⓑ employees/workforce/pensioners;
- Ⓒ regulators/governments;
- Ⓓ NGOs/civil society stakeholders/academia/think-tanks;
- Ⓔ communities;
- Ⓕ customers; and
- Ⓖ suppliers/strategic partners.

Principal decisions

We define principal decisions taken by the Board as decisions taken in 2020 that are of a strategic nature and significant to any of our key stakeholder groups. As outlined in the UK Financial Reporting Council (FRC) Guidance on the Strategic Report, we include decisions related to capital allocation and dividend policy.

How were stakeholders considered

We describe how regard was given to likely long-term consequences of the decision including how stakeholders were considered during the decision-making process.

What was the outcome

We describe which accommodations or mitigations were made, if any, and how Directors have considered different interests, and the factors taken into account.

Strategic updates	What was the outcome
<p>Over the course of the year, the Board considered strategic options and areas of emerging strategic focus, including in relation to the Net Carbon Footprint target. Principal decisions included: Shell's plans to become a net-zero emissions (NZE) energy business by 2050, in step with society, covering Scope 1, 2 and 3 emissions (the NZE energy business target as announced on April 16, 2020); and the update on strategic direction that clarified the investment proposition and how the value that Shell generates is translated into shareholder distributions (announced on October 29, 2020).</p>	<p>In relation to Shell's target to become a net-zero emissions energy business by 2050, in step with society, the Board considered whether the NZE energy business target would meet investors' expectations, how Shell can help customers find ways to decarbonise, and how to ensure Shell's credible leadership in informing and driving a societal energy transition. The outcome of those deliberations was the view that we should work with our customers to address the emissions that are produced when they use products they buy from Shell. This is in addition to the other elements of the NZE energy business target.</p>
<p>How stakeholders were considered</p> <p>Given the significance of the strategic topics, the Board had multiple stakeholder engagements. These involved shareholders, employees and our internal climate experts throughout the year, and in earlier years where we also engaged external climate scientists, to help inform the key choices and parameters in the months leading up to the decisions, which included a three-day annual strategy meeting. These engagements included an update and discussion on: the strategic agenda; the proposed strategic pathway and underlying premises; the energy transition strategy; choices for traditional businesses and preparing for alternative strategies; and the financial framework required. These discussions were informed by research undertaken for the Executive Committee to better understand the requirements and expectations of Shell's external stakeholders. This research focused on: investors; environmental, social, and governance (ESG) and sustainability benchmarks; customers; business partners; international organisations; NGOs; civil society stakeholders; think-tanks; academia and schools; and general public audiences. This included qualitative and quantitative interview-based analysis. The Board considered: implications for customer sectors to drive the approach to decarbonising; business opportunities in new areas to develop the energy system; changes to be made to current business to drive competitive performance, delivery and funds for future investments and shareholders; and Shell's Net Carbon Footprint. In later meetings, the strategy was subsequently refined. In these discussions, the Board considered, among other things, shifting societal expectations of the extent and pace of the energy transition; government and regulatory expectations; ways to meet existing investors' expectations and what would be needed to attract new investors in future; and strategic partnerships.</p>	<p>The direction of the strategic discussion fed through into the discussions on cash allocation, shareholder returns and to the development of Shell's Powering Progress strategy. After feedback from investors seeking an update on our strategic discussions, in October 2020, stakeholders were informed about Shell's response to the COVID-19 pandemic and provided with an explanation of the driver behind the enhanced target to be a NZE energy business. The direction of the ongoing restructuring of Shell's ways of working and organisation was also outlined in order to provide stakeholders with continued updates in the lead-up to Shell's Strategy Day in February 2021.</p>
<p>The Board participated in virtual staff engagement sessions that enabled the Board members to speak directly with staff from various locations on themes including leadership styles, safety and controls, the Reshape reorganisation and the future of Shell.</p>	<p>As part of the Shell Strategy Day 2021, we announced Powering Progress, our strategy to accelerate the transition of our business to cleaner energy while delivering value for our shareholders, our customers and wider society. The strategy includes how we are working towards our target to become a net-zero emissions energy business by 2050, in step with society. We are increasing our investments in the cleaner products and solutions that our customers need, from biofuels to hydrogen and renewable power, so that we can build a low-carbon business of significant scale by the beginning of the 2030s. We will fund these investments, and our returns to shareholders, with the strong returns we expect from our oil and gas production over the rest of this decade. The Board has been involved in formulating the strategy and ensuring that the Company maintains financial resilience while being able to seize the opportunities that transition will bring as part of our journey to net zero. We are the first energy company to offer shareholders an advisory vote on our energy transition strategy at our Annual General Meeting. We will do this every three years, starting in 2021. We will also on an annual basis offer an advisory vote on our progress against the targets we set for ourselves in the energy transition strategy. The Board believe this is a time of tremendous opportunity for Shell. By transforming our business, we will contribute to achieving a net-zero world, help society reach its climate goals and create a compelling investment case for our shareholders, today and in the future. That is the essence of Powering Progress and it has been fully endorsed by the Board through multiple engagements with management over a 12-month period.</p>

SECTION 172(1) STATEMENT continued

Financial strength, cash allocation including shareholder distributions	What was the outcome
<p>The year 2020 involved unprecedented conditions for Shell, the industry and society generally. The challenges caused by COVID-19 resulted in material responses by Shell to successfully maintain its financial strength and resilience. The Board considered Shell's financial policies on several occasions and made decisions accordingly (see above, regarding the relationship and direction of the strategic and cash allocation discussions). The long-term financial health of Shell is crucial for staff, customers, the communities in which Shell operates, and for debt holders and shareholders. In early 2020, a key focus area for the Board was cash preservation, which included cost and capital spend reduction, pausing of the share buyback programme and the reduction of the dividend. In the later part of the year, Directors approved the cash allocation framework, which was announced as part of the third quarter 2020 results. For each quarter, the Board assessed the continuation of the share buyback programme and the ongoing payment and rate of dividend per share payable to shareholders.</p> <p>How stakeholders were considered</p> <p>A number of metrics and factors underpinned each decision, including the BG intention statement regarding equity issued in connection with the combination with the BG Group.</p> <p>When making decisions relating to Shell's financial policies, including the cash allocation framework, the Board asked for further information on specific yet broad topics that impacted various stakeholders, such as: information on the proposed operating and capital expenditure reductions; the potential impact of a reduced dividend on strategic options; the articulation of cash allocation plans to investors and other stakeholders; and potential asset and project risks associated with counterparty financial viability risks. These considerations were balanced against prior intention statements.</p> <p>To support these discussions, the Board was provided with information from an investor survey. This was discussed extensively in order to understand the perceptions of the market in relation to Shell's direction, strategy and financial strength. Having equity advisors and banks present directly to the Board helped build the Board's knowledge of what the markets were looking for. This helped guide the content of the third quarter 2020 communications.</p> <p>An annual investor perception study was commissioned and considered by the Board. The Board was also provided with periodic reports from the Executive Vice President, Investor Relations which summarised feedback from various brokers and provided detailed analysis of how Shell's messages had been received by investors.</p> <p>The Board was regularly updated on, and discussed, the management and impact of COVID-19 on Shell's activities and workforce.</p>	<p>The Board and management carefully considered various stakeholders in their decisions to reinforce the financial strength and resilience of Shell's business. They also took action to protect staff and customers. Their considerations focused on three key areas: care for staff, customers, and communities; business continuity and the need to continue to serve customers in every way we can, including providing them with certainty; and generating and preserving cash to protect the future financial health of Shell.</p> <p>For example, in relation to staff and the wider workforce, the Board considered with management the appropriate timing of any large-scale redundancies, given the stress involved and the potential vulnerability of staff and their families to issues associated with COVID-19; how management was engaging with staff while most people were working from home; and how work sites were being equipped and return-to-work plans were being formulated to ensure people could return to work safely.</p> <p>In relation to the decision to lower the dividend level, the Board and Management considered employees, Shell pensioners, lenders, debt holders, credit-rating agencies, suppliers, customers, governments, partners and communities. As a reduced dividend meant greater retention of cash to use for increasing financial resilience, the outcome of the consideration of stakeholders was that the decision would be largely positive for all stakeholders in the longer term.</p> <p>Investor feedback received towards the middle of 2020 led to the decision to more clearly communicate the cash allocation framework to investors and the prioritisation of allocation between balance sheet strength, shareholder distributions and investments. More information on this can be found in "Dividend policy" on 183.</p>
<p>Approval of Shell's detailed Operating Plan 2021-2023 (OP20)</p> <p>The approval of OP20 followed an in-depth review by the Board of proposals on capital allocation, capital investment outlook, competitive outlook, operating expenses, return on average capital employed and shareholder distributions. This included reviews in the latter part of 2020 as an advance engagement on OP20 while it was under preparation, and in December 2020 for final approval.</p> <p>How stakeholders were considered</p> <p>OP20 discussions included a full review against Shell's strategic ambitions. The Directors and Executive Committee balanced the priorities in the operating plan versus the strategy by using feedback received as part of continual engagement with investors, discussions with equity and debt market analysts, and commitments made regarding share buybacks, gearing and organic free cash flow. The plan was discussed extensively and reviewed thoroughly.</p> <p>In the assessment, the interests of investors and capital markets received particular attention and featured heavily in many discussions. Potential differences of interests between debt and equity investors were observed. This was balanced against the importance of the value that societies – (including communities, employees, customers, suppliers) – place on Shell because of the services it provides and the way it conducts business.</p> <p>Information on employees and our organisational structure featured as part of OP20. The plan maintained the approach to salaries, benefits, health, worker welfare, focus on employee experience and training.</p> <p>Metrics agreed within OP20 underpin the 2021 organisational scorecard, against which the majority of employee bonuses are calculated. Both the Board and the Remuneration Committee discussed these metrics at length to ensure they are suitably stretching and motivating, support the right culture within the business, and align to the strategic ambitions.</p> <p>OP20 reflects the refreshing of the strategy with the growth of low-carbon, customer-facing businesses. It considered the economic and social effects of the pandemic in developing the plan and sought appropriate balance between key priorities, including sustaining cash flows, pivoting the portfolio to deliver the strategy (including reductions in carbon emissions), reducing debt and increasing shareholder distributions.</p>	<p>What was the outcome</p> <p>Following the review of the draft operating plan, the Board requested further information on a number of specific matters. Responses were provided on these items and changes were incorporated into the plan where appropriate.</p> <p>The overall outcome of this decision is an operating plan that the Board believes underpins Shell's strategic ambitions and has taken into account different stakeholder views, realising that not all stakeholder views can or will completely align with OP20.</p> <p>While stakeholder opinion may differ on Shell's approach, OP20 is based on society's demand for products and services. OP20 supports Shell in maintaining a reputation for high standards on business conduct and health, safety, security and environment issues. It maintained the approach to employee remuneration and benefits to pensioners. OP20 seeks to reward our investors with returns and maintain long-term financial strength to invest in more and cleaner forms of energy and meet the current and future needs of society.</p>

Investing in new business, acquisitions and divestments, and closures	What was the outcome
<p>Over the course of the year, the Board discussed and approved new opportunities, new projects and proposed divestments or closures across the different segments. This was in order to continually high-grade the portfolio, to deliver the best from our traditional businesses, to grow our customer-centric business and to rapidly and purposefully innovate for our future business models.</p>	<p>As a result of discussion and decisions in this area, the Board obtained insights on renewables growth, customers' priorities (around price and interest in clean power), and information on anticipated market direction and regulatory frameworks.</p>
<p>How stakeholders were considered</p>	<p>Oil and gas – The Board recognises that societal views vary widely in this area. It must also bear in mind that global demand for energy is still growing. Although renewable resources will meet a growing share of the rising energy demand, Shell and other experts believe there continues to be a need for oil and gas for many years to come through the energy transition. The Directors also appreciate that it is this business that provides the capital to invest in the energy transition.</p>
<p>The Board obtained a clearer perspective on the role of Shell's Trading and Supply organisation in the energy transition (for example, in biofuels and renewable energy). This assisted the Board in assessing the possible impact on stakeholders and risks to its reputation in relation to certain stakeholder groups. These considerations included assessing the impact on cash allocation and shareholder distributions.</p>	<p>Offshore wind farm Hollandse Kust (noord) – Throughout 2019, the Board obtained a clearer understanding of New Energies' investments and their alignment with the Power strategy. In 2020, the Board continued to receive updates on strategic priorities for New Energies/Power investments. The Board also received a summary of potential opportunities being considered in order for Shell to deliver upon the overarching goal of creating a profitable, cohesive and integrated business in the Power strategy's core markets. North-west Europe is a priority region for implementing Shell's Power Strategy. The Board reflected on Shell's differentiators to be successful in the tender, including technology and innovation. During the Board's discussion, particular attention was paid to where this proposal fits in the capital programme and the role of this proposal in customer offerings for decarbonised power.</p>
<p>Investors shared their opinions on significant acquisitions in the New Energies sector compared with organic growth/investment.</p>	<p>Oil and gas – During the year Shell secured new opportunities in a number of regions, some of which were considered and approved by the Board. The Directors carefully reviewed new significant entries and risk and rewards of new projects. During these discussions, the Board was aware that some stakeholders may disagree with Shell's strategy to continue to invest in oil and gas during the energy transition.</p>
<p>Offshore wind farm Hollandse Kust (noord) – The CrossWind Consortium, a joint venture between Shell and Eneco, was awarded the tender for this wind farm. The consortium plans to have Hollandse Kust (noord) operational in 2023 with an installed capacity of 759 MW, generating at least 3.3 TWh per year. This is enough renewable power to supply more than 1 million Dutch households with green electricity. The Board was informed of stakeholder engagements, including with the Rijksdienst voor Ondernemend Nederland (the ministerial entity responsible for the tender).</p>	

RISK FACTORS

The risks discussed below could have a material adverse effect separately, or in combination, on our earnings, cash flows and financial condition. Accordingly, investors should carefully consider these risks.

Further background on each risk is set out in the relevant sections of this Report indicated by way of cross-references under each risk factor.

The Board's responsibility for identifying, evaluating and managing our significant and emerging risks is discussed in "Other Regulatory and Statutory Information" on pages 182-189.

STRATEGIC RISKS

Risk description	How this risk is managed
<p>We are exposed to macroeconomic risks including fluctuating prices of crude oil, natural gas, oil products and chemicals.</p> <p>The prices of crude oil, natural gas, oil products and chemicals are affected by supply and demand, both globally and regionally. Macroeconomic, geopolitical and technological uncertainties can also affect production costs and demand for our products. Government actions may also affect the prices of crude oil, natural gas, oil products and chemicals. This could happen, for example, if governments promote the sale of lower-carbon electric vehicles or even prohibit future sales of new diesel or gasoline vehicles, such as the prohibition in the United Kingdom (UK) that is expected to come into force in 2030. Oil and gas prices can also move independently of each other. Factors that influence supply and demand include operational issues, natural disasters, weather, pandemics such as COVID-19, political instability, conflicts, economic conditions and actions by major oil and gas producing countries. In a low oil and gas price environment, we would generate less revenue from our Upstream and Integrated Gas businesses, and parts of those businesses could become less profitable or incur losses. Low oil and gas prices have also resulted and could continue to result in the debooking of proved oil or gas reserves, if they become uneconomic in this type of price environment. Prolonged periods of low oil and gas prices, or rising costs, have resulted and could continue to result in projects being delayed or cancelled. Assets have been impaired in the past, (including in 2020), and there could be impairments in the future. Low oil and gas prices could also affect our ability to maintain our long-term capital investment programme and dividend payments. Prolonged periods of low oil and gas prices could adversely affect the financial, fiscal, legal, political and social stability of countries that rely significantly on oil and gas revenue. In a high oil and gas price environment, we could experience sharp increases in costs, and, under some production-sharing contracts, our entitlement to proved reserves would be reduced. Higher prices could also reduce demand for our products, which could result in lower profitability, particularly in our Oil Products and Chemicals business. Higher prices can also lead to more capacity being built, potentially resulting in an oversupply of products that can negatively affect our LNG and Chemicals businesses.</p> <p>Accordingly, price fluctuations could have a material adverse effect on our earnings, cash flows and financial condition.</p> <p>See "Market overview" on page 38.</p>	<p>We maintain a diversified portfolio to mitigate the impact of price volatility. We test the resilience of our projects and other opportunities against a range of prices and costs for crude oil, natural gas, oil products and chemicals. We prepare annual strategic and financial plans that test different scenarios and their impact on prices on our businesses and company as a whole. These plans are appraised regularly throughout the year, especially during periods of significant price and demand volatility as experienced in 2020. We also aim to maintain a strong balance sheet to provide resilience against weak market prices.</p>
<p>Our ability to deliver competitive returns and pursue commercial opportunities depends in part on the accuracy of our price assumptions.</p> <p>We use a range of oil and gas price assumptions, which we review on a periodic basis. These ranges help us to evaluate the robustness of our capital allocation for our evaluation of projects and commercial opportunities. If our assumptions prove to be incorrect, it could have a material adverse effect on our earnings, cash flows and financial condition.</p> <p>See "Market overview" on page 40.</p>	<p>The range of commodity prices used in our project and portfolio evaluations is subject to a rigorous assessment of short-, medium- and long-term market drivers. These drivers include the extent and pace of the energy transition.</p>
<p>Our ability to achieve our strategic objectives depends on how we react to competitive forces.</p> <p>We face competition in all our businesses. In the crude oil, natural gas, Oil Products and Chemicals businesses we seek to differentiate our products, but many of them are competing in commodity-type markets. Accordingly, failure to manage our costs and our operational performance could result in a material adverse effect on our earnings, cash flows and financial condition. We also compete with state-owned oil and gas entities with access to vast financial resources. State-owned entities could be motivated by political or other factors in making their business decisions. Accordingly, when bidding on new leases or projects, we could find ourselves at a competitive disadvantage because these state-owned entities may not require a competitive return. If we are unable to obtain competitive returns when bidding on new leases or projects, this could have a material adverse effect on our earnings, cash flows and financial condition.</p> <p>See "Strategy and outlook" on page 20.</p>	<p>We continually assess the external environment – the markets and the underlying economic, political, social and environmental drivers that shape them – to evaluate changes in competitive forces and business models. We use multiple future scenarios to assess the resilience of our strategy. We maintain business strategies and plans that focus on actions and capabilities to create and sustain competitive advantage.</p>

STRATEGIC RISKS continued

Risk description	How this risk is managed
<p>If we fail to stay in step with the pace and extent of society's demands with regard to the energy transition to a low-carbon future, we could fail in sustaining and growing our business.</p> <p>The pace and extent of the energy transition could pose a risk to Shell if our own transition towards decarbonisation moves at a different speed to society. If we are slower than society, customers may prefer a different supplier which would adversely impact our reputation and demand for our products. If we move much faster than society, we risk investing in technologies, markets or low-carbon products that are unsuccessful because there is limited demand for them. This could have a material adverse effect on our earnings, cash flows and financial condition.</p> <p>See "Strategy and outlook" on page 21 and "Climate change and energy transition" on page 97.</p>	<p>We actively monitor societal developments, such as regulation-driven carbon-pricing mechanisms and customer-driven preferences for products. We incorporate these into scenarios which provide insights into how the energy transition may unfold in the medium and long term. These insights and those from various other external scenarios (such as the IPCC Special Report 1.5°C) guide us how we set our strategic direction, capital allocation and carbon emission commitments. We have updated our strategy and organisational structure to be more focused on the sectors where our customers operate, in order to make us better able to compete in the current evolving energy landscape.</p>
<p>Rising climate change concerns and the effects of the energy transition have led and could lead to a decrease in demand and potentially affect prices for fossil fuels. This may also lead to additional legal and/or regulatory measures which could result in project delays or cancellations, potential litigation, operational restrictions and additional compliance obligations.</p>	<p>Our response to the evolving risk landscape requires transparency and clarity around our plans and actions to achieve our climate target. We have a climate change risk management structure which is supported by standards, policies and controls, as part of our health, safety, security and environment and social performance (HSSE & SP) control framework. Climate change and risks resulting from GHG emissions are reviewed and managed in accordance with other significant risks through the Board and Executive Committee. We have established several dedicated climate change and GHG-related forums at different levels of the organisation. These forums seek to address, monitor and review climate change issues. Our strategy to assess and manage risks and opportunities resulting from climate change includes considering different time horizons and their relevance to risk identification and business planning.</p>
<p>Societal demand for urgent action has increased especially after the Intergovernmental Panel on Climate Change (IPCC) 1.5°C special report of 2018 and the Paris Agreement's goal to keep the rise in global average temperature this century to well below two degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. Society's increasing focus on climate change and the effects of the energy transition has created a risk landscape that is changing rapidly in response to a wide range of stakeholder actions at global, local and business levels. The potential impact and likelihood of climate change effects on Shell could vary across different time horizons, depending on the specific components of the risk.</p>	<p>Overall, mitigation of the risk is addressed through our strategy to accelerate the transition to net-zero emissions, purposefully and profitably. This approach has three components:</p>
<p>We expect that a growing share of our GHG emissions will be subject to regulation, resulting in increased compliance costs and operational restrictions. Regulators may seek to limit certain fossil fuel projects or make it more difficult to obtain required permits. Achieving our target to become net zero on all emissions from our operations will result in additional cost. We also expect that actions by customers to reduce their emissions will continue to lower demand and potentially affect prices for fossil fuels, as will GHG emissions regulation through taxes, fees and/or other incentives. This could be a factor contributing to additional provisions for our assets and result in lower earnings, cancelled projects and potential impairment of certain assets.</p>	<ul style="list-style-type: none"> ▪ reducing the GHG-emissions intensity of our operations. We expect to reduce our carbon intensity primarily through altering our product mix as customer (Scope 3) emissions represent the largest component of our carbon intensity. Our aim is to achieve this by shifting the focus of our portfolio as we build our power, hydrogen, biofuels, carbon capture and storage and nature-based solutions businesses and activities; ▪ demonstrating resilience by adopting the guidance on disclosure by the Task Force on Climate-related Financial Disclosures; and ▪ working towards our target to become a net-zero emissions energy business by 2050, in step with society.
<p>The physical effects of climate change such as, but not limited to, increases in temperature and sea levels and fluctuations in water levels could also adversely affect our operations and supply chains.</p>	<p>Some groups are putting pressure on certain investors to divest their investments in fossil fuel companies. If this were to continue, it could have a material adverse effect on the price of our securities and our ability to access capital markets. Groups are also putting pressure on commercial and investment banks to stop financing fossil fuel companies. According to press reports, some financial institutions have started to limit their exposure to certain fossil fuel projects. Accordingly, our ability to use financing for these types of future projects may be adversely affected. This could also adversely affect our potential partners' ability to finance their portion of costs, either through equity or debt.</p>
<p>In some countries, governments, regulators, organisations and individuals have filed lawsuits seeking to hold fossil fuel companies liable for costs associated with climate change. While we believe these lawsuits to be without merit, losing any of them could have a material adverse effect on our earnings, cash flows and financial condition.</p>	<p>In summary, rising climate change concerns and effects of the energy transition have led and could lead to a decrease in demand and potentially affect prices for fossil fuels. If we are unable to find economically viable, publicly acceptable solutions that reduce our GHG emissions and/or GHG intensity for new and existing projects and for the products we sell, we could experience financial penalties or extra costs, delayed or cancelled projects, potential impairments of our assets, additional provisions and/or reduced production and product sales. This could have a material adverse effect on our earnings, cash flows and financial condition.</p> <p>For further explanations of our climate change governance, risk management, climate ambition and strategy, our portfolio and performance, please refer to the section "Climate change and energy transition" on page 98.</p> <p>For further explanations of how we manage the risk of the physical effects of climate change affecting our operations and supply chains, please refer to the risk factor "The nature of our operations exposes us, and the communities in which we work, to a wide range of health, safety, security and environment risks".</p>

RISK FACTORS continued

STRATEGIC RISKS continued

Risk description	How this risk is managed
<p>We seek to execute divestments in pursuing our strategy. We may be unable to divest these assets successfully in line with our strategy.</p> <p>We may be unable to divest assets at acceptable prices or within the timeline envisaged because of market conditions or credit risk. This would result in increased pressure on our cash position and potential impairments. In some cases, we have also retained certain liabilities following a divestment. Even in cases where we have not expressly retained certain liabilities, we may still be held liable for past acts, failures to act or liabilities that are different from those foreseen. We may also face liabilities if a purchaser fails to honour their commitments. Accordingly, if any of the above circumstances arise, this could have a material adverse effect on our earnings, cash flows and financial condition.</p>	<p>We continually monitor market developments to assess potential divestments in pursuing our strategy. We carefully tailor our sales processes to buyers' perceived expectations so we can deliver the most competitive outcomes. As a general principle, the sales processes are configured so that buyers will acquire the assets including all related liabilities. For some assets, Shell may agree to retain certain liabilities. We monitor these liabilities closely and make appropriate provisions for them.</p>
<p>See "Strategy and outlook" on page 21.</p> <p>We operate in more than 70 countries that have differing degrees of political, legal and fiscal stability. This exposes us to a wide range of political developments that could result in changes to contractual terms, laws and regulations. We and our joint arrangements and associates also face the risk of litigation and disputes worldwide.</p> <p>Developments in politics, laws and regulations can and do affect our operations. Potential impacts include: forced divestment of assets; expropriation of property; cancellation or forced renegotiation of contract rights; additional taxes including windfall taxes, restrictions on deductions and retroactive tax claims; antitrust claims; changes to trade compliance regulations; price controls; local content requirements; foreign exchange controls; changes to environmental regulations; changes to regulatory interpretations and enforcement; and changes to disclosure requirements. Tensions between nation states can also affect our business. Any of these, individually or in aggregate, could have a material adverse effect on our earnings, cash flows and financial condition.</p> <p>In 2020, many governments ran deficits to deal with the economic impacts of the COVID-19 pandemic. Given the ongoing nature of the pandemic, there will be uncertain long-term fiscal consequences, with possible subsequent effects on government policies that affect Shell's business interests.</p> <p>From time to time, social and political factors play a role in unprecedented and unanticipated judicial outcomes that could adversely affect Shell. Non-compliance with policies and regulations could result in regulatory investigations, litigation and, ultimately, sanctions. Certain governments and regulatory bodies have, in Shell's opinion, exceeded their constitutional authority by: attempting unilaterally to amend or cancel existing agreements or arrangements; failing to honour existing contractual commitments; and seeking to adjudicate disputes between private litigants. Certain governments have also adopted laws and regulations that could potentially conflict with other countries' laws and regulations, potentially subjecting us to both criminal and civil sanctions. Such developments and outcomes could have a material adverse effect on our earnings, cash flows and financial condition.</p> <p>See "Other regulatory and statutory information" on page 187.</p>	<p>We continually monitor geopolitical developments and societal issues relevant to our interests. Our Legal and Tax functions are organised globally and support our business lines in ensuring compliance with local laws and fiscal regulations. Our Government Relations department engages with governments in countries where we operate to understand and influence local policies and to advocate Shell's position on topics relevant to our industry. We are prepared to exit a country if we believe we can no longer operate there in accordance with our standards and applicable law, and we have done so in the past.</p>

OPERATIONAL RISKS

Risk description	How this risk is managed																				
<p>Our future hydrocarbon production depends on the delivery of large and integrated projects, and our ability to replace proved oil and gas reserves.</p>	<p>We continue to explore for and mature hydrocarbons across our Deep Water, Conventional Oil and Gas, Shales and Integrated Gas businesses. We use our subsurface, project and technical expertise, and actively manage non-technical risks across a diversified portfolio of opportunities and projects. This involves adopting an integrated approach for all stages, from basin choice to development. We use competitive techniques and benchmark our approach internally and externally.</p>																				
<p>We face numerous challenges in developing capital projects, especially those which are large and integrated. Challenges include: uncertain geology; frontier conditions; the existence and availability of necessary technology and engineering resources; the availability of skilled labour; the existence of transportation infrastructure; project delays; the expiration of licences; delays in obtaining required permits; potential cost overruns; and technical, fiscal, regulatory, political and other conditions. These challenges are particularly relevant in certain developing and emerging-market countries, in frontier areas and in deep-water fields, such as off the coast of Mexico. We may fail to assess or manage these and other risks properly. Such potential obstacles could impair our delivery of these projects, our ability to fulfil the full potential value of the project as assessed when the investment was approved, and/or our ability to fulfil related contractual commitments. This could lead to impairments and could have a material adverse effect on our earnings, cash flows and financial condition.</p>																					
<p>Future oil and gas production will depend on our access to new proved reserves through exploration, negotiations with governments and other owners of proved reserves and acquisitions, and through developing and applying new technologies and recovery processes to existing fields. Failure to replace proved reserves could result in an accelerated decrease of future production, potentially having a material adverse effect on our earnings, cash flows and financial condition.</p>																					
<p>Oil and gas production available for sale</p>	<p>Million boe [A]</p>																				
<table border="1"> <thead> <tr> <th></th> <th>2020</th> <th>2019</th> <th>2018</th> </tr> </thead> <tbody> <tr> <td>Shell subsidiaries</td> <td>1,104</td> <td>1,182</td> <td>1,179</td> </tr> <tr> <td>Shell share of joint ventures and associates</td> <td>135</td> <td>156</td> <td>159</td> </tr> <tr> <td>Total</td> <td>1,239</td> <td>1,338</td> <td>1,338</td> </tr> </tbody> </table>		2020	2019	2018	Shell subsidiaries	1,104	1,182	1,179	Shell share of joint ventures and associates	135	156	159	Total	1,239	1,338	1,338	<p>[A] Natural gas volumes are converted into oil equivalent using a factor of 5,800 scf per barrel.</p>				
	2020	2019	2018																		
Shell subsidiaries	1,104	1,182	1,179																		
Shell share of joint ventures and associates	135	156	159																		
Total	1,239	1,338	1,338																		
<p>Proved developed and undeveloped oil and gas reserves [A][B] (at December 31)</p>	<p>Million boe [C]</p>																				
<table border="1"> <thead> <tr> <th></th> <th>December 31, 2020</th> <th>December 31, 2019</th> <th>December 31, 2018</th> </tr> </thead> <tbody> <tr> <td>Shell subsidiaries</td> <td>8,222</td> <td>9,980</td> <td>10,294</td> </tr> <tr> <td>Shell share of joint ventures and associates</td> <td>902</td> <td>1,116</td> <td>1,285</td> </tr> <tr> <td>Total</td> <td>9,124</td> <td>11,096</td> <td>11,578</td> </tr> <tr> <td>Attributable to non-controlling interest in Shell subsidiaries</td> <td>322</td> <td>304</td> <td>331</td> </tr> </tbody> </table>		December 31, 2020	December 31, 2019	December 31, 2018	Shell subsidiaries	8,222	9,980	10,294	Shell share of joint ventures and associates	902	1,116	1,285	Total	9,124	11,096	11,578	Attributable to non-controlling interest in Shell subsidiaries	322	304	331	<p>[A] We manage our total proved reserves base without distinguishing between proved reserves from subsidiaries and those from joint ventures and associates. [B] Includes proved reserves associated with future production that will be consumed in operations. [C] Natural gas volumes are converted into oil equivalent using a factor of 5,800 scf per barrel.</p>
	December 31, 2020	December 31, 2019	December 31, 2018																		
Shell subsidiaries	8,222	9,980	10,294																		
Shell share of joint ventures and associates	902	1,116	1,285																		
Total	9,124	11,096	11,578																		
Attributable to non-controlling interest in Shell subsidiaries	322	304	331																		
<p>See "Shell story" on page 16.</p>																					
<p>The estimation of proved oil and gas reserves involves subjective judgements based on available information and the application of complex rules. This means subsequent downward adjustments are possible.</p>	<p>A central group of reserves experts undertakes the primary assurance of the proved reserves bookings. A multidisciplinary committee reviews and endorses all major proved reserves bookings. Shell's Audit Committee reviews all proved reserves bookings and Shell's Executive Committee is responsible for final approval. The Internal Audit function also provides further assurance through audits of the control framework, including the information disclosed in "Supplementary information – oil and gas (unaudited).</p>																				
<p>The estimation of proved oil and gas reserves involves subjective judgements and determinations based on available geological, technical, contractual and economic information. Estimates can change over time due to new information from production or drilling activities, changes in economic factors, such as oil and gas prices, alterations in the regulatory policies of host governments, or other events. Estimates also change to reflect acquisitions, divestments, new discoveries, extensions of existing fields and mines, and improved recovery techniques. Published proved oil and gas reserves estimates could also be subject to correction because of errors in the application of published rules and changes in guidance. Downward adjustments could indicate lower future production volumes and could also lead to impairment of assets. This could have a material adverse effect on our earnings, cash flows and financial condition.</p>																					
<p>See "Supplementary information – oil and gas (unaudited)" on page 265.</p>																					

OPERATIONAL RISKS continued

Risk description	How this risk is managed
<p>The nature of our operations exposes us, and the communities in which we work, to a wide range of health, safety, security and environment risks.</p> <p>The health, safety, security and environment (HSSE) risks to which we and the communities in which we work are potentially exposed cover a wide spectrum, given the geographic range, operational diversity and technical complexity of our operations. These risks include the effects of natural disasters (including weather events), earthquakes, social unrest, pandemic diseases, criminal actions by external parties, and safety lapses. If a major risk materialises, such as an explosion or hydrocarbon leak or spill, this could result in injuries, loss of life, environmental harm, disruption of business activities, loss or suspension of permits, loss of our licence to operate and loss of our ability to bid on mineral rights. Accordingly, this could have a material adverse effect on our earnings, cash flows and financial condition.</p> <p>Our operations are subject to extensive HSSE regulatory requirements that often change and are likely to become more stringent over time. Governments could require operators to adjust their future production plans, as has occurred in the Netherlands, affecting production and costs. We could incur significant extra costs in the future because of the need to comply with such requirements. We could also incur significant extra costs due to violations of or liabilities under laws and regulations that involve elements such as fines, penalties, clean-up costs and third-party claims. Therefore, if HSSE risks materialise, they could have a material adverse effect on our earnings, cash flows and financial condition.</p> <p> See "Environment and society" on page 86.</p>	<p>We have standards and a clear governance structure to help manage HSSE risks and avoid potential adverse effects. The standards and governance structure also help us to develop mitigation strategies aimed at ensuring that if an HSSE risk materialises, we avoid catastrophic consequences and have ways of trying to remediate any environmental damage. Our standards and governance structure are defined in our Health, Safety, Security, Environment and Social Performance (HSSE & SP) control framework and supporting guidance documents. The process safety and HSSE & SP assurance team provides assurance on the effectiveness of HSSE & SP controls to the Board. We routinely practise implementing our emergency response plans to significant risks (such as a spill, toxic substances, fire or explosion).</p> <p>We have assessed the impact of COVID-19 on activities and we are implementing measures to minimise the adverse effect of the pandemic on our operations. These measures include monitoring the level of infections among staff, ensuring the safety and well-being of all staff, (particularly critical staff who continue to operate our assets), scenario planning, deploying continuity plans and ensuring our sites and offices are "COVID safe".</p>
<p>A further erosion of the business and operating environment in Nigeria could have a material adverse effect on us.</p> <p>In our Nigerian operations, we face various risks and adverse conditions. These include: security issues affecting the safety of our people, host communities and operations; sabotage and theft; our ability to enforce existing contractual rights; litigation; limited infrastructure; potential legislation that could increase our taxes or operating costs; the effect of lower oil and gas prices on the government budget; and regional instability created by militant activities. These risks or adverse conditions could have a material adverse effect on our earnings, cash flows and financial condition.</p> <p> See "Upstream" on page 58.</p>	<p>We test the economic and operational resilience of our Nigerian projects against a wide range of assumptions and scenarios. We seek to proportionally share risks and funding commitments with joint-venture partners. When we participate in joint ventures in Nigeria, we require that they operate to internationally accepted business standards. We monitor the security situation, and liaise with host communities, governmental and non-governmental organisations to help promote peaceful and safe operations.</p>
<p>An erosion of our business reputation could have a material adverse effect on our brand, our ability to secure new resources or access capital markets, and on our licence to operate.</p> <p>Our reputation is an important asset. The Shell General Business Principles (Principles) govern how Shell and its individual companies conduct their affairs, and the Shell Code of Conduct tells employees and contract staff how to behave in line with the Principles. Our challenge is to ensure that all employees and contract staff comply with the Principles and the Code of Conduct. Real or perceived failures of governance or regulatory compliance or a perceived lack of understanding of how our operations affect surrounding communities could harm our reputation.</p> <p>Societal expectations of businesses are increasing, with a focus on business ethics, quality of products, contribution to society, safety and minimising damage to the environment. There is increasing focus on the role of oil and gas in the context of climate change and energy transition. This could negatively affect our brand, reputation and licence to operate, which could limit our ability to deliver our strategy, reduce consumer demand for our branded and non-branded products, harm our ability to secure new resources and contracts, and restrict our ability to access capital markets or attract staff. Many other factors, including the materialisation of the risks discussed in several of the other risk factors, could negatively affect our reputation and could have a material adverse effect on our earnings, cash flows and financial condition.</p> <p> See "Other Regulatory and Statutory Information" on page 185 and "Our people" on page 110.</p>	<p>We continually assess and monitor the external environment for potential risks to our reputation. We engage in ongoing dialogue with our key stakeholders such as investors, industry and trade groups, universities, governments and non-governmental organisations (NGOs) to gain greater insights into societal expectations of our business. We have mitigation plans for identified brand and reputation risks at the Group, country and line of business level. Our country chairs are responsible for the implementation of country reputation plans which are updated annually. We continually develop and defend our brand in line with Shell's purpose and promises, and target our investments to drive brand differentiation, relevance and preference.</p>

Risk description	How this risk is managed
<p>We rely heavily on information technology systems in our operations.</p> <p>The operation of many of our business processes depends on reliable information technology (IT) systems. Our IT systems are increasingly concentrated in terms of geography and number of systems. They are dependent on key contractors supporting the delivery of IT services. During 2020, information and cyber-security risks developed and changed rapidly. Globally the COVID-19 pandemic and geopolitical tensions have altered the IT threat landscape, increasing the frequency and ingenuity of malware attacks and increasing the temptation to attack targets for financial gain. Also, the prevalence of remote working introduces additional risk because it expands the IT threat landscape. We have experienced breaches and disruptions to our critical IT services in the past. These factors continue to contribute to potential breaches and disruptions of critical IT services. Additionally, breaches can lead to data privacy issues. If the breaches are not detected early and responded to effectively, they could harm our reputation and have a material adverse effect on our earnings, cash flows and financial condition.</p> <p> See "Corporate" on page 80.</p>	<p>We continually measure and improve our cyber-security capabilities. To reduce the likelihood of successful cyber-attacks, our cyber-security capabilities are embedded into our IT systems. Our IT is protected by detective and protective technologies. Identification and assessment capabilities are built into our IT support processes and adhere to industry best practices. When external companies provide us with IT services, the security of those services is managed through contractual clauses and supplier assurance reports. Shell invests constantly in efforts to embed and improve our controls and monitoring. For example, we improved our global web content filtering capability in response to the challenge of increased remote working in 2020. If breaches occur, all entities, including ones that have yet to be fully integrated into Shell's systems and processes, are required to report the incident and use Shell's information security capabilities.</p>
<p>Our business exposes us to risks of social instability, criminality, civil unrest, terrorism, piracy, cyber-disruption and acts of war that could have a material adverse effect on our operations.</p> <p>As seen in recent years, these risks can manifest themselves in the countries where we operate and elsewhere. These risks affect people and assets. Potential risks include: acts of terrorism; acts of criminality including maritime piracy; cyber-espionage or disruptive cyber-attacks; conflicts including war, civil unrest and environmental and climate activism (including disruptions by non-governmental and political organisations).</p> <p>The above risks can threaten the safe operation of our facilities and the transport of our products. They can harm the well-being of our people, inflict loss of life and injuries, damage the environment and disrupt our operational activities. These risks could have a material adverse effect on our earnings, cash flows and financial condition.</p> <p> See "Environment and society" on pages 87.</p>	<p>We seek to obtain the best possible information to enable us to assess threats and risks. We conduct detailed assessments for all our sites and activities, and implement appropriate measures to deter, detect and respond to security risks. Further mitigations include strengthening the security of sites, reducing our exposure as appropriate, journey management, information risk management, crisis management and business continuity measures. We conduct training and awareness campaigns for staff and provide them with travel and health advice and access to 24/7 assistance while travelling.</p>
<p>Production from the Groningen field in the Netherlands causes earthquakes that affect local communities.</p> <p>Shell and ExxonMobil are 50:50 shareholders in Nederlandse Aardolie Maatschappij B.V. (NAM). An important part of NAM's gas production comes from the onshore Groningen gas field, in which EBN, a Dutch government entity, has a 40% interest and NAM a 60% interest. The gas field is in the process of being closed down due to earthquakes induced by gas production. Some of these earthquakes have damaged houses and other structures in the region, resulting in complaints and lawsuits from the local community. The government has announced it intends to accelerate the close-down, bringing the end of production forward from 2030 to possibly mid-2022. The exact shut-in date depends on security of supply considerations and is still to be decided. While we expect the earlier closing down of the Groningen gas field to further reduce the number and strength of earthquakes in the region, any additional earthquakes could have further adverse effects on our earnings, cash flows and financial condition.</p> <p> See "Upstream" on page 55.</p>	<p>NAM is working with the Dutch government and other stakeholders to fulfil its obligations to residents of the area. These include compensating for damage caused by the earthquakes and paying to strengthen houses where this is required for safety considerations. Negotiations with the state are being conducted to determine how to manage the accelerated close-down. Specific remediations within the agreed scope of responsibilities are planned. NAM's joint-venture partners will review its financial robustness against different scenarios for Groningen's liabilities and costs, with the aim of the venture being able to self-fund any additional expenses and claims.</p>

RISK FACTORS continued

OPERATIONAL RISKS continued

Risk description	How this risk is managed
<p>We are exposed to treasury and trading risks, including liquidity risk, interest rate risk, foreign exchange risk and credit risk. We are affected by the global macroeconomic environment and the conditions of financial and commodity markets.</p> <p>Our subsidiaries, joint arrangements and associates are subject to differing economic and financial market conditions around the world. Political or economic instability affects such markets.</p> <p>We use debt instruments, such as bonds and commercial paper, to raise significant amounts of capital. Should our access to debt markets become more difficult, the potential impact on our liquidity could have a material adverse effect on our operations. Our financing costs could also be affected by interest rate fluctuations or any credit rating deterioration.</p> <p>We are exposed to changes in currency values and to exchange controls as a result of our substantial international operations. Our reporting currency is the US dollar, although, to a material extent, we also hold assets and are exposed to liabilities in other currencies. While we undertake some foreign exchange hedging, we do not do so for all our activities. Even where hedging is in place, it may not function as expected.</p> <p>We are exposed to credit risk; our counterparties could fail or be unable to meet their payment and/or performance obligations under contractual arrangements. Although we do not have significant direct exposure to sovereign debt, it is possible that our partners and customers may have exposure which could impair their ability to meet their obligations. Our pension plans invest in government bonds, and could therefore be affected by a sovereign debt downgrade or other default.</p> <p>If any of the above risks materialise, they could have a material adverse effect on our earnings, cash flows and financial condition.</p> <p>See "Liquidity and capital resources" on page 81 and Note 19 to the "Consolidated Financial Statements" on pages 251-255.</p>	<p>We use various financial instruments for managing exposure to foreign exchange and interest rate movements. Our treasury operations are highly centralised and seek to manage credit exposures associated with our substantial cash, foreign exchange and interest rate positions. Our portfolio of cash investments is diversified to avoid concentrating risk in any one instrument, country or counterparty. Other than in exceptional cases, the use of external derivative instruments is confined to specialist trading and central treasury organisations that have the appropriate skills, experience, supervision, control and reporting systems. We have credit risk policies in place which seek to ensure that products are sold to customers with appropriate creditworthiness. These policies include detailed credit analysis and monitoring of customers against counterparty credit limits. Where appropriate, netting arrangements, credit insurance, prepayments and collateral are used to manage credit risk. We maintain committed credit facilities. Management believes it has access to sufficient debt funding sources (capital markets) and to undrawn committed borrowing facilities to meet foreseeable requirements.</p>
<p>Our future performance depends on the successful development and deployment of new technologies and new products.</p> <p>Technology and innovation are essential to our efforts to meet the world's energy demands competitively. If we fail to continue developing or deploying technology and new products, or fail to make full, effective use of our data in a timely and cost-effective manner, there could be a material adverse effect on the delivery of our strategy and our licence to operate. We operate in environments where advanced technologies are used. In developing new technologies and new products, unknown or unforeseeable technological failures or environmental and health effects could harm our reputation and licence to operate or expose us to litigation or sanctions. The associated costs of new technology are sometimes underestimated. Sometimes the development of new technology is subject to delays. If we are unable to develop the right technology and products in a timely and cost-effective manner, or if we develop technologies and products that harm the environment or people's health, there could be a material adverse effect on our earnings, cash flows and financial condition.</p> <p>See "Shell story" on page 17.</p>	<p>Shell's Technology organisation and the relevant business lines work together to determine the content, scope and budget for developing new technology that supports our activities. The new technology is developed to ensure portfolio alignment with Shell's strategic ambitions and deployment commitments. A significant proportion of Shell's technology contributes to Shell's New Energies portfolio and Net Carbon Footprint target, and is built around key relationships with leading academic research institutes and universities. We also benefit from working with start-ups. In our Shell GameChanger programme, we help companies to mature early-stage technologies. In our Shell Ventures scheme, we invest in and partner with start-ups and small and medium-sized enterprises that are in the early stages of developing new technologies.</p>
<p>We have substantial pension commitments, the funding of which is subject to capital market risks and other factors.</p> <p>Liabilities associated with defined benefit pension plans are significant, and the cash funding requirement of such plans can also involve significant liabilities. They both depend on various assumptions. Volatility in capital markets or government policies could affect investment performance and interest rates, causing significant changes to the funding level of future liabilities. Changes in assumptions for mortality, retirement age or pensionable remuneration at retirement could also cause significant changes to the funding level of future liabilities. We operate a number of defined benefit pension plans and, in case of a shortfall, we could be required to make substantial cash contributions (depending on the applicable local regulations). This could result in a material adverse effect on our earnings, cash flows and financial condition.</p> <p>See "Liquidity and capital resources" on page 81.</p>	<p>A pensions forum chaired by the Chief Financial Officer oversees Shell's input to pension strategy, policy and operation. A risk committee supports the forum in reviewing the results of assurance processes with respect to pension risks. Local trustees manage the funded defined benefit pension plans, and the contributions paid are based on independent actuarial valuations that align with local regulations.</p>

Risk description	How this risk is managed
<p>We mainly self-insure our risk exposure. We could incur significant losses from different types of risks that are not covered by insurance from third-party insurers.</p> <p>Our insurance subsidiaries provide hazard insurance coverage to other Shell entities, who may insure a portion of their risk exposures with third parties. Such insurance would not provide any material coverage in the event of a large-scale safety or environmental incident. Accordingly, in the event of a material incident, we would have to meet our obligations without access to material proceeds from third-party insurance companies. Therefore, we may incur significant losses from different types of risks that are not covered by insurance from third-party insurers, potentially resulting in a material adverse effect on our earnings, cash flows and financial condition.</p> <p>See "Corporate" on page 80.</p>	<p>We continually assess the safety performance of our operations and make risk mitigation recommendations, where relevant, to keep the risk of an accident as low as possible. Our insurance subsidiaries are adequately capitalised and they may transfer risks to third-party insurers where economical, effective and relevant.</p>
<p>Many of our major projects and operations are conducted in joint arrangements or with associates. This could reduce our degree of control and our ability to identify and manage risks.</p> <p>When we are not the operator, we have less influence and control over the behaviour, performance and operating costs of joint arrangements or associates. Despite having less control, we could still be exposed to the risks associated with these operations, including reputational, litigation (where joint and several liability could apply) and government sanction risks. For example, our partners or members of a joint arrangement or an associate, (particularly local partners in developing countries), may be unable to meet their financial or other obligations to projects, threatening the viability of a given project. Where we are the operator of a joint arrangement, the other partner(s) could still be able to veto or block certain decisions, which could be to our overall detriment. Accordingly, where we have limited influence, we are exposed to operational risks that could have a material adverse effect on our earnings, cash flows and financial condition.</p> <p>See "Other Regulatory and Statutory Information" on page 187.</p>	<p>Shell appoints a Joint Venture Asset Manager, whose responsibility is to manage performance and create and protect value for Shell. The Joint Venture Asset Manager seeks to influence operators and other partners to adapt their practices in order to drive value appropriately and to mitigate identified risks. An annual assurance review assesses how the joint venture's standards and processes align with those of Shell. The Joint Venture Asset Manager follows up on any gaps identified.</p>

CONDUCT RISKS

Risk description	How this risk is managed
<p>We are exposed to commodity trading risks, including market and operational risks.</p> <p>Commodity trading is an important component of our Upstream, Integrated Gas, Oil Products and Chemicals businesses and is integrated with our supply business. Processing, managing and monitoring many trading transactions across the world, some of them complex, exposes us to operational and market risks, including commodity price risks which saw significant levels of volatility in 2020. We use derivative instruments such as futures and contracts for differences to hedge market risks. We do not hedge all our activities and where hedging is in place, it may not function as expected. The risk of ineffective controls and oversight of trading activities, and the risk that traders could deliberately act outside limits and controls, either individually or as a group, could have material adverse effects on our earnings, cash flows and financial condition.</p> <p>See "Liquidity and capital resources" on page 81 and Note 19 to the "Consolidated Financial Statements" on pages 251-255.</p>	<p>In effecting commodity trades and derivative contracts, the company operates within procedures and policies designed to ensure that risks are managed within authorised limits. For example, the use of external derivative instruments is confined to specialist trading organisations that have the appropriate skills, experience, supervision, control and reporting systems. Our trading organisation has a compliance manual addressing our operational risks which all staff are required to follow. Senior Management regularly reviews mandated trading limits. We monitor market risk exposure daily, using value-at-risk (VAR) techniques. We monitor trading positions against limits every day. We use marking to fair value to assess trading exposures where appropriate, with a department that is independent of the traders reviewing the market values applied. In response to the COVID-19 pandemic, trader monitoring tools have been upgraded. During the period of extreme market volatility, additional oversight has been provided by a dedicated 'Liquidity Forum', chaired by senior executives in our trading organisation. We have increased the monitoring of the financial resilience of our customers, suppliers and the clearing houses that we deal with.</p>

RISK FACTORS continued

CONDUCT RISKS continued

Risk description	How this risk is managed	
<p>Violations of antitrust and competition laws carry fines and expose us and/or our employees to criminal sanctions and civil suits.</p> <p>Antitrust and competition laws apply to Shell and its joint arrangements and associates in the vast majority of countries where we do business. Shell and its joint arrangements and associates have been fined for violations of antitrust and competition laws in the past. This includes a number of fines by the European Commission Directorate-General for Competition (DG COMP). Because of DG COMP's fining guidelines, any future conviction of Shell or any of its joint arrangements or associates for violation of EU competition law could potentially result in significantly larger fines and have a material adverse effect on us. Violation of antitrust laws is a criminal offence in many countries, and individuals can be imprisoned or fined. In certain circumstances, directors may receive director disqualification orders. It is also now common for persons or corporations allegedly injured by antitrust violations to sue for damages. Any violation of these laws can harm our reputation and could have a material adverse effect on our earnings, cash flows and financial condition.</p>	<p>See "Other Regulatory and Statutory Information" on pages 186.</p>	<p>We maintain an antitrust programme with adequate resources, a comprehensive governance structure and established reporting lines. Staff receive clear guidance that includes requirements in Shell's Ethics and Compliance Manual, an antitrust-specific website, training modules where completion is monitored and regular messages from Shell leaders on the importance of managing antitrust risks. Staff must understand and comply with the "Protect Shell Policy", which explains Shell's position on managing antitrust risks in engagements with parties external to Shell. As result of the COVID-19 pandemic, we have issued guidance to address antitrust risks arising from the disruption to supply chains, including procurement guidance which outlines the risks associated with exchanging information and collaborating with Shell's procurement competitors.</p>
<p>Violations of anti-bribery, tax-evasion and anti-money laundering laws carry fines and expose us and/or our employees to criminal sanctions, civil suits and ancillary consequences (such as debarment and the revocation of licences).</p> <p>Anti-bribery, tax-evasion and anti-money laundering laws apply to Shell, its joint arrangements and associates in all countries where we do business. Shell and its joint arrangements and associates have in the past settled with the US Securities and Exchange Commission regarding violations of the US Foreign Corrupt Practices Act. Any violation of anti-bribery, tax-evasion or anti-money laundering laws, including those potential violations associated with Shell Nigeria Exploration and Production Company Limited's investment in Nigerian oil block OPL 245 and the 2011 settlement of litigation pertaining to that block, could harm our reputation or have a material adverse effect on our earnings, cash flows and financial condition.</p>	<p>See "Our people" on pages 110, "Other Regulatory and Statutory Information" on page 186 and Note 25 to the "Consolidated Financial Statements" on pages 260-262.</p>	<p>We maintain an anti-bribery and anti-money-laundering (ABC/AML) programme with adequate resources, a comprehensive governance structure and established reporting lines. Staff receive clear guidance which includes requirements in Shell's Ethics and Compliance Manual, an ABC/AML-specific website, training modules where completion is monitored and regular messages from Shell leaders on the importance of managing ABC/AML risks. As regards OPL 245, the 2011 settlement was a fully legal transaction with Eni and the Federal Government of Nigeria, represented by the most senior officials of the relevant ministries. We maintain our view that there is no basis to convict Shell, or any of our former employees who are also on trial in Milan. In response to the COVID-19 pandemic, we have set up fast-track processes to deal with relief donation requests. These processes include counterparty due diligence and are supported by Shell's Ethics and Compliance Office.</p>
<p>Violations of data protection laws carry fines and expose us and/or our employees to criminal sanctions and civil suits.</p> <p>Data protection laws apply to Shell and its joint arrangements and associates in the vast majority of countries where we do business. Most of the countries we operate in have data protection laws and regulations. In some countries that are key to Shell's business operations, legislation continues to be amended or introduced. Shell must be able to adapt dynamically to such legislative changes and be capable of updating our internal programmes if necessary. The EU General Data Protection Regulation (GDPR), which came into effect in May 2018, imposed increased financial penalties of up to a maximum of 4% of global annual turnover. It requires mandatory breach notification in certain situations, the standard which is also followed outside the EU (particularly in Asia). Non-compliance with data protection laws could expose us to regulatory investigations, which could result in fines, penalties and harm to our reputation. With regard to data breaches, we have breached the GDPR in the past and some investigations are still ongoing with European regulators. To date, no material fines have been imposed, but no assurance can be provided that future breaches would have similar outcomes. In addition to imposing fines, regulators may also issue orders to stop processing personal data, which could disrupt operations. We could also be subject to litigation from persons or entities allegedly affected by data protection violations.</p> <p>With data privacy legislation now in force in the USA, the risk of class actions is increased. Class actions after large-scale data breaches are increasingly common in the UK.</p> <p>The COVID-19 pandemic has increased the level of processing of personal data to track employees, suppliers or other visitors to our premises. Some governments require immediate disclosure of information, including sensitive personal data, to identify infected individuals, with some mandating technologies such as tracing applications on all devices, including corporate mobile phones.</p> <p>Violation of data protection laws is a criminal offence in some countries, and individuals can be imprisoned or fined. Any violation of these laws or harm to our reputation could have a material adverse effect on our earnings, cash flows and financial condition.</p>	<p>See "Other Regulatory and Statutory Information" on page 186.</p>	<p>We maintain a data privacy programme with adequate resources, a comprehensive governance structure and established reporting lines. Shell has had Binding Corporate Rules in place for the last 10 years. These rules are part of a group wide global programme to ensure consistent levels of data protection across the group. Staff receive clear guidance which includes requirements in Shell's Ethics and Compliance Manual, a website focusing on data privacy, training modules where completion is monitored, and regular messages from Shell leaders on the importance of managing data privacy risks.</p> <p>We have revised the requirements for incident management that are set out in our Binding Corporate Rules, in order to comply with GDPR reporting requirements. We have revised our approach to privacy impact assessments, also to comply with GDPR reporting requirements. We use our Privacy by Design programme to enhance our controls in this area. We continue to address challenges with compliance in data-heavy companies controlled by Shell but not fully integrated into our systems. IT remediation work remains a priority in such companies, as does the strengthening of programmes to support data privacy compliance.</p> <p>To respond to the increased risk resulting from the pandemic, we have developed policies on temperature screening and published a guidance note on "Privacy Best Practices for COVID-19".</p>

Risk description	How this risk is managed
<p>Violations of trade compliance laws and regulations, including sanctions, carry fines and expose us and our employees to criminal sanctions and civil suits.</p> <p>We use “trade compliance” as an umbrella term for various national and international laws designed to regulate the movement of items across national boundaries and restrict or prohibit trade and other dealings with certain parties. The number and breadth of such laws continue to expand. For example, the EU and the USA continue to impose restrictions and prohibitions on certain transactions involving countries such as Syria, Venezuela, Russia and Cuba. The USA continues to impose comprehensive sanctions against Iran, while the EU and other nations continue to maintain targeted sanctions. The EU and the USA imposed restrictions and controls on defined oil and gas activities in Russia in 2014, and these remain in force. The USA introduced further restrictions regarding Russia in 2017, expanding them in 2018. The EU and the USA introduced sectoral sanctions against Venezuela in 2017, with the USA expanding them in 2018 and 2019. The US sanctions primarily target the government of Venezuela and the oil industry. Many other nations are also adopting trade-control programmes similar to those administered by the EU and the USA. The expansion of sanctions, the frequent additions of prohibited parties, the number of markets in which we operate and the large number of transactions we process, make compliance with all sanctions complex and sometimes challenging. Shell has voluntarily self-disclosed potential violations of sanctions in the past. The COVID-19 pandemic has increased trade compliance risks, due to factors such as growing state involvement in business dealings, the need to maintain and develop business opportunities and cross-border movement of goods and technologies, and the increasing likelihood that counterparties will change ownership as the economic crisis continues.</p> <p>Any violation of sanctions could lead to loss of import or export privileges and significant penalties on or prosecution of Shell or its employees. This could harm our reputation and have a material adverse effect on our earnings, cash flows and financial condition</p> <p> See “Other Regulatory and Statutory Information” on page 186.</p>	<p>We continue to develop and maintain a trade compliance programme with adequate resources, a comprehensive governance structure and established reporting lines. Staff receive clear guidance, which includes requirements in Shell’s Ethics and Compliance Manual, a specific website for trade compliance, training modules where completion is monitored and regular messages from Shell leaders on the importance of managing trade compliance risks. The effectiveness of the trade compliance programme is assessed annually (or more frequently if necessary). In response to the COVID-19 pandemic, we have promoted an increased focus on compliance and assurance. For example, in Trading and Supply we have promoted a particular focus on compliance with trade controls in high-risk areas such as port agency, inspections and terminal operations.</p>

Investors should also consider the following, which could limit shareholder remedies.

OTHER (Generally applicable to an investment in securities)

Risk description	How this risk is managed
<p>The Company’s Articles of Association determine the jurisdiction for shareholder disputes. This could limit shareholder remedies.</p> <p>Our Articles of Association generally require that all disputes between our shareholders in such capacity and the Company or our subsidiaries (or our Directors or former Directors), or between the Company and our Directors or former Directors, be exclusively resolved by arbitration in The Hague, the Netherlands, under the Rules of Arbitration of the International Chamber of Commerce. Our Articles of Association also provide that, if this provision is to be determined invalid or unenforceable for any reason, the dispute could only be brought before the courts of England and Wales. Accordingly, the ability of shareholders to obtain monetary or other relief, including in respect of securities law claims, could be determined in accordance with these provisions.</p>	

MARKET OVERVIEW

We maintain a large business portfolio across an integrated value chain and are exposed to crude oil, natural gas, hydrocarbon product and chemical prices (see "Risk factors" on page 28). This diversified portfolio helps us mitigate the impact of price volatility. Our annual planning cycle and periodic portfolio reviews aim to ensure that our levels of capital investment and operating expenses are appropriate in the context of a volatile price environment. We test the resilience of our projects and other opportunities against a range of crude oil, natural gas, oil product and chemical prices and costs. We also aim to maintain a strong balance sheet to provide resilience against weak market prices.

GLOBAL ECONOMIC GROWTH

The COVID-19 pandemic has delivered an enormous global economic shock, leading to steep recessions in many countries. In the World Economic Outlook of January 2021, the International Monetary Fund (IMF) estimates that despite unprecedented policy support, global GDP contracted by 3.5% in 2020, one of the deepest global recessions in history. The most severe economic downturns occurred in India, Western Europe, the Middle East, and Latin America. China was the only major economy that recorded economic growth.

Developed countries were particularly vulnerable to lockdown measures, because of their economic structure. Services and consumption, which account for a higher share of GDP in developed countries, were disproportionately affected by restrictions on movement and closures of hospitality and leisure facilities. Developing economies suffered from collapses in capital inflows and commodity prices, and from a sharp compression in consumption and investment. Massive fiscal and monetary support measures were deployed in the major economies. In China, the authorities funded infrastructure investments. In the USA and Europe, government transfers supplemented incomes and supported businesses, in order to prevent deeper declines in employment and disposable income.

Led by mainland China, the Asia-Pacific region led the recovery during the year, as public health measures helped to contain community transmission of COVID-19. In other countries, the pandemic proved more difficult to control. European countries experienced renewed rises in infection rates during the fourth quarter of 2020. They responded by reinstating restrictions on activities that have a high risk of transmitting COVID-19.

Encouraging news on vaccines and improvements in therapeutics have increased the chances of a recovery in 2021, but the global economic outlook remains precarious, because markets fear that more virulent variants of COVID-19 could trigger additional waves of infections. The deep recessions triggered by the pandemic could leave lasting scars in the form of: lower investment by companies; high unemployment; increased global debt; and a potential retreat from global trade and supply linkages. There is concern that these effects may well restrict growth in the medium term.

GLOBAL PRICES, DEMAND AND SUPPLY

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

Oil and gas average industry prices [A]

	2020	2019	2018
Brent (\$/b)	42	64	71
West Texas Intermediate (\$/b)	39	57	65
Henry Hub (\$/MMBtu)	2.0	2.5	3.1
UK National Balancing Point (pence/therm)	25	35	60
Japan Customs-cleared Crude (\$/b)	46	67	73

[A] Yearly average prices are based on daily spot prices. The 2020 average price for Japan Customs-cleared Crude excludes December data.

CRUDE OIL

On a daily average basis, Brent crude oil, an international benchmark, traded between \$13 per barrel (/b) and \$70/b in 2020, ending the year around \$50/b. Brent crude oil prices averaged \$42/b for the year, 34% (or \$22/b) lower than in 2019.

In 2020, oil markets experienced unprecedented developments in demand driven by the COVID-19 pandemic. At the start of 2020, global oil demand for the year was expected to grow by 1.2 million barrels per day (b/d). Then in January, oil demand started to contract because demand fell in China as lockdown was imposed to contain the virus outbreak. In subsequent months, oil demand contracted further as the outbreak in China evolved into a global pandemic and lockdowns were introduced across the world. In April, oil demand fell to its lowest level, around 22 million b/d below year-average demand in 2019, according to an estimate of the International Energy Agency (IEA). Contraction of such magnitude has never been recorded before. Country lockdowns deeply impacted transportation sectors, especially passenger road and passenger air in Organisation for Economic Co-operation and Development (OECD) economies. In subsequent months, oil demand started recovering, but only partially, because resurgences of COVID-19 triggered re-imposition of social distancing and travel restrictions. By the fourth quarter, global oil demand was still estimated to be around 5.5 million b/d below the 2019 level, according to the Oil Market Report published by the IEA in January 2021. Averaged for the full year, oil demand contracted by around 9 million b/d, or 9%, to 91.2 million b/d. Oil demand fell by 5.7 million b/d in OECD economies, and by 3.2 million b/d in non-OECD economies. By contrast, oil demand in 2019 was 0.8 million b/d higher than in 2018.

In 2020, oil markets also experienced unprecedented developments in supply. In March, there was a serious disagreement within the OPEC+ alliance, which consists of OPEC members and co-operating non-OPEC resource holders such as Russia. Saudi Arabia and Russia failed to agree on what to do about falling demand for oil. Saudi Arabia responded to the disagreement by boosting its production to almost 12 million b/d, a monthly record. By April, storage capacity was filling up quickly and oil prices were falling rapidly. On April 12, the OPEC+ alliance agreed to jointly reduce production by an unprecedented 9.7 million b/d for May and June. For the month of June, Saudi Arabia voluntarily cut production further, by around 1 million b/d. For the rest of the year, the OPEC+ alliance agreed on and complied with a production cut of 7.7 million b/d.

In April, supply from outside the OPEC+ alliance also started to fall, most notably in the USA. The US Energy Information Administration reported a supply contraction of around 2 million b/d by the end of May, from a level of around 13 million b/d at the start of the year. US producers cut budgets, leading to an unprecedented fall in the number of oil drill rigs to around 26% of the total at the start of the year. Supply from the USA occasionally fell even further to around 10 million b/d because of production shut-ins during the hurricane season.

In aggregate, production of oil supply in 2020 is estimated in the Oil Market Report at 93.9 million b/d, which is 6.7 million b/d lower than in 2019. OPEC production is estimated to have fallen by 3.8 million b/d. Supply from the USA fell by 0.8 million b/d from 2019. By contrast, global oil supply in 2019 was 0.1 million b/d higher than in 2018.

Daily average oil prices reached a low at the end of April before the OPEC+ supply curtailments came into effect. Brent crude oil prices fell to around \$14/b. Contract prices of some crude grades, such as West Texas Intermediate (WTI), even traded well below \$0/b for a short period. Brent crude oil prices started to recover from May and traded in a price range of around \$35-45/b from June. Towards the end of 2020, announcements of promising COVID-19 vaccines supported Brent crude oil prices, allowing them to break through the upper end of this range.

On a yearly average basis, WTI crude oil traded at a discount of about \$2.5/b to Brent crude oil in 2020, compared with \$7/b in 2019. The discount narrowed from 2019 because falling US supply prevented bottlenecks in pipeline capacity from the landlocked Cushing storage hub to the US Gulf Coast. According to the US Energy Information Administration, US crude oil exports increased further to a yearly average of around 3.1 million b/d in 2020, up by 0.1 million b/d from 2019. This helped to ensure a narrow price differential between Brent and WTI.

Looking ahead, the IMF's global economic outlook indicates some increase in global economic growth, which should support oil demand growth.

Demand growth could accelerate further if vaccines can help contain COVID-19 and allow a return to pre-pandemic demand patterns in perhaps two or three years. According to the IEA, global oil demand is projected to increase by around 5.4 million b/d for 2021 to reach 96.6 million b/d. This is still 3.4 million b/d less than in 2019. OPEC+ members may have to carefully balance supply growth with sustained production curtailments in order to achieve price stability. In the near term, once demand has recovered to 2019 levels, the need for OPEC+ cuts may diminish. If there is further demand growth, tightness of supply could even develop. This is because any supply growth from the US shale basins could be limited, since US operators have shifted their focus from volume to value. We expect this shift to be permanent.

The supply growth potential from outside OPEC+ and the USA could be limited by industry-wide lack of investment in new supply projects which also tend to have a long lead time.

In the near term, prices could rise if demand is quicker to recover and OPEC+ members successfully constrain supply. On the other hand, the price environment could weaken if the impact of COVID-19 prevents full demand recovery, and/or OPEC and the non-OPEC resource holders relax their production agreement. The price environment could also weaken if there is an increase in supply from other non-OPEC producers, such as US shale producers.

NATURAL GAS

Global gas demand is estimated to have declined by around 2.4% in 2020, in contrast with the 2.5% annual growth rate observed since the start of the century. The deterioration in gas demand for power generation and in industry was mainly caused by lockdowns related to COVID-19. Resilient gas demand for heating helped offset the overall decline. Demand declined across all regions except non-OECD Asia. In non-OECD Asia, demand grew in China, which experienced a robust recovery after mitigating the impacts of COVID-19. Outside China, aggregate gas demand in non-OECD Asia remained flat year-on-year.

In 2020, global LNG imports were almost unchanged from 2019, rising by about 2 million tonnes year-on-year to 360 million tonnes. Growth in LNG supply capacity was mostly limited to the USA, where 21 million tonnes of new liquefaction started commercial operations in 2020. Liquefaction plants already in operation in the USA responded to the weak gas price environment by significantly curtailing production in the middle of the year. Supply from major LNG-exporting countries such as Egypt, Malaysia and Norway was also lower year-on-year because of operational disruptions and shut-ins to prevent economic losses.

Natural gas prices can vary from region to region.

In the USA, the natural gas price at the Henry Hub averaged \$2.0 per million British thermal units (MMBtu) in 2020, 21% lower than in 2019. It traded in a range of \$1.5 to 3.2/MMBtu. In the earlier part of 2020, there was downward pressure on prices because of decreased demand from a mild winter, lower LNG exports and a weak domestic market caused by COVID-19. Supply fell because activity declined as producers cut investments and because lower oil production meant there was less associated gas. During the summer, prices found support from growing demand for gas that could generate power for cooling during the hotter months of the year. Later in 2020, demand strengthened because of storage ahead of the winter season and increasing US LNG exports.

In Europe, the average price at the UK National Balancing Point (NBP) in 2020 was 28% lower than in 2019. At the main continental gas trading hubs – in the Netherlands, Belgium and Germany – prices were also lower, as reflected by weaker Dutch Title Transfer Facility (TTF) prices. European gas prices were lower because of: the slump in demand in power generation and industry; robust supply of pipeline gas; well-filled gas storage inventories at the start of the year; and competition with renewables in power.

We also produce and sell natural gas in regions where supply, demand and regulatory circumstances differ markedly from those in the USA or Europe.

Long-term contracted LNG prices in the Asia-Pacific region in 2020 were lower than in 2019 because they are predominantly indexed to oil prices, particularly the Japan Customs-cleared Crude (JCC) index which dropped by an 32% year-on-year, tracking Brent crude prices. Meanwhile, delivered North Asia spot prices, reflected by the Japan Korea Marker, declined by 20% compared with 2019, because of oversupply in the global LNG market and weak demand.

Looking ahead, we expect gas markets in North America, Europe and Asia-Pacific to find support from markets recovering from the pandemic. Price developments are very uncertain and dependent on many factors.

MARKET OVERVIEW

continued

In the USA, Henry Hub gas prices are expected to increase over the next few years. This is because while production of gas is expected to recover by perhaps late 2021, it could lag behind demand, which may grow earlier, to supply LNG exports and exports to Mexico by pipeline, and to supply residential and industrial users. The Henry Hub gas price could rise more than expected if oil prices stay low, leading to the Permian Basin producing less oil and supplying less associated gas as a result.

On the other hand, if producers increase investments substantially, the extra supply could exert downward pressure on prices.

In Europe, we believe gas prices will be increasingly influenced by the cost of LNG imports from the USA. In the Asia-Pacific region, long-term gas prices are expected to continue to be strongly influenced by oil prices. Spot prices are expected to be increasingly influenced by gas supply and demand fundamentals.

CRUDE OIL AND NATURAL GAS PRICE ASSUMPTIONS

Our ability to deliver competitive returns and pursue commercial opportunities ultimately depends on the accuracy of our price assumptions (see "Risk factors" on page 28). We use a rigorous assessment of short-, medium- and long-term market uncertainties to determine what ranges of future crude oil and natural gas prices to use in project and portfolio evaluations. Market uncertainties include, for example, future economic conditions, geopolitics, actions by major resource holders, production costs, technological progress and the balance of supply and demand. See also Note 8 to the "Consolidated Financial Statements" on pages 234-238.

REFINING MARGINS

Refining marker average industry gross margins

	2020	2019	2018
US West Coast	8.5	13.5	11.5
US Gulf Coast Coking	2.3	4.9	7.0
Rotterdam Complex	0.4	2.3	2.5
Singapore	(0.5)	(0.6)	1.4

Industry gross refining margins weakened in 2020 because demand for oil products was significantly reduced by the fall in economic activity and increase in travel restrictions caused by COVID-19. Demand for transportation fuels such as gasoline for passenger cars and kerosene for air transportation was hit particularly hard. During most of the second half of the year, mobility and the resulting demand for transportation fuels improved in some parts of the world, especially in China and South-east Asia. At the end of the year, new waves of COVID-19 infections in Europe and the Americas severely limited any global increase in demand for transportation fuels.

On January 1, 2020, the new International Maritime Organization low-sulphur shipping fuel specification came into effect, limiting the sulphur content of maritime fuel to 0.5%. This had a limited effect on margins because of the economic slowdown in 2020 and because companies had prepared for the new regulations by building inventory in the second half of 2019.

The destruction of demand caused by COVID-19 led to industry idling some refinery capacity. Permanent refinery closures were also announced in 2020, but construction of new capacity did occur during the year, especially in the Middle East and Asia.

The outlook for refining margins for the next few years will be influenced by the uncertainty around the pace of economic and demand recovery from the pandemic, and by the continued addition of new refinery capacity in the Middle East and Asia, often integrated with chemicals production. On balance, refining marker margins are expected to remain under pressure for 2021.

PETROCHEMICAL MARGINS

Cracker industry margins [A]

	2020	2019	2018
North East/South East Asia naphtha	362	302	594
Western Europe naphtha	513	528	562
US ethane	433	440	412

[A] ICIS data is quoted. Cracker margins have been revised from the fourth quarter 2019 onwards due to updated cracker margin calculation methodology by ICIS. Further revisions based on available market information to external industry data provider up to the end of the period.

Cracker margins were volatile during 2020 because of how COVID-19 affected demand. Overall margins, however, were broadly similar to those in 2019. The effect on chemicals depended on end use. Some sectors, such as automotive, were hit particularly hard, while others, such as packaging, showed robust demand. Chinese demand recovered relatively quickly because the virus was swiftly brought under control. Overall chemicals demand was not hit as hard as GDP. West European cracker margins were supported by the sudden fall in the price of crude oil in March and April. The fact that crude oil was at a lower price than in 2019 reduced naphtha feedstock costs, which reduced product prices. This in turn put pressure on US ethane cracker margins, although plentiful ethane supply helped counter the impact.

The outlook for petrochemical margins in 2021 and beyond depends on feedstock costs and supply and demand balances. Demand for petrochemicals will be affected by the speed and extent of recovery from the COVID-19 pandemic. Supply of petrochemicals will depend on the net capacity effect of new builds and plant closures (taking into account any delays or cancellations in building new plants or closing old ones). Product prices reflect the prices of raw materials, which are closely linked to crude oil and natural gas prices. The balance of all these factors will drive margins.

The statements in this "Market overview" section, including those related to our price forecasts, are forward-looking statements based on management's current expectations and certain material assumptions and, accordingly, involve risks and uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied herein. See "About this Report" on pages iii-iv and "Risk factors" on pages 28-37.

SUMMARY OF RESULTS

Key statistics

	\$ million, except where indicated		
	2020	2019	2018
(Loss)/income for the period	(21,534)	16,432	23,906
Current cost of supplies adjustment	1,833	(605)	458
Total segment earnings [A][B], of which:	(19,701)	15,827	24,364
Integrated Gas	(6,278)	8,628	11,444
Upstream	(10,785)	3,855	6,490
Oil Products	(494)	6,139	6,025
Chemicals	808	478	1,884
Corporate	(2,952)	(3,273)	(1,479)
Identified Items [B]	(24,767)	(1,192)	2,429
Adjusted Earnings [B]	4,846	16,462	21,404
Capital expenditure	16,585	22,971	23,011
Cash capital expenditure [B]	17,827	23,919	24,078
Operating expenses [B]	34,789	37,893	39,316
Return on average capital employed [B]	(6.8)%	6.7%	9.4%
Net Debt at December 31 [B]	75,386	79,093	51,428
Gearing at December 31	32.2%	29.3%	20.3%
Oil and gas production (thousand boe/d)	3,386	3,665	3,666
Proved oil and gas reserves at December 31 (million boe)	9,124	11,096	11,578

[A] Segment earnings are presented on a current cost of supplies basis. See Note 4 to the "Consolidated Financial Statements" on pages 230-232.

[B] See "Non-GAAP measures reconciliations" on pages 305-306.

EARNINGS 2020-2019

Income for the period was a loss of \$21,534 million in 2020, compared with earnings of \$16,432 million in 2019. After current cost of supplies adjustment, total segment earnings were a loss of \$(19,701) million in 2020, compared with earnings of \$15,827 million in 2019.

Earnings on a current cost of supplies basis (CCS earnings) exclude the effect of changes in the oil price on inventory carrying amounts, after making allowance for the tax effect. The purchase price of volumes sold in the period is based on the current cost of supplies during the same period, rather than on the historic cost calculated on a first-in, first-out (FIFO) basis. Therefore, when oil prices are decreasing, CCS earnings are likely to be higher than earnings calculated on a FIFO basis and, when prices are increasing, CCS earnings are likely to be lower than earnings calculated on a FIFO basis.

Integrated Gas earnings in 2020 were a loss of \$6,278 million, compared with earnings of \$8,628 million in 2019. The decrease was mainly driven by higher impairments, lower realised oil, LNG and gas prices, higher charges related to fair value accounting of commodity derivatives and lower contributions from marketing and trading. These effects were partly offset by lower operating expenses. See "Integrated Gas" on pages 46-52.

Upstream earnings in 2020 were a loss of \$10,785 million, compared with earnings of \$3,855 million in 2019. The decrease was mainly driven by lower realised oil and gas prices, higher impairments, higher losses on sales of assets, lower production volumes and unfavourable deferred tax movements. This was partly offset by lower operating expenses and lower well write-offs. See "Upstream" on pages 53-60.

Oil Products earnings in 2020 were a loss of \$494 million, compared with earnings of \$6,139 million in 2019. The decrease was mainly driven by higher impairments, lower combined Refining and Trading margins as well as lower marketing margins. This was partly offset by lower operating expenses and other items mainly including taxation movements.

See "Oil Products" on pages 70-76.

Chemicals earnings in 2020 were \$808 million, compared with \$478 million in 2019. The increase was mainly driven by lower tax and operating expenses and higher chemicals prices, which was partly offset by higher redundancy and restructuring charges and higher depreciation, depletion and amortisation. See "Chemicals" on pages 77-79.

Corporate segment in 2020 was an expense of \$2,952 million, compared with \$3,273 million in 2019. The lower expense was mainly driven by the favourable deferred tax movements. See "Corporate" on page 80.

EARNINGS 2019-2018

Income for the period was \$16,432 million in 2019, compared with \$23,906 million in 2018. After current cost of supplies adjustment, total segment earnings were \$15,827 million in 2019, compared with \$24,364 million in 2018.

Integrated Gas earnings in 2019 were \$8,628 million, compared with \$11,444 million in 2018. The decrease was mainly driven by lower gains on sale of assets, lower realised oil, LNG and gas prices, higher impairments, higher operating expenses, negative movements in deferred tax positions and lower liquids production volumes. These effects were partly offset by stronger contributions from LNG marketing and trading, and gains related to the fair value accounting of commodity derivatives. See "Integrated Gas" on pages 46-52.

Upstream earnings in 2019 were \$3,855 million, compared with \$6,490 million in 2018. The decrease was mainly driven by higher impairments, lower realised oil and gas prices, higher depreciation and higher well write-offs. This was partly offset by increased gains on sale of assets and higher volumes. See "Upstream" on pages 53-60.

Oil Products earnings in 2019 were \$6,139 million, compared with \$6,025 million in 2018. The increase was mainly driven by higher Marketing margins and lower operating expenses partly offset by lower Refining and Trading margins. See "Oil Products" on pages 70-76.

SUMMARY OF RESULTS continued

Chemicals earnings in 2019 were \$478 million, compared with \$1,884 million in 2018. The decrease was mainly driven by lower margins and higher legal provisions. See "Chemicals" on pages 77-79.

Corporate segment in 2019 was an expense of \$3,273 million, compared with \$1,479 million in 2018. The higher loss was mainly driven by the introduction of IFRS 16 and reduced capitalised interest, as well as reduced tax credits from financing and one-off charges. See "Corporate" on page 80.

PRODUCTION AVAILABLE FOR SALE

Oil and gas production available for sale in 2020 was 1,239 million barrels of oil equivalent (boe), or 3,386 thousand boe per day (boe/d), compared with 1,338 million boe, or 3,665 thousand boe/d, in 2019. In 2020, lower production was due to the impact of divestments, higher maintenance, demand reduction and OPEC+ restrictions. New fields and ramp-ups offset the impact of field declines.

Oil and gas production available for sale [A]

	Thousand boe/d		
	2020	2019	2018
Crude oil and natural gas liquids	1,752	1,823	1,749
Synthetic crude oil	51	52	53
Natural gas [B]	1,583	1,790	1,863
Total	3,386	3,665	3,666
Of which:			
Integrated Gas	911	922	957
Upstream	2,424	2,691	2,656
Oil sands (reported as part of Oil Products)	51	52	53

[A] See "Oil and gas information" on pages 61-69.

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

PROVED RESERVES

The proved oil and gas reserves of Shell subsidiaries and the Shell share of the proved oil and gas reserves of joint ventures and associates are summarised in "Oil and gas information" on pages 61-69 and set out in more detail in "Supplementary information – oil and gas (unaudited)" on pages 265-282.

Before taking production into account, our proved reserves decreased by 686 million boe in 2020. This comprised decreases of 614 million boe from Shell subsidiaries and decreases of 72 million boe from the Shell share of joint ventures and associates. The decrease from Shell subsidiaries included a net decrease of 607 million boe from revisions and reclassifications, an increase of 88 million from extensions and discoveries and a net decrease of 95 million boe related to purchases and sales of minerals in place. The decrease of 72 million boe from the Shell share of joint ventures and associates comprises a net decrease of 73 million boe from revisions and reclassifications.

In 2020, total oil and gas production was 1,286 million boe, of which 1,239 million boe was available for sale and 47 million boe was consumed in operations. Production available for sale from subsidiaries was 1,04 million boe and 40 million boe was consumed in operations. The Shell share of the production available for sale of joint ventures and associates was 135 million boe and 7 million boe was consumed in operations.

Accordingly, after taking production into account, our proved reserves decreased by 1,972 million boe in 2020, to 9,124 million boe at December 31, 2020, with a decrease of 1,758 million boe from subsidiaries and a decrease of 214 million boe from the Shell share of joint ventures and associates.

CASH CAPITAL EXPENDITURE AND OTHER INFORMATION

Cash capital expenditure was \$17.8 billion in 2020, compared with \$23.9 billion in 2019.

Operating expenses decreased by \$3.1 billion in 2020, to \$34.8 billion.

Our return on average capital employed (ROACE) decreased to (6.8)%, compared with 6.7% in 2019, mainly driven by lower income in 2020.

Net debt was \$75.4 billion at the end of 2020, compared with \$79.1 billion at the end of 2019, mainly driven by lower share buybacks and dividend payments.

Gearing was 32.2% at the end of 2020, compared with 29.3% at the end of 2019, mainly driven by lower earnings in 2020.

SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS

See Note 2 to the "Consolidated Financial Statements" on pages 221-229.

LEGAL PROCEEDINGS

See Note 25 to the "Consolidated Financial Statements" on pages 260-262.

PERFORMANCE INDICATORS

These indicators enable management to evaluate Shell's performance against our strategy and operating plans. Those that are used in the determination of the Executive Directors' remuneration are asterisked below and on the following page. See "Directors' Remuneration Report" on pages 153-156.

FINANCIAL

Total shareholder return (%)^{*}

(32.7) 2019: 0.5

Total shareholder return (TSR) is the difference between the share price at the beginning of the year and the share price at the end of the year (each averaged over 90 days), plus gross dividends delivered during the calendar year (reinvested quarterly), expressed as a percentage of the share price at the beginning of the year (averaged over 90 days). The data used are a weighted average in dollars for A and B shares. The TSRs of major publicly traded oil and gas companies can be compared directly, providing a way to determine how we are performing relative to our industry peers.

Cash flow from operating activities (\$ million)^{*}

34,105 2019: 42,178

Cash flow from operating activities is the total of all the cash receipts and payments associated with our sales of oil, gas, chemicals and other products. The components that provide a reconciliation from income for the period are listed in the "Consolidated Statement of Cash Flows". This indicator reflects our ability to generate cash to service and reduce our debt and for distributions to shareholders and for investments.

 See "Liquidity and capital resources" on pages 81-84.

Free cash flow (\$ million)^{*}

20,828 2019: 26,399

Free cash flow is the sum of "Cash flow from operating activities" and "Cash flow from investing activities", which are listed in the "Consolidated Statement of Cash Flows". This indicator is used to evaluate the cash available for financing activities, including dividend payments, after investment in maintaining and growing our business.

 See "Non-GAAP measures reconciliations" on pages 305-306.

Organic free cash flow (\$ million)

17,634 2019: 20,116

Organic free cash flow is defined as free cash flow excluding the cash flows from acquisition and divestment activities. It is a measure used by management to evaluate the generation of cash flow without these activities.

 See "Non-GAAP measures reconciliations" on page 305-306.

Return on average capital employed (%)^{*}

(6.8) 2019: 6.7

ROACE is defined as income for the period, adjusted for after-tax interest expense, as a percentage of the average capital employed during the year. Capital employed is the sum of total equity and total debt. ROACE measures the efficiency of our utilisation of the capital that we employ and is a common measure of business performance.

 See "Summary of results" on pages 41-42 and "Non-GAAP measures reconciliations" on pages 305-306.

Adjusted earnings (\$ million)

4,846 2019: 16,462

Adjusted earnings are income/(loss) attributable to shareholders plus cost of sales adjustment and excluding identified items. This measure aims to facilitate a comparative understanding of Shell's financial performance from period to period by removing the effects of oil price changes on inventory carrying amounts and removing the effects of identified items. These items are in some cases driven by external factors and may, either individually or collectively, hinder the comparative understanding of Shell's financial results from period to period. This measure excludes earnings attributable to non-controlling interest.

 See "Non-GAAP measures reconciliations" on pages 305-306.

Adjusted earnings per share (\$)

0.62 2019: 2.04

Adjusted earnings per share is calculated as adjusted earnings, divided by the weighted average number of shares used as the basis for basic earnings per share.

 See "Non-GAAP measures reconciliations" on pages 305-306.

Divestment proceeds (\$ million)

4,010 2019: 7,871

Divestment proceeds represent cash received from divestment activities in the period. This is the sum of the following lines from the "Consolidated Statement of Cash Flows": proceeds from sale of property, plant and equipment and businesses; proceeds from sale of joint ventures and associates [A]; and proceeds from sale of equity securities.

[A] includes \$313 million (2019: \$155 million) of long-term loan repayments received from joint ventures and associates.

 See "Non-GAAP measures reconciliations" on pages 305-306.

PERFORMANCE INDICATORS continued

FINANCIAL continued

Cash capital expenditure (\$ million)

17,827 2019: 23,919

Cash capital expenditure is the sum of capital expenditure, investments in joint ventures and associates, and investments in equity securities, as reported in the "Consolidated Statement of Cash Flows". It is used to monitor investing activities on a cash basis, excluding items such as lease additions that do not necessarily result in cash outflows in the period.

 See "Non-GAAP measures reconciliations" on pages 305-306.

Net debt (\$ million)

75,386 2019: 79,093

Net debt is defined as the sum of current and non-current debt, less cash and cash equivalents. The net debt calculation includes the fair value of derivative financial instruments used to hedge foreign exchange, interest rate risks relating to debt and associated collateral balances. The inclusion of these debt-related derivative balances reduces the volatility of net debt caused by fluctuations in foreign exchange and interest rates, and eliminates the potential impact of related collateral payments or receipts.

 See "Note 14 Debt and Lease Arrangements" on pages 241-243.

Gearing (%)

32.2 2019: 29.3

Gearing is defined as net debt as a percentage of total capital (net debt plus total equity) at December 31, and is a measure of the degree to which our operations are financed by debt.

 See "Liquidity and capital resources" on page 81-84 and "Note 14 Debt and Lease Arrangements" on pages 241-243.

OPERATIONAL

Production available for sale (thousand boe/d)*

3,386 2019: 3,665

Production is the sum of all the average daily volumes of unrefined oil and natural gas produced for sale by Shell subsidiaries and Shell's share of those produced for sale by joint ventures and associates. The unrefined oil comprises crude oil, natural gas liquids (NGLs), synthetic crude oil and bitumen. The gas volume is converted into equivalent barrels of oil to make the summation possible.

 See "Summary of results" on pages 41-42.

LNG liquefaction volumes (million tonnes)*

33.2 2019: 35.6

LNG liquefaction volumes is a measure of the operational performance of our Integrated Gas business and LNG market demand.

 See "Integrated Gas" on pages 46-52.

Refinery and chemical plant availability (%)*

95.5 2019: 90.8

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

 See "Oil Products" on pages 70-76 and "Chemicals" on pages 77-79.

Project delivery on schedule (%)*

48 2019: 90

Project delivery on budget (%)*

104 2019: 99

Project delivery reflects our capability to complete major projects on time and within budget on the basis of the targets set in our annual business plan. Project delivery on schedule measures the percentage of projects delivered on schedule. Project delivery on budget reflects the aggregate cost against the aggregate budget for those projects, where a figure greater than 100% means over-budget.

Proved oil and gas reserves (million boe)

9,124 2019: 11,096

Proved oil and gas reserves are the total estimated quantities of oil and gas from Shell subsidiaries and Shell's share from joint ventures and associates that geoscience and engineering data demonstrate, with reasonable certainty, to be recoverable in future years from known reservoirs, at December 31, under existing economic conditions, operating methods and government regulations. Gas volumes are converted into boe using a factor of 5,800 scf/b. Reserves estimates are subject to change owing to a wide variety of factors, some of which are unpredictable.

 See "Risk factors" on pages 28-37, "Summary of results" on pages 41-42, "Oil and gas information" on pages 61-69 and "Supplementary information - oil and gas (unaudited)" on pages 265-282.

SAFETY AND ENVIRONMENT

Total recordable case frequency (injuries per million working hours)*

0.7 2019: 0.9

Total recordable case frequency (TRCF) is the number of employee and contract staff injuries requiring medical treatment or time off for every million hours worked. It is a standard measure of occupational safety.

 See "Environment and society" on pages 85-93.

Number of operational Tier 1 and 2 process safety events*

103 2019: 130

A Tier 1 process safety event is an unplanned or uncontrolled release of any material, including non-toxic and non-flammable materials, from a process with the greatest actual consequence resulting in harm to employees, contract staff, or a neighbouring community, damage to equipment, or exceeding a threshold quantity, as defined by the API Recommended Practice 754 and IOGP Standard 456. A Tier 2 process safety event is a release of lesser consequence.

 See "Environment and society" on pages 85-93.

Upstream and Integrated Gas GHG intensity (tonnes of CO₂ equivalent/tonne of hydrocarbon production available for sale)*

0.16 2019: 0.17

Upstream/midstream GHG intensity is a measure of GHG emissions (direct and indirect GHG emissions associated with imported energy, excluding emissions from exported energy), expressed in metric tonnes of CO₂ equivalent, emitted into the atmosphere per metric tonne of hydrocarbon production available for sale.

 See "Climate change and energy transition" on pages 94-107.

Refining GHG intensity (tonnes of CO₂ equivalent/UEDCTM)*

1.05 2019: 1.06

Refining GHG intensity is a measure of GHG emissions (direct and indirect GHG emissions associated with imported energy, excluding emissions from exported energy), expressed in metric tonnes of CO₂ equivalent, emitted into the atmosphere per unit of Utilised Equivalent Distillation Capacity (UEDCTM). UEDCTM 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 the size and configuration of its particular mix of process and non-process facilities.

 See "Climate change and energy transition" on pages 94-107.

Chemicals GHG intensity (tonnes of CO₂ equivalent/tonne petrochemicals produced)*

0.98 2019: 1.04

Chemicals GHG intensity is a measure of GHG emissions (direct and indirect GHG emissions associated with imported energy, excluding emissions from exported energy), expressed in metric tonnes of CO₂ equivalent, emitted into the atmosphere per metric tonne of steam cracker, high-value petrochemicals production.

 See "Climate change and energy transition" on pages 94-107.

Number of operational spills of more than 100 kilograms

68 2019: 67

The operational spills indicator is the number of incidents in respect of activities where we are the operator in which 100 kilograms or more of oil or oil products were spilled as a result of those activities and reached the environment.

 See "Environment and society" on page 85-93.

Direct GHG emissions (million tonnes of CO₂ equivalent)

63 2019: 70

Direct GHG emissions from facilities operated by Shell, expressed in million tonnes of CO₂ equivalent.

 See "Climate change and energy transition" on pages 94-107.

Net Carbon Footprint (grams of CO₂ equivalent per megajoule)*

75 2019: 78

Net Carbon Footprint is a comprehensive measure of the life-cycle carbon intensity of the energy products we sell. It is a weighted average of the life-cycle CO₂ intensities of different energy products, normalised to the same point relative to their final end use. It includes emissions from the extraction, transportation and processing of crude oil or gas or other feedstocks, transport of products, and our customers' emissions from the use of products we sell. Also included are emissions from elements of this life cycle not owned by Shell, such as oil and gas processed by Shell but not produced by Shell; or from oil products and electricity marketed by Shell that have not been processed or generated at a Shell facility. Emissions compensated through various measures are also included, such as emissions mitigated by nature-based solutions and carbon capture and storage technology.

 See "Climate change and energy transition" on pages 94-107.

INTEGRATED GAS

Key statistics

	\$ million, except where indicated		
	2020	2019	2018
Segment earnings	(6,278)	8,628	11,444
Including:			
Revenue (including inter-segment sales)	36,697	45,602	48,795
Share of profit of joint ventures and associates	562	1,791	2,273
Interest and other income	14	263	2,230
Operating expenses [A]	6,555	6,667	6,014
Exploration	611	281	208
Depreciation, depletion and amortisation	17,704	6,238	4,850
Taxation charge	(2,507)	2,242	2,795
Identified Items [A]	(10,661)	(326)	2,045
Adjusted Earnings [A]	4,383	8,955	9,399
Capital expenditure	3,661	3,851	3,262
Cash capital expenditure [A]	4,301	4,299	3,819
Oil and gas production available for sale (thousand boe/d)	911	922	957
LNG liquefaction volumes (million tonnes)	33.2	35.6	34.3

[A] See "Non-GAAP measures reconciliations" on pages 305-306.

OVERVIEW

Our Integrated Gas segment includes liquefied natural gas (LNG) activities and the conversion of natural gas into gas-to-liquids (GTL) fuels and other products, as well as our New Energies businesses which were rebranded to Renewables and Energy Solutions in 2021. The segment includes natural gas and liquids exploration and extraction, and the operation of upstream and midstream infrastructure that delivers gas and liquids to market. It markets and trades natural gas, LNG, electricity and carbon-emission rights, and markets and sells LNG as a fuel for heavy-duty vehicles and marine vessels.

BUSINESS CONDITIONS

Global gas demand is estimated to have declined by around 2.4% in 2020, in contrast with the 2.5% annual growth rate observed since the start of the century. The deterioration in gas demand for power generation and in industry was mainly caused by lockdowns related to COVID-19. Resilient gas demand for heating helped offset the overall decline. Demand declined across all regions except non-OECD Asia. In non-OECD Asia, demand grew in China, which experienced a robust recovery after mitigating the impacts of COVID-19. Outside China, aggregate gas demand in non-OECD Asia remained flat year-on-year.

In 2020, global LNG imports were almost unchanged from 2019, rising by about 2 million tonnes year-on-year to 360 million tonnes. Growth in LNG supply capacity was mostly limited to the USA, where 21 million tonnes of new liquefaction started commercial operations in 2020. Liquefaction plants already in operation in the USA responded to the weak gas price environment by significantly curtailing production in the middle of the year. Supply from major LNG-exporting countries such as Egypt, Malaysia and Norway was also lower year-on-year because of operational disruptions and shut-ins to prevent economic losses.

Natural gas prices can vary from region to region.

In the USA, the natural gas price at the Henry Hub averaged \$2.0 per million British thermal units (MMBtu) in 2020, 21% lower than in 2019. It traded in a range of \$1.5 to 3.2/MMBtu.

In Europe, the average price at the UK National Balancing Point (NBP) in 2020 was 28% lower than in 2019. At the main continental gas trading hubs – in the Netherlands, Belgium and Germany – prices were also lower, as reflected by weaker Dutch Title Transfer Facility (TTF) prices.

Long-term contracted LNG prices in the Asia-Pacific region in 2020 were lower than in 2019 because they are predominantly indexed to oil prices, particularly the Japan Customs-cleared Crude (JCC) index which dropped by an 32% year-on-year, tracking Brent crude prices. Meanwhile, delivered North Asia spot prices, reflected by the Japan Korea Marker, declined by 20% compared with 2019.

See "Market overview" on pages 38-40.

PRODUCTION AVAILABLE FOR SALE

In 2020, production was 333 million barrels of oil equivalent (boe), or 911 thousand boe per day (boe/d), compared with 336 million boe, or 922 thousand boe/d in 2019. Natural gas production was 83% of total production in 2020 and 2019. In 2020 natural gas production decreased by 1% compared with 2019. This was mainly because of extended maintenance at the Prelude floating liquefied natural gas (FLNG) facility and maintenance activities at the Gorgon project in Australia, as well as lower wells performance. These were partially offset by the transfer of Rashpetco operations in Egypt from the Upstream segment and field ramp-ups. Liquids production decreased by 2%, in line with the decrease in natural gas production.

LNG LIQUEFACTION VOLUMES

LNG liquefaction volumes of 33.2 million tonnes in 2020 were 6% lower than in 2019, mainly driven by lower feedgas availability, higher maintenance activities, primarily at Prelude FLNG and Gorgon, as well as cargo timing.

LNG sales volumes of 69.67 million tonnes in 2020 were 6% lower than in 2019, driven by lower LNG liquefaction volumes partly offset by higher purchases from third parties.

Through our Shell Energy organisation, we market a portion of our share of equity production of LNG and sell and market LNG volumes around the world through our hubs in the UK, Dubai and Singapore. Shell has term sales contracts for the majority of our LNG liquefaction and term purchase contracts. We are able to maximize the income we generate from our LNG cargos through our shipping network, regasification terminals and ability to purchase and deliver LNG spot cargos from third parties. For example, if one customer does not need a scheduled cargo, we can deliver that cargo to another customer who is in need. Similarly, if a customer needs an additional cargo not available from our production facilities, we can contract with third parties to deliver the additional cargo. We also conduct paper trades primarily to manage commodity price risk related to sales and purchase contracts. We also sell trucked LNG in China, Singapore and Europe.

INTEGRATED GAS DATA TABLE

LNG liquefaction volumes

	2020	2019	2018
Australia	11.8	12.5	12.1
Brunei	1.6	1.6	1.6
Egypt	0.2	0.4	0.3
Malaysia	—	—	0.6 [A]
Nigeria	5.3	5.3	5.1
Norway	0.1	0.1	0.1
Oman	2.5	2.6	2.4
Peru	0.9	0.9	0.8
Qatar	2.4	2.5	2.3
Russia	3.1	3.0	3.1
Trinidad and Tobago	5.4	6.7	5.8
United States	0.1	0.1	—
Total	33.2	35.6	34.3

[A] Includes LNG liquefaction volumes related to our share in equity securities of Malaysia LNG Tiga, which were disposed of in 2018.

EARNINGS 2020-2019

Segment earnings in 2020 were a loss of \$6,278 million, which included a net charge of \$10,661 million. The net charge reflected impairment charges of \$9,282 million mainly reflecting revisions to mid- and long-term price outlook assumptions and primarily related to the Queensland Curtis LNG and Prelude FLNG operations in Australia. It also comprised a net charge of \$969 million due to the fair value accounting of commodity derivatives and a charge of \$607 million related to onerous contract provisions.

Segment earnings in 2019 were \$8,628 million, which included a net charge of \$326 million. The net charge mainly reflected impairment charges of \$890 million mostly in Australia, negative movements in deferred tax positions of \$292 million in Australia and write-offs of \$131 million in Trinidad and Tobago. These were partly offset by a gain of \$787 million related to the fair value accounting of commodity derivatives and a gain of \$203 million on a sale of assets in Australia.

Excluding the net charge described above, segment earnings were \$4,383 million in 2020 compared with \$8,955 million in 2019. Earnings were negatively impacted by lower realised LNG, oil and gas prices, and lower contributions from marketing and trading, partly offset by lower operating expenses.

EARNINGS 2019-2018

Segment earnings in 2019 were \$8,628 million, which included a net charge of \$326 million as described above.

Segment earnings in 2018 were \$11,444 million, which included a net gain of \$2,045 million. The net gain primarily reflected gains of \$1,937 million on sale of assets, mainly related to the divestment of assets in Thailand, New Zealand and India. It also comprised a gain of \$481 million related to the fair value accounting of commodity derivatives and impairment charges of \$371 million related to investments in Trinidad and Tobago and Shell's investment in a joint venture.

Excluding the net charge above, segment earnings were \$8,955 million in 2019 compared with \$9,399 million in 2018. Earnings were negatively impacted by lower realised oil, LNG and gas prices, higher operating expenses (of which about 50% related to New Energies, reflecting underlying business growth), and lower liquids production volumes, partly offset by significantly stronger contributions from LNG marketing and trading.

CASH CAPITAL EXPENDITURE

Cash capital expenditure in 2020 was \$4.3 billion, unchanged from \$4.3 billion in 2019. Our cash capital expenditure is expected to be around \$6 billion in 2021.

PORTFOLIO AND BUSINESS DEVELOPMENT

Key portfolio events in 2020 included the following:

- In February 2020, we announced that we will build and operate our first industrial-scale solar electricity farm near Wandoan in central Queensland, Australia. The solar farm will generate 120 MW of solar electricity and is expected to be completed in early 2021.
- In March 2020, we decided not to proceed with an equity interest in the proposed Lake Charles LNG project. Energy Transfer will take over as the project developer.
- In July 2020, the CrossWind consortium, a joint venture between Shell in the Netherlands and Eneco, was awarded the tender for the offshore wind farm Hollandse Kust (noord). Both companies have already taken their final investment decisions (FID) on the project. The consortium plans to have Hollandse Kust (noord) operational in 2023 with an installed capacity of 759 MW.

The following major milestones were reached in 2020:

- In April 2020, we took a FID to develop the first phase of Arrow Energy's Surat Gas Project in Queensland, Australia. This decision will bring up to 90 billion cubic feet per year of new gas by the end of the decade, which will flow to Shell-operated QGC to be sold locally and exported through its plant on Curtis Island.
- In May 2020, we took a FID on a new LNG processing unit known as Train 7 at Nigeria LNG (NLNG).
- In August 2020, the tenth and final movable modular liquefaction system (MMLS) unit at the Elba Island export terminal in Georgia, USA, was delivered to the energy infrastructure company Kinder Morgan.
- In August 2020, the Blauwwind consortium, which is developing offshore wind projects in the Netherlands, achieved its first power.

We continued our divestment activities for selected assets during 2020, including:

- In December, QGC Common Facilities Company Pty Ltd, a wholly-owned subsidiary of Shell, announced it had agreed to the sale of a 26.25% interest in the Queensland Curtis LNG (QCLNG) Common Facilities to Global Infrastructure Partners Australia. The transaction is subject to regulatory approval in Australia and customary conditions. It is expected to complete in the first half of 2021.

INTEGRATED GAS

continued

BUSINESS AND PROPERTY

Integrated Gas

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

LNG liquefaction plants in operation at December 31, 2020

Asset	Location	Shell interest (%)	100% capacity (mtpa) [A]	Shell-operated
Europe				
Norway	Gasnor	Bergen	100	0.3
Asia				
Brunei	Brunei LNG	Lumut	25	7.6
Oman	Oman LNG	Sur	30	7.1
	Qalhat LNG	Sur	11 [B]	3.7
Qatar	Qatargas 4 [C]	Ras Laffan	30	7.8
Russia	Sakhalin LNG [C]	Prigorodnoye	27.5	10.9
Oceania				
Australia	Australia North West Shelf [C]	Karratha	16.7	16.9
	Gorgon LNG [C]	Barrow Island	25	15.6
	Prelude [C] [D]	Browse Basin	67.5	3.6
	Queensland Curtis LNG T1 [C]	Curtis Island	50	4.3
	Queensland Curtis LNG T2 [C]	Curtis Island	97.5	4.3
Africa				
Egypt [E]	Egyptian LNG T1	Idku	35.5	3.6
	Egyptian LNG T2	Idku	38	3.6
Nigeria	Nigeria LNG	Bonny	25.6	24.1
South America				
Peru	Peru LNG	Pampa Melchorita	20	4.5
Trinidad and Tobago	Atlantic LNG T1	Point Fortin	46	3
	Atlantic LNG T2/T3	Point Fortin	57.5	6.6
	Atlantic LNG T4	Point Fortin	51.1	5.2

[A] 100% capacity represents the total capacity that all trains can process as reported by the operator.

[B] Interest, or part of the interest, is held via indirect shareholding.

[C] These assets are clustered as integrated assets and have onshore or offshore upstream production.

[D] Following a number of operational issues and shutdown since February 2020, Prelude continues to progress towards safe and reliable operations with LNG rundown restart in late December 2020.

[E] In January 2014, force majeure notices were issued under the LNG agreements as a result of domestic gas diversions severely restricting volumes available to the ELNG plant. These notices remain in place.

LNG liquefaction plants under construction at December 31, 2020

Asset	Location	Shell interest (%)	100% capacity (mtpa) [A]	Shell-operated
Africa				
Nigeria	Train 7 [B]	Bonny	25.6	7.6
North America				
Canada	LNG Canada T1-2 [C]	Kitimat	40.0	14.0

[A] 100% capacity represents the total capacity that all trains can process as reported by the operator.

[B] First LNG is expected in the middle of the 2020s.

[C] Construction started in October 2018 and first LNG is expected before the middle of the 2020s.

GTL plants in operation at December 31, 2020

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

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

We also have interests and rights in various regasification terminals listed below. Extension of leases or rights beyond the periods mentioned below will be reviewed on a case-by-case basis.

LNG regasification terminals

Project name	Location	Shell capacity rights (mtpa)	Capacity rights period	Status	Shell interest (%) and Rights
Altamira	Tamaulipas, Mexico	3.3 [A]	2006-2021	In operation	Leased
Costa Azul	Baja California, Mexico	2.7	2008-2028	In operation	Leased
Cove Point	Lusby, MD, USA	1.8	2003-2023	In operation	Leased
Dragon LNG	Milford Haven, UK	3.1	2009-2029	In operation	50
Elba Island Expansion	Elba Island, GA, USA	4.2	2010-2035	In operation	Leased
Elba Island	Elba Island, GA, USA	2.8	2006-2036	In operation	Leased
Elba Island	Elba Island, GA, USA	4.6	2003-2027	In operation	Leased
GATE (Gas Access to Europe)	Rotterdam, The Netherlands	1.5	2015-2031	In operation	Capacity rights
Shell Energy India Pvt Ltd (formerly Hazira)	Gujarat, India	5	2005-2035	In operation	100
Lake Charles	Lake Charles, LA, USA	4.4	2002-2030	In operation	Leased
Lake Charles Expansion	Lake Charles, LA, USA	8.7	2005-2030	In operation	Leased
Singapore SGM	SLNG, Singapore	up to 3.0 [B]	2013-2029	In operation	Import rights
Singapore SETL	SLNG, Singapore	up to 1.0 [C]	2018-2035	In operation	Import rights
Shell LNG Gibraltar	Gibraltar	up to 0.04	2018-2038	In operation	51

[A] 100% capacity rights are held by Gas del Litoral joint venture with which Shell has a contract to supply 75% of the volumes. Our capacity rights end in September 2021 and the contract will not be renewed.

[B] Exclusive licence to import LNG and sell regasified LNG in Singapore for up to 3.0 mtpa.

[C] Second licence to import LNG and sell regasified LNG in Singapore.

Our Integrated Gas business also includes oil and natural gas production, exploration and development in the following locations:

Australia

We have interests in offshore production, LNG liquefaction and exploration licences in the North West Shelf (NWS) and Greater Gorgon areas of the Carnarvon Basin and in the Browse Basin. Woodside is the operator on behalf of the NWS joint venture (Shell interest 16.7%). We have a 25% interest in the Chevron-operated Gorgon LNG joint venture that includes offshore production.

We relinquished positions in asset and exploration areas in the Exmouth Plateau, leading to us relinquishing four exploration permits in the Exmouth Plateau in June 2020.

Our interests in the Browse basin include joint arrangements, with Shell as the operator, for the Prelude field (Shell interest 67.5%), the pre-FID Crux gas and condensate field (Shell interest 82%), and other backfill and contingent resources for Prelude FLNG, including the Bratwurst field (Shell interest 100%). Bratwurst, discovered in 2019, is currently under evaluation as a future backfill opportunity.



QGC is one of Australia's leading natural gas producers.

We are also a partner in the Browse joint arrangement (Shell interest 27%) covering the Brecknock, Calliance and Torosa gas fields, which are under development and operated by Woodside.

We also operate the Queensland Curtis LNG (QCLNG) venture's natural gas operations, including wells, compression stations and processing plants, in Queensland's Surat Basin. We have interests ranging from 44% to 74% in 25 field compression stations and six central processing plants. Our production of natural gas from the onshore Surat Basin supplies the QCLNG liquefaction plant and the domestic gas market.

We have a 50% interest in Arrow, a Queensland-based joint venture with China National Petroleum Corporation (CNPC). Arrow owns coal-bed methane assets and a domestic power business.

Bolivia

We hold a 37.5% participating interest in the Caipipendi block where we produce and explore. We also have a 25% interest in Tarija XX West block where we produce from the Itaú field. We have the rights to explore and further develop the onshore Huacareta block (Shell interest 100% during exploration), and we are exploring there. We hold a 15% participating interest in the Repsol-operated Iniguazu exploration.

China

We jointly develop and produce from the onshore Changbei tight-gas field under a production-sharing contract (PSC) with CNPC. In 2017, we took the FID on the Changbei II Phase 1 project and started drilling activity in early 2019.

Egypt

We have a 25% interest in the Burullus Gas Company (Burullus), a self-operated joint venture which operates the West Delta Deep Marine concession (Shell interest 50%) and supplies gas to the domestic market and the Egyptian LNG plant. We have a 50% interest in the Rashid Petroleum Company (Rashpetco), a self-operated joint venture which operates the Rosetta concession (Shell interest 100%).

We have a 60% interest in the development rights for the Harmattan Deep discovery and the Notus discovery offshore the Nile Delta.

INTEGRATED GAS continued

Indonesia

We have a 35% interest in the INPEX Masela Ltd joint venture which owns and operates the offshore Masela block.

Oman

In February 2019, we signed an interim upstream agreement that detailed a funding and work programme for 2019 and 2020 to develop gas resources for projects to help meet the Sultanate of Oman's growing need for energy. The other signatories were Petroleum Development Oman (PDO), Oman Oil Company (OOC) and Total. The project covers investments in gas exploration and production.

Qatar

We operate the Pearl GTL plant (Shell interest 100%) in Qatar under a development and PSC with the government. The fully integrated facility has the capacity to produce, process and transport 1.6 billion standard cubic feet per day (scf/d) of gas from Qatar's North Field.

We have a 30% interest in Qatargas 4, which comprises integrated facilities to produce about 1.4 billion scf/d of gas from Qatar's North Field, an onshore gas-processing facility.

Russia

We have a 27.5% interest in Sakhalin-2, the joint venture with Gazprom, an integrated oil and gas project located on Sakhalin island.

Singapore

We have a 50% interest in a joint venture with KS Investments (the investment arm of Keppel Group) that holds a licence to supply LNG fuel for vessels in the Port of Singapore. We have aggregator licences to import LNG into Singapore and market the gas to power plants and other customers.

Tanzania

We operate and have a 60% interest in Blocks 1 and 4 offshore southern Tanzania. In June 2020, the government granted a 4.5-year licence extension for both blocks. We continue to develop a potential domestic gas and LNG project.

Trinidad and Tobago

We have interests in three concessions with producing fields: Central Block (Shell interest 65%), East Coast Marine Area (ECMA) (Shell interest 100%) and North Coast Marine Area (NCMA) (Shell interest 80.5%). We also own a 100% interest in Block 5(c), 90% interest in Block 22 and 80% interest in NCMA 4 which include five undeveloped discoveries. Our interests range from 35% to 100% in exploration activities in Blocks 5(d), 6(d), and Atlantic Area Blocks 3, 5, and 6.

USA

We have offtake rights via a lease to 100% of the capacity (2.5 mtpa) of the Kinder Morgan-operated Elba Island liquefaction plant in Georgia which consists of 10 MMLS units. We also lease regasification capacity on Elba Island with a contracted capacity of 11.6 mtpa.

Other

We have a 17.9% share in the West African Gas Pipeline Company Limited which owns and operates a 678-kilometre pipeline transporting gas from Nigeria to Ghana, Benin and Togo.

We have a 40% interest in a gas pipeline connecting Uruguay to Argentina.

We have a 35% interest in Cyprus Block 12, holding the Aphrodite discovery, which is currently under appraisal. In Colombia, we have a 60% interest in two deep-water blocks that we operate and 50% interests in three other blocks that we operate. We have interests in offshore blocks in Myanmar. We have a 90% interest in one exploration block licence in Namibia.

Renewables and Energy Solutions

Renewables and Energy Solutions includes power generation, trading and supply, hydrogen and nature-based solutions.

The Renewables and Energy Solutions portfolio is being built through organic growth and acquisitions. Most of these opportunities are in sectors that are different from Shell's existing oil and gas businesses, but have some similarities and/or adjacencies to our downstream and gas and power trading businesses. Shell-controlled Renewables and Energy Solutions companies are subject to the Shell Control Framework. Some are not yet in full compliance with the Shell Control Framework and we are working to bring them into compliance with this framework in a fit-for-purpose manner.

In 2020, cash capital expenditure in Renewables and Energy Solutions amounted to \$0.9 billion.



Shell is investing in renewables such as wind power.

Power

In the UK, through Shell Energy Retail, we supply 100% renewable electricity via the purchase of renewable energy guarantees of origin (REGO) certificates, and natural gas and smart home technology to more than 900 thousand homes. In Germany, we supply electricity and/or gas to more than 80 thousand homes through Shell Energy Retail GmbH.

Through sonnen, we provide battery storage systems to homes with solar panels, with over 60 thousand installations globally. Through our London-based energy technology firm Limejump, we manage distributed, renewable and flexible power generation assets in supplying power to the UK national grid.

Our Shell Recharge electric vehicle (EV) charging service offers ways for drivers to recharge their vehicles at home, at their destination or during their journey. Shell New Energies is also developing charging networks for EV drivers through our NewMotion and Greenlots subsidiaries. NewMotion operates around 60 thousand private electric charge points in the Netherlands, Germany, France and the UK.

Greenlots provides EV charging posts, charging network software and grid services. It operates 8 thousand charge points for businesses and private drivers in the USA, Canada and Singapore.

Through MP2, we provide retail electricity and renewable energy solutions to commercial and industrial customers across the USA.

Silicon Ranch is an independent power producer and Shell's US solar platform, with a diverse portfolio of operating facilities including utility-scale solar.

In Australia, through ERM, we are the second-largest electricity retailer serving commercial and industrial customers.



Shell Recharge allows drivers to charge their electric vehicles.

Our major renewable power projects in operation and in development are listed below:

Renewable power projects in operation

Project	Location	Shell interest (%)	100% capacity (MW)	Type	Theme	Shell-operated
Silicon Ranch	USA	46.47	1,130	Solar Developer	Solar	No
Cleantech Solar	Asia	24.5 [A]	252	Solar Developer	Solar	No
Moerdijk	The Netherlands	100	27	Solar Operations	Solar	Yes
Noordzee Wind NL	The Netherlands	50	108	Offshore Wind JV	Offshore wind	No
Brazos, TX	USA	100	160	Onshore wind Operations	Onshore wind	Yes
Whitewater Hill, CA	USA	50	61.5	Onshore wind Operations	Onshore wind	No
Rock River, WY	USA	50	49	Onshore wind Operations	Onshore wind	No
Cabazon Pass, CA	USA	50	41	Onshore wind Operations	Onshore wind	No
Sohar Solar Quabas	Oman	100	34	Solar Development	Solar	Yes
Emmen	The Netherlands	100	12	Solar Development	Solar	Yes
Heerhoven	The Netherlands	100	14.5	Solar Development	Solar	Yes

[A] Shell interest in Cleantech is 49% where Cleantech owns 50% of the projects. Therefore 24.5% Shell interest is reported.

Renewable power projects under construction

Project	Location	Shell interest (%)	100% capacity (MW)	Type	Theme	Shell-operated
Gangarri	Australia	100	120	Solar Development	Solar	Yes
Silicon Ranch [A]	USA	46.47	1,744	Solar Developer	Solar	No
Cleantech Solar [A]	Asia	24.5 [B]	174	Solar Developer	Solar	No
CrossWind	The Netherlands	79.9	759	Offshore Wind Development	Offshore wind	No
Borssele III and IV	The Netherlands	20	731.5	Offshore Wind Development	Offshore wind	No
Sas van Gent	The Netherlands	100	29.6	Solar Development	Solar	Yes

[A] These solar projects are shown in Projects in operation and under construction as they are in multiple phases.

[B] Shell interest in Cleantech is 49% where Cleantech owns 50% of the projects. Therefore 24.5% Shell interest is reported.

Renewable power projects in development

Projects in development represent various earlier stages where FID has not yet been taken.

Project	Location	Shell interest (%)	100% capacity (MW)	Type	Theme	Shell-operated
GBI	France	29.5	28.5	Offshore Wind JV	Offshore wind	Yes
Mayflower	USA	50	1,600	Offshore Wind JV	Offshore wind	No
Atlantic Shores	USA	50	2,500	Offshore Wind JV	Offshore wind	No
Pottendijk	The Netherlands	100	100	Solar and Onshore Wind	Onshore Renewable Power	Yes

INTEGRATED GAS continued

Hydrogen

We are part of joint ventures and alliances that have built hydrogen filling stations for passenger cars in Canada, Germany, the UK and the US state of California. We have announced plans to build several hydrogen filling stations in the Netherlands, the first of which opened in the fourth quarter of 2020.

We aim to complete the construction of a 10 MW electrolyser at our Rheinland refinery in Germany by mid-2021. In China, Shell and Zhangjiakou City Transport have signed a joint-venture agreement to build a 20 MW renewable power electrolyser and hydrogen refuelling stations in Zhangjiakou City in the Beijing-Tianjin-Hebei region.



Shell opened its first hydrogen refuelling station in the Netherlands in 2020.

Nature-based solutions

In 2020, we completed the acquisition of Select Carbon, a specialist company that partners with farmers, pastoralists and other landowners in Australia to develop carbon farming projects, where plants are grown and soil managed to absorb carbon dioxide from the atmosphere. Select Carbon represents the first corporate acquisition for our nature-based solutions programme. This programme invests in forests, grasslands, wetlands and other natural ecosystems around the world to offset emissions by using plants to absorb carbon dioxide. The investment in natural ecosystems also helps biodiversity.

Marketing and Trading

We also market and trade natural gas, power and carbon-emission rights in multiple markets in North and South America, Europe, Asia and Australia, of which a portion includes equity volumes from our upstream operations.

We have set up a power marketing and trading business in the Philippines and China which began operations in 2020.

UPSTREAM

Key statistics

	\$ million, except where indicated		
	2020	2019	2018
Segment earnings	(10,785)	3,855	6,490
Including:			
Revenue (including inter-segment sales)	28,330	45,217	46,584
Share of profit of joint ventures and associates	(7)	379	285
Interest and other income	542	2,180	605
Operating expenses [A]	10,983	11,582	11,690
Exploration	1,136	2,073	1,132
Depreciation, depletion and amortisation	23,119	16,881	12,871
Taxation charge/(credit)	(467)	5,878	8,756
Identified Items [A]	(7,933)	(598)	19
Adjusted Earnings [A]	(2,852)	4,452	6,472
Capital expenditure	6,911	10,003	12,002
Cash capital expenditure [A]	7,296	10,205	12,134
Oil and gas production available for sale (thousand boe/d)	2,424	2,691	2,656

[A] See "Non-GAAP measures reconciliations" on pages 305-306.

OVERVIEW

Our Upstream business explores for and extracts crude oil, natural gas and natural gas liquids. It also markets and transports oil and gas, and operates infrastructure necessary to deliver them to market.

BUSINESS CONDITIONS

In 2020, oil markets experienced unprecedented developments in demand driven by the COVID-19 pandemic. At the start of 2020, global oil demand for the year was expected to grow by 1.2 million barrels per day (b/d). Then in January, oil demand started to contract because demand fell in China as lockdown was imposed to contain the virus outbreak. In subsequent months, oil demand contracted further as the outbreak in China evolved into a global pandemic and lockdowns were introduced across the world. In April, oil demand fell to its lowest level, around 22 million b/d below year-average demand in 2019, according to an estimate of the International Energy Agency (IEA). Contraction of such magnitude has never been recorded before. Country lockdowns deeply impacted transportation sectors, especially passenger road and passenger air in Organisation for Economic Co-operation and Development (OECD) economies. In subsequent months, oil demand started recovering, but only partially, because resurgences of COVID-19 triggered re-imposition of social distancing and travel restrictions. By the fourth quarter, global oil demand was still estimated to be around 5.5 million b/d below the 2019 level, according to the Oil Market Report published by the IEA in January 2021. Averaged for the full year, oil demand contracted by around 9 million b/d, or 9%, to 91.2 million b/d. Oil demand fell by 5.7 million b/d in OECD economies, and by 3.2 million b/d in non-OECD economies. By contrast, oil demand in 2019 was 0.8 million b/d higher than in 2018.

On a daily average basis, Brent crude oil, an international benchmark, traded between \$13 per barrel (/b) and \$70/b in 2020, ending the year around \$50/b. Brent crude oil prices averaged \$42/b for the year, 34% (or \$22/b) lower than in 2019.

On a yearly average basis, WTI crude oil traded at a discount of about \$2.5/b to Brent crude oil in 2020, compared with \$7/b in 2019. The discount narrowed from 2019 because falling US supply prevented bottlenecks in pipeline capacity from the landlocked Cushing storage hub to the US Gulf Coast. According to the US Energy Information Administration, US crude oil exports increased further to a yearly average of around 3.1 million b/d in 2020, up by 0.1 million b/d from 2019. This helped to ensure a narrow price differential between Brent and WTI.

Global gas demand is estimated to have declined by around 2.4% in 2020, in contrast with the 2.5% annual growth rate observed since the start of the century. The deterioration in gas demand for power generation and in industry was mainly caused by lockdowns related to COVID-19. Resilient gas demand for heating helped offset the overall decline.

Demand declined across all regions except non-OECD Asia. In non-OECD Asia, demand grew in China, which experienced a robust recovery after mitigating the impacts of COVID-19. Outside China, aggregate gas demand in non-OECD Asia remained flat year-on-year.

In the USA, the natural gas price at the Henry Hub averaged \$2.0 per million British thermal units (MMBtu) in 2020, 21% lower than in 2019. It traded in a range of \$1.5 to 3.2/MMBtu. In the earlier part of 2020, there was downward pressure on prices because of decreased demand from a mild winter, lower LNG exports and a weak domestic market caused by COVID-19. Supply fell because activity declined as producers cut investments and because lower oil production meant there was less associated gas. During the summer, prices found support from growing demand for gas that could generate power for cooling during the hotter months of the year. Later in 2020, demand strengthened because of storage ahead of the winter season and increasing US LNG exports.

In Europe, the average price at the UK National Balancing Point (NBP) in 2020 was 28% lower than in 2019. At the main continental gas trading hubs – in the Netherlands, Belgium and Germany – prices were also lower, as reflected by weaker Dutch Title Transfer Facility (TTF) prices. European gas prices were lower because of: the slump in demand in power generation and industry; robust supply of pipeline gas; well-filled gas storage inventories at the start of the year; and competition with renewables in power.

See "Market overview" on pages 38-40.

PRODUCTION AVAILABLE FOR SALE

In 2020, production was 887 million boe, or 2,424 thousand boe/d, compared with 982 million boe, or 2,691 thousand boe/d in 2019. Liquids production decreased by 4% and natural gas production decreased by 19% compared with 2019.

The decrease in liquids production was mainly caused by divestments, OPEC+ curtailment, higher maintenance and hurricanes in the Gulf of Mexico interrupting production. Increased production from ramp-ups and new field start-ups more than offset field decline. The decrease in gas production was mainly caused by divestments, lower demand from Nederlandse Aardolie Maatschappij B.V. (NAM) in the Netherlands, and the transfer of Rashpetco operations in Egypt from Upstream to Shell's Integrated Gas segment.

We expect that oil production peaked in 2019. Going forward, we expect a gradual reduction in oil production of around 1-2% each year, including divestments and natural decline.

EARNINGS 2020-2019

Segment earnings in 2020 were a loss of \$10,785 million, which included a net charge of \$6,447 million related to impairments, primarily in the US Gulf of Mexico, unconventional assets in North America, offshore assets in Brazil and Europe, and a project in Nigeria (OPL245), mainly triggered by revision of Shell's mid- and long-term commodity price and updated Appomattox sub surface understanding. Also included was a net charge of \$782 million related to the impact of the weakening Brazilian real on a deferred tax position.

Segment earnings in 2019 were \$3,855 million, which included a net charge of \$1,930 million related to impairments, primarily in the US Appalachia unconventional gas assets and a drilling rig joint venture, partly offset by a gain of \$1,609 million on sale of assets, mainly in Denmark and the US Gulf of Mexico.

Excluding the net charges described above, segment earnings in 2020 were a loss of \$2,852 million, compared with a profit of \$4,452 million in 2019. Earnings excluding the net charges were adversely impacted by lower prices and lower volumes, mainly driven by the unfavourable macroeconomic conditions as described in the business condition section and severe weather conditions in the Gulf of Mexico.

In the second quarter of 2020, we made cost interventions by reducing the size of our contingent workforce and initiating an organisational review in line with Reshape.

EARNINGS 2019-2018

Segment earnings in 2019 were \$3,855 million, which included a net charge of \$598 million as described above.

Segment earnings in 2018 were \$6,490 million, which included a net gain of \$19 million. This included a net gain of \$888 million on sale of assets, mainly related to our divestments in Iraq, Malaysia, Oman and Ireland, and a gain of \$152 million related to the fair value accounting of commodity derivatives. These gains were partly offset by a charge of \$561 million related to the impact of the weakening of the Brazilian real on a deferred tax position, a net impairment charge of \$350 million mainly related to assets in North America and deep-water rig joint ventures, and a charge of \$90 million related to the release of historic currency differences.

Excluding the net charges described above, segment earnings in 2019 were \$4,452 million compared with \$6,472 million in 2018. Earnings excluding the net charge were adversely impacted by lower realised oil and gas prices, higher depreciation and higher well write-offs, mainly in Albania and Kazakhstan, partly offset by higher sales volumes associated with the timing of liftings.

CASH CAPITAL EXPENDITURE

Cash capital expenditure in 2020 was \$7.3 billion, compared with \$10.2 billion in 2019. Our cash capital expenditure is expected to be around \$8 billion in 2021.

Lower cash capital expenditure in 2020 was mainly driven by actions to preserve cash. The lower cash capital expenditure and capital investments in 2020 also reflected our continuing efforts to improve capital efficiency by pursuing developments which cost less.

PORTFOLIO AND BUSINESS DEVELOPMENT

We took the following key portfolio decisions during 2020:

- In Argentina, in January 2020, partnering with Equinor, we completed the acquisition of Schlumberger's 60% interest in the Bandurria Sur block, located in the Vaca Muerta Basin (Shell interest 30%).
- In Brazil, in August 2020, we took the final investment decision (FID) to contract the Mero 3 floating production, storage and offloading (FPSO) vessel to be deployed at the Mero field within the offshore Santos Basin.
- In Brunei, in March 2020, we completed the acquisition of deep-water exploration Block CA-1 (Shell interest 86.95%).
- In Kazakhstan, in December 2020, we successfully settled a long-running contractual dispute with the Republic of Kazakhstan government about the profit share between the parties in the Karachaganak joint venture. Shell paid \$424 million as its share of the settlement.
- In Norway, in May 2020, partnering with Equinor and Total, we made a final investment decision on the Northern Lights carbon capture and storage (CCS) project. The project will involve the capture, transport and storage of carbon dioxide produced from industrial regions around the Norwegian continental shelf. Equinor is the operator of the project.
- In Russia, in April 2020, we cancelled our acquisition of the 50% participation interest in LLC Meretoyahaneftegaz from Gazprom Neft.
- In Russia, with Gazprom Neft, we established a joint venture (Shell interest 50%) to explore and develop the Leskinsky and Pukhutsayakhsky blocks in the Gydan peninsula, in north-western Siberia. The deal was completed in November 2020.
- In September, we agreed to acquire seven exploration licences in four countries from Kosmos Energy. Suriname represents a new country entry for Shell. In São Tomé and Príncipe, we will deepen our position in two blocks and enter two others. In both Namibia and South Africa, we will expand our position in two blocks. Transfer has been completed in Suriname, São Tomé and Príncipe and Namibia. South Africa is expected to complete in 2021.
- In the US Gulf of Mexico, in March 2020, we acquired seven blocks across multiple plays in the Gulf of Mexico Lease 254.

We achieved the following operational milestones in 2020:

- In Brazil, Atapu 1, (the FPSO vessel P-70), came on stream and delivered first oil in June.

We continued to divest selected assets during 2020, including:

- In Brazil, in June 2020, we sold a 30% interest in the Gato do Mato project in the Santos Basin. We are still the project operator, with a 50% interest.
- In Brazil, we agreed to sell our 23% interest in the P-71 FPSO vessel, the deal is expected to be completed in the first quarter of 2021.
- In Canada, in August 2020, we completed the sale of our Tourmaline shares.
- In Canada, we agreed to sell our Duvernay shale light oil position in Alberta. The deal is expected to be completed in the second quarter of 2021.
- In Nigeria, we agreed to sell our 30% interest in oil mining lease (OML17). The deal was completed in January 2021.
- In the USA, we completed the sale of our Appalachia shale gas position. The deal was completed in July 2020.
- In Egypt, we agreed to sell our onshore assets in the Western Desert. The deal is expected to be completed in the second half of 2021.

BUSINESS AND PROPERTY

Our subsidiaries, joint ventures and associates are involved in all aspects of upstream activities, including such matters as land tenure, entitlement to produced hydrocarbons, production rates, royalties, pricing, environmental protection, social impact, exports, taxes and foreign exchange.

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

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

Europe

Italy

We have a 39% interest in the Val d'Agri producing concession, operated by ENI.

We also have a 25% interest in the Tempa Rossa producing concession operated by Total.

Netherlands

Shell and ExxonMobil are 50:50 shareholders in Nederlandse Aardolie Maatschappij B.V. (NAM). A significant part of NAM's gas production comes from the onshore Groningen gas field, in which NAM holds a 60% interest. The remaining 40% interest is held by EBN, a Dutch government entity.

Production from the Groningen field induces earthquakes that have damaged houses and other buildings and structures in the region. This has led to complaints and claims for compensation for damage from the local community. NAM is working with the Dutch government and other stakeholders to fulfil its obligations to the residents of the area. These obligations include compensating for earthquake damage.

Since 2013, the Dutch Minister of Economic Affairs and Climate (the Minister) has set an annual production level for the Groningen field, taking into account all interests, including residents' safety, security of supply in the domestic gas market and supply commitments in EU member states. The production level in the gas year 2019-2020 (ending October 1, 2020) was 8.7 billion cubic meters.

In June 2018, NAM's shareholders and the Dutch government signed a heads of agreement (HoA) to reduce production from Groningen and to ensure the financial robustness of NAM to fulfil its obligations. In the HoA, NAM's shareholders agreed not to declare dividends for 2018 and 2019. Dividend payments in 2020 and beyond will be made only if a solvency ratio of 25% is reached and maintained. In September 2018, detailed agreements were signed to further implement the HoA. As part of these agreements, Shell guarantees NAM's payment obligations vis-à-vis the Dutch government in relation to earthquake-related damages and costs of strengthening houses, up to a maximum of 30%. This maximum equates to Shell's indirect interest in the Groningen production system.

In conjunction with the HoA, it was agreed that NAM would cease all involvement in handling damage claims or strengthening buildings to make them safe. The Dutch government has stepped into these two roles and has developed legislation and policies to deal with earthquake-related matters. One of the consequences of the legislation is that duty of care has shifted from NAM to the Dutch government. The Dutch government passes on to NAM the cost of the elements for which NAM is liable. There are escalation and arbitration options to settle any disputes.

In September 2019, the government issued an update announcing that it was able to reduce Groningen production faster, stopping production in 2022, eight years earlier than initially planned. Negotiations are ongoing between the government and the NAM shareholders regarding the compensation payable by the government to NAM in order to restore the balance of the package of arrangements laid down in the 2018 HoA. If no agreement can be reached on such re-balancing, NAM shareholders can go to arbitration to resolve the matter.

NAM also has a 60% interest in the Schoonebeek oil field and operates 25 other hydrocarbon production licences. Some of these are onshore and others are offshore in the North Sea.

UPSTREAM continued

Norway

We are a partner in 27 production licences on the Norwegian continental shelf. We are the operator in 14 of these, of which two are producing: the Knarr field (Shell interest 45%), and the Ormen Lange gas field (Shell interest 17.8%). We have a non-operated interest in the producing field Troll.

We are a partner in the Northern Lights carbon dioxide transport and storage project. In this phase the partnership is governed by a collaboration agreement between Equinor, Shell and Total (equal partners).



The Nyhamna gas plant processes gas from the Ormen Lange field, 120 kilometres off the Norwegian coast.

UK

We operate a significant number of our interests on the UK continental shelf under a 50:50 joint-venture agreement with ExxonMobil. On February 24, 2021, ExxonMobil announced that it had signed an agreement with HitecVision (through its wholly owned portfolio company Neo Energy) for the sale of most of its non-operated upstream assets in the UK central and northern North Sea, including a number of interests subject to the Shell ExxonMobil 50:50 joint venture agreement. The sale, which ExxonMobil expects will close later in 2021, is subject to regulatory and third-party approvals. In addition to our oil and gas production from North Sea fields, we have various interests in the Atlantic Margin area where we are not the operator, principally in the West of Shetland area (Clair, Shell interest 28%), and Schiehallion (Shell interest 44.89%).

In 2020, new production came on stream in the Fram (Shell interest 32%), Shearwater (Shell interest 28%) and Pierce (Shell interest 92.52%) fields. We are a participant in the Acorn project, which is in its early stages and will involve carbon capture, utilisation and storage (CCUS) and hydrogen production (joint venture, Shell interest 25%).

We continued with decommissioning Heather assets and the Curlew FPSO, and continued Brent decommissioning. In June 2020 the Pioneering Spirit vessel safely completed the single-lift removal of the 17,000-tonne Brent Alpha topside from the North Sea. This was followed in August 2020 by the SSCV Sleipnir vessel safely lifting and removing the upper portion of the Brent Alpha jacket. Brent Alpha is the third of four platforms, after Brent Delta and Brent Bravo, to be decommissioned and removed from the Brent oil and gas field. In July 2020, the UK government approved the Brent Alpha decommissioning programme, including the derogation to leave in place the Brent Alpha steel jacket footings. A decision on the proposed derogations to leave in place each of the gravity-based concrete installations of Brent Bravo, Brent Charlie and Brent Delta is expected in the first half of 2021.

Rest of Europe

We also have interests in Albania, Bulgaria and Germany.

Asia (including the Middle East and Russia)

Brunei

Shell and the Brunei government are 50:50 shareholders in Brunei Shell Petroleum Company Sendirian Berhad (BSP). BSP has long-term oil and gas concession rights onshore and offshore Brunei, and sells most of its gas production to Brunei LNG Sendirian Berhad (see "Integrated Gas" on pages 46-52), with the remainder (23% in 2020) sold in the domestic market.

In addition to our interest in BSP, we have a 35% non-operating interest in the offshore Block B concession, where gas and condensate are produced from the Maharaja Lela field.

We also have non-operating interest in a gas holding area for deep-water exploration Block CA-2 (Shell interest 12.5%), under a PSC. The exploration acreage in Block CA-2 was relinquished in 2020.

We completed the acquisition of Total E&P Deep Offshore Borneo B.V. on March 31, 2020, and renamed the company Shell Exploration and Production Brunei B.V. The acquisition gives us an operator interest in the deep-water Block CA-1 (Shell interest 86.95%), under a PSC.

Iraq

We have a 44% interest in the Basrah Gas Company, which gathers, treats and processes associated gas that was previously being flared from the Rumaila, West Qurna 1 and Zubair fields. The processed gas and associated products, such as condensate and LPG, are sold to the domestic market. Any surplus condensate and LPG is exported.

Kazakhstan

We are the joint operator of the onshore Karachaganak oil and condensate field (Shell interest 29.3%), where we have a licence until the end of 2037. In December 2020, we successfully settled a long-running contractual dispute with the Republic of Kazakhstan government about the profit share between the parties in the Karachaganak joint venture. Shell paid \$424 million as its share of the settlement.

We have an interest in the North Caspian Sea production-sharing agreement (Shell interest 16.8%) which includes the Kashagan field in the Kazakh sector of the Caspian Sea. The North Caspian Operating Company is the operator. This shallow-water field covers an area of around 3,400 square kilometres. Phase 1 development of the field is expected to lead to plateau oil production capacity of around 66 thousand boe/d (Shell interest) by 2021, with the possibility of increases after later phases of development.



The Pioneering Spirit vessel has now lifted and removed the topsides of Brent Alpha, Brent Bravo and Brent Delta.

We have a 7.4% interest in the Caspian Pipeline Consortium, which owns and operates an oil pipeline running from the Caspian Sea to the Black Sea, across parts of Kazakhstan and Russia.

Malaysia

We explore for and produce oil and gas offshore Sabah and Sarawak under 16 PSCs, in which our interests range from 20% to 85%.

Early in 2020, the Malaysian Inland Revenue Board (MIRB) started a tax audit on Sabah and Sarawak Contiguous, which comprises the Sabah and Sarawak upstream businesses. This resulted in preliminary audit findings. The Company has determined it is probable that each uncertain tax treatment used in its income tax filings will ultimately be defensible, either during the next phase of the audit or on appeal to the courts. To date, no notices of additional assessments have been received.

Offshore Sabah, we operate two producing oil fields. These are the Gumasut-Kakap deep-water field (Shell interest 29%), and the Malikai deep-water field (Shell interest 35%). In August 2020, we took FID on phase 3 of the Gumasut-Kakap project. The project involves drilling four subsea wells, (two oil producers and two water injectors), to enhance Gumasut-Kakap's expected recoverable oil volumes.

In October 2020, drilling started for phase 2 of the Malikai project. Phase 2 is expected to deliver first oil in 2021. We also have a 21% interest in the Siakap North-Petai deep-water field and a 30% interest in the Kebabangan field, both operated by third parties. We also have exploration interests in Blocks SB-J, SB-G, SB-N, SB-3G, ND-6 and ND-7.

Offshore Sarawak, in 2020 we were the operator of eight producing gas fields (Shell interest 30%-50%) and one field producing oil and gas (Shell interest 50%). Shell handed over interest and operations of the E11 field/hub, one of the eight producing gas fields, to Petronas at the end of December 2020. After a binding heads of agreement (HoA) in December 2019 to extend the MLNG PSC, the PSC and joint operating agreement (JOA) were amended on November 16, 2020. Under the extended MLNG PSC, as of January 1, 2021, Shell (with 40% interest) will continue to be the operator of the F6 and F23 hubs and the producing E8, F13 East and F13 West fields. Shell will also continue to be the operator for new exploration acreage and new fields (F22, F27, Selasih).

Shell is also the operator for Block SK318 PSC (Shell interest 75%), which contains the discovered Rosmari, Marjoram and Timi fields.

In Block SK408 (Shell interest 30%), first gas was successfully produced from the Gorek field in May 2020 and from Bakong in June 2020. The block also contains the producing Larak gas field.



First oil and gas for phase 2 of the E6 project in Malaysia is expected in 2021.

For SK308 PSC, first oil and gas for phase 2 of the E6 project is expected in 2021.

First gas is expected from the Pegaga field in Block SK320 (Shell interest 20%) by the fourth quarter of 2021.

Nearly all the gas produced offshore Sarawak is supplied to Malaysia LNG and to our gas-to-liquids plant in Bintulu. See "Integrated Gas" on pages 46-52.

Shell has exploration interests in Block SK320. Exploration periods expired in June 2020 for Blocks SK318 and SK408, and in December 2020 for Block SK319. We also have a 40% interest in the amended 2011 Baram Delta enhanced oil recovery PSC, and a 50% interest in Block SK-307.

Oman

We have a 34% interest in the Block 6 concession and its operator Petroleum Development Oman (PDO); the Omani government has a 60% interest. PDO is the operator of more than 200 oil fields, mainly located in central and southern Oman, over an area of 90,874 square kilometres.

We have a 50% interest in the Block 42 exploration and production-sharing agreement. Oman Oil (OQ) has the remaining 50% interest. Shell is the operator of Block 42, an area of 31,068 square kilometres. We have signed an exploration and production-sharing agreement that makes us the operator and gives us a 100% working interest in Block 55, an area of 7,564 square kilometres.

Russia

We have a 50% interest in Salym Petroleum Development N.V., a joint venture with Gazprom Neft that is developing the Salym fields in the Khanty Mansiysk Autonomous District of western Siberia. In March 2020, Salym Petroleum Development N.V. expanded its area of operations by acquiring a 100% interest in LLC Salymsky 2, holder of the licence for the Salymsky 2 block.

Shell and Gazprom Neft each have a 50% interest in the Khanty-Mansiysk Petroleum Alliance VOF partnership. Through this, Shell is a holder of 50% of shares in the JSC Khanty-Mansiysk Petroleum Alliance. Acquisition of the 50% participating interest in LLC Meretoyahaneftegaz from Gazprom Neft through the VOF was cancelled in April 2020. Since then, neither Khanty-Mansiysk Petroleum Alliance VOF partnership nor JSC Khanty-Mansiysk Petroleum Alliance has undertaken any significant activities.

Because European Union and US sanctions prohibit certain defined oil and gas activities in Russia, we have since 2014 suspended our support to Salym Petroleum Development N.V. and JSC Khanty-Mansiysk Petroleum Alliance in relation to shale oil activities.

In November 2020, Shell acquired from Gazprom Neft a 50% shareholding in LLC Gazpromneft-Aero Bryansk, which holds the Leskinsky and Pukhutsayakhsky licences on the Gydan peninsula. The joint venture will be managed by Gazprom Neft and Shell on a parity basis aiming to develop an exploration cluster in the north-eastern part of the Gydan Peninsula.

United Arab Emirates

In Abu Dhabi, we have a 15% interest in the licence of ADNOC Gas Processing. ADNOC Gas Processing exports propane, butane and heavier-liquid hydrocarbons, which it extracts from the wet gas associated with the oil produced by ADNOC Onshore.

Syria

Shell holds a 65% interest in Shell Petroleum Development B.V. (SSPD), a joint venture between Shell and the China National Petroleum Corporation (CNPC). SSPD holds a 31.3% interest in Al Furat Petroleum Company (AFPC), a Syrian joint stock company, which performs operations under SSPD contracts. In December 2011, in compliance with international sanctions on Syria, including European Council Decision 2011/782/CFSP, Shell suspended all exploration and production activities in Syria

Rest of Asia

We also have interests in Kuwait, the Philippines and Turkey. In the Philippines, Shell is exploring options to divest its interest in SC 38 (Malampaya).

Africa**Egypt**

We have a 50% interest in the Badr Petroleum Company (BAPETCO), a joint venture between Shell and the Egyptian General Petroleum Corporation (EGPC). BAPETCO operates 10 oil- and gas-producing concessions and two exploration concessions, (North East Obaiyed, North Matruh), in the Western Desert. We also have onshore concessions with 100% Shell interest (West El Fayum, South East Horus, South Abu Sennan) and one producing concession extension (Bed 2-17). In 2021, we agreed to sell our onshore upstream assets in Egypt. The deal is expected to be completed in the second half of 2021.

Nigeria

Our share of production, onshore and offshore, in Nigeria was 223 thousand boe/d in 2020, compared with 266 thousand boe/d in 2019. Security issues, sabotage and crude oil theft in the Niger Delta remained significant challenges in 2020.

Onshore

The Shell Petroleum Development Company of Nigeria Limited (SPDC) is the operator of a joint venture (Shell interest 30%) that, after the completion of the sale of its interest in OML 17 on 15 January 2021, has 16 Niger Delta onshore oil mining leases (OML).

SPDC started litigation in May 2019 against the Federal Government (FGN) in the domestic court to challenge the non-renewal of oil mining lease 11 (OML 11). In August 2019, the Federal High Court ruled in favour of SPDC, affirming that it has fulfilled its obligations under the law for the renewal of OML 11. The court ordered the FGN to renew OML 11 for 20 years. In December 2019, the court refused to grant an application by the FGN to suspend the implementation of the judgement. The FGN appealed the court's decision and, in February 2021, the Court of Appeal granted a stay of the judgment in favour of FGN thereby suspending implementation pending a determination of the appeal on the merits. SPDC is taking various steps to protect its right to continue operating OML 11 pending a determination of the appeal.

In separate litigation, in August 2020, the Rivers State Government (RVSG) obtained judgment against SPDC. This judgement, by the Rivers State High Court, sought to reinforce the RVSG's purported purchase of SPDC's interest in OML 11. The purported purchase was said to have

occurred through a court-auction sale arising out of the Ejema Ebubu (Ogoniland) community litigation. SPDC has appealed against the judgement of the Rivers State High Court.

Notwithstanding the FGN appeal and the judgement in favour of the RVSG, SPDC continues to operate OML 11. In doing so, it is supported by the August 2019 Federal High Court judgement in its favour, which remains in force.

SPDC supplies gas to Nigeria LNG Ltd (see "Integrated Gas" on pages 46-52) mainly through its Gbaran-Ubie and Soku projects.

Offshore

Our main offshore deep-water activities are carried out by Shell Nigeria Exploration and Production Company Limited (SNEPCO, Shell interest 100%). SNEPCO has interests in four deep-water blocks, three of which are under PSC terms: the producing assets Bonga (OML 118) and Erha (OML 133) and the non-producing asset Bolia Chota (OML 135). SNEPCO operates OMLs 118 (including the Bonga field FPSO, Shell interest 55%) and 135 (Bolia and Doro, Shell interest 55%) and has a 43.8% non-operating interest in OML 133 (including the Erha FPSO). Separately, SNEPCO holds a 50% non-operating interest in oil prospecting licence (OPL) 245 (Zabazaba, Etan) under a production-sharing agreement.

Authorities in various countries are investigating our investment in Nigerian oil block OPL 245 and the 2011 settlement of litigation pertaining to that block. See Note 25 to the "Consolidated Financial Statements" on pages 260-262.

SPDC also has three shallow-water licences (OMLs 74, 77 and 79) and a 40% interest in the non-Shell-operated Sunlink joint venture that has one shallow-water licence (OML 144).

In our Nigerian operations, we face various risks and adverse conditions which could have a significant adverse effect on our operational performance, earnings, cash flows and financial condition (see "Risk factors" on pages 28-37). There are limitations to the extent to which we can mitigate these risks. We carry out regular portfolio assessments to remain a competitive player in Nigeria for the long term. We support the Nigerian government's efforts to improve the efficiency, functionality and domestic benefits of Nigeria's oil and gas industry. We monitor legislative developments and the security situation. We liaise with host communities, governmental and non-governmental organisations to help promote peace and safe operations. We continue to be transparent about how we manage and report spills, and how we deploy oil-spill response capability and technology. We implement a maintenance strategy to support sustainable equipment reliability and have begun a multi-year programme to reduce routine flaring of associated gas. See "Climate change and energy transition" on pages 94-107.

Rest of Africa

We also have interests in Algeria, Mauritania, Namibia, São Tomé and Príncipe, South Africa, Tanzania and Tunisia.

North America

Bitumen and synthetic crude oil

From January 1, 2020, our interest in bitumen and synthetic crude oil is reported in the Oil Products segment. Comparative information has not been restated.

Canada

We have mineral leases mainly in Alberta and British Columbia. We produce and market natural gas, natural gas liquids and condensate.

Shales

We have around 1.3 million net mineral acres, primarily in the Duvernay play in Alberta and the Montney play in British Columbia. Our Groundbirch asset in British Columbia will be an integral part of the LNG Canada value chain. We currently operate four natural gas processing area facilities in British Columbia. In 2021 we agreed to sell our Duvernay shale light oil position in Alberta. The deal is expected to be completed in the second quarter of 2021.

In 2020, we drilled and brought 17 wells on stream. We have interests in 757 productive wells.

USA

We produce oil and gas in deep water in the Gulf of Mexico, heavy oil in California and oil and gas in Texas. The majority of our oil and gas production interests are acquired under leases granted by the owner of the minerals underlying the relevant acreage, including many leases for federal offshore tracts. Such leases usually run on an initial fixed term that is automatically extended by the establishment of production for as long as production continues, subject to compliance with the terms of the lease (including, in the case of federal leases, extensive regulations imposed by federal law). Our total share of production in the USA was 571 thousand boe/d in 2020.

Gulf of Mexico

The Gulf of Mexico is our major production area in the USA and accounts for around 55% of our oil and gas production in the country. We have an interest in around 315 active federal offshore leases and secured a further 19 blocks as an outcome of the US Gulf of Mexico Lease Sale 256 held in November 2020. Our share of production averaged 313 thousand boe/d in 2020.

We are the operator of eight production hubs – Mars, Olympus, Auger, Perdido, Ursa, Enchilada/Salsa, Appomattox and Stones – and the West Delta 143 processing facilities (Shell interests ranging from 33% to 100%). We continue to produce from Coulomb (Shell interest 100%) which ties into the Na Kika platform, where Shell has a 50% non-operating interest.

We continued exploration, development and abandonment activities in the Gulf of Mexico in 2020.

We continued the ramp-up of the Appomattox floating production system, which started production in May 2019. We also advanced the development of Powernap and Vito, which are both in the execution phase. Powernap, a subsea tie-back to the Olympus production hub, is expected to produce up to 35 thousand boe/d. Vito, Shell's eleventh deep-water project in the Gulf of Mexico, is expected to achieve first oil in 2022 and reach around 100 thousand boe/d at peak rates.

The 2020 Atlantic hurricane season adversely impacted production at our US Gulf of Mexico assets. We experienced extended shutdowns at our Auger and Enchilada/Salsa production hubs because of the storms and the subsequent recovery efforts.



The Turturitella FPSO in the Gulf of Mexico.

Shales

We have around 410 thousand net mineral acres. Our activity is focused in the Permian Basin, following our divestment of the Appalachia asset. This was completed in July 2020 and covered the sale of around 443 thousand net leasehold acres across Pennsylvania, with around 358 producing wells in the Marcellus and Utica shale formations, and associated facilities in Tioga County. The transaction also included the transfer of owned and operated midstream infrastructure.



Our shales activity in the USA is focused on the Permian Basin.

In 2020, we drilled and brought on stream 181 wells. We have interests in 1,588 productive wells and operate eight central processing facilities.

California

We have a 51.8% interest in Aera Energy LLC which operates around 13 thousand wells in the San Joaquin Valley in California, mostly producing heavy oil and associated gas.

Alaska

We have sold or relinquished all frontier licences in Alaska and have no plans for frontier exploration offshore Alaska. We retain two exploration acreage positions in the long-established North Slope area of Alaska. One is a non-operating interest of 50% in 13 federal leases held since 2007 and operated by ENI. The other position consists of 18 state leases in nearby West Harrison Bay that have been held since 2012, which we plan to turn over to an alternative operator.

Rest of North America

Shell has equity in nine deep-water licences and one shallow-water licence in Mexico (Shell interest 40%-100%). We are currently evaluating these positions through exploration drilling.

In November 2020, we agreed a farm-in transaction with the China National Offshore Oil Corporation (CNOOC) E&P Mexico, acquiring a participating interest (Shell interest 30%) in the deep-water round 1.4 Block 4 exploration licence in the offshore Mexico Perdido. This transaction is subject to regulatory approval.

South America

Argentina

Shales

We have more than 178 thousand net mineral acres in the Vaca Muerta Basin, a liquids- and gas-rich play located in the Neuquén Province. The operated acreage includes blocks in Cruz de Lorena and Sierras Blancas (Shell interest 90%), Coiron Amargo Sur Oeste (Shell interest 80%), and Bajada de Añelo (Shell interest 50%). We have a 45% non-Shell-operated interest in the Rincon La Ceniza and La Escalonada blocks.

In 2020, we drilled and brought 23 wells on stream. We have interests in 88 producing wells. We have a 90% interest in our operated Sierras Blancas/Cruz de Lorena central processing facility.

In 2020, in a 50:50 partnership with Equinor, we acquired a 60% working interest (Shell 30% interest) in the Bandurria Sur block, operated by YPF S.A., in the Vaca Muerta Basin.

Offshore

We have two frontier exploration blocks offshore Argentina. For both blocks, Shell is the operator with a 60% interest.

Brazil

Our total share of production in Brazil was an average of 394 thousand boe/d in 2020.

Our operated portfolio consists of offshore assets in:

- the Bijupirá and Salema fields (Shell interest 80%) and the BC-10 field (Shell interest 50%) in the Campos Basin;
- the Gato do Mato field in the Santos Basin and the adjacent Sul de Gato do Mato area (Shell interest 50%, after the completed sale of a 30% stake to Ecopetrol in 2020), subject to unitisation, with development options under evaluation; and
- a total of 17 exploration blocks in the following areas:
 - Barreirinhos Basin (10 blocks with Shell interests ranging from 50% to 100%);
 - Santos Basin (Alto Cabo Frio Oeste PSC, Shell interest 55%; Saturno PSC, Shell interest 45%);
 - Potiguar Basin (POT-M-948, Shell interest 100%); and
 - Campos Basin (C-M-659, Shell interest 40%; C-M-713, Shell interest 40%; C-M-791, Shell interest 40% and C-M-757, Shell interest 100%). (Block C-M-757 was awarded to Shell in the National Petroleum Agency (ANP) permanent offer round in December 2020 and is awaiting ratification.)

Our non-operated portfolio consists of the following fields in the offshore Santos Basin:

- Sapinhoá field (Shell interest 30%, operated by Petrobras), straddling the BM-S-9 and Entorno de Sapinhoá blocks, already unitised;
- Lapa field (Shell interest 30%, operated by Total) in Block BM-S-9A;
- Berbigão and Sururu fields (Shell interest 25%, subject to ongoing discussions about unitisation agreements, operated by Petrobras) in Block BM-S-11A;
- Atapu field (Shell interest 4%, unitised in September 2019) in Block BM-S-11A;
- Lula field in Block BM-S-11, recently renamed the Tupi field because of a court decision (subject to unitisation in effect since April 2019, Shell interest 23%, operated by Petrobras);
- Iracema field in Block BM-S-11 (Shell interest 25%, not subject to unitisation, operated by Petrobras); and
- Mero field in the Libra PSC area (Shell interest 20%, unitisation with an adjoining area still subject to government approval, operated by Petrobras).

In addition to the producing assets, we hold interests in two non-operated exploration blocks in the Santos Basin:

- BM-S-50, containing the Sagitário discovery (Shell interest 20%, operated by Petrobras); and
- Tres Marias (Shell interest 40%, operated by Petrobras).

We also hold interests in two non-operated exploration blocks in the Potiguar Basin:

- POT-M-859 (Shell interest 40%, operated by Petrobras); and
- POT-M-952 (Shell interest 40%, operated by Petrobras).



P69 FPSO produces oil and gas in the pre-salt Santos basin, offshore Brazil.
Photo credit: Agência Petrobras.

The activities of operated and non-operated fields are currently supported by 17 producing deep-water FPSOs, of which the 17th (P-70) delivered first oil in June 2020. Two additional FPSOs are expected to be brought online over the period 2022-2023 (Mero 1 and Mero 2). In August 2020, we announced the final investment decision to contract the Mero 3 FPSO vessel to be deployed at the Mero field. We agreed to sell our 23% interest in the P-71 FPSO, the deal is expected to be completed in the first quarter of 2021.

Rest of South America

We also have interests in Suriname and Uruguay.

TRADING AND SUPPLY

We market and trade crude oil from most of our Upstream operations.

OIL AND GAS INFORMATION

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

	Crude oil and natural gas liquids (million barrels)	Synthetic crude oil (million barrels)	Bitumen (million barrels)	Natural gas (thousand million scf)	Total (million boe)[A]
Shell subsidiaries					
Increase/(decrease) in 2020:					
Revisions and reclassifications	(63)	57	-	(3,477)	(607)
Improved recovery	-	-	-	-	-
Extensions and discoveries	48	-	-	228	88
Purchases and sales of minerals in place	8	-	-	(599)	(95)
Total before taking production into account	(7)	57	-	(3,848)	(614)
Production [B]	(606)	(20)	-	(3,012)	(1,144)
Total	(613)	37	-	(6,860)	(1,758)
At January 1, 2020	4,374	607	-	28,992	9,980
At December 31, 2020	3,761	644	-	22,132	8,222
Shell share of joint ventures and associates					
Increase/(decrease) in 2020:					
Revisions and reclassifications	(32)	-	-	(234)	(73)
Improved recovery	-	-	-	-	-
Extensions and discoveries	1	-	-	2	1
Purchases and sales of minerals in place	-	-	-	-	-
Total before taking production into account	(31)	-	-	(232)	(72)
Production [C]	(36)	-	-	(615)	(142)
Total	(67)	-	-	(847)	(214)
At January 1, 2020	283	-	-	4,829	1,116
At December 31, 2020	216	-	-	3,982	902
Total					
Increase/(decrease) before taking production into account	(38)	57	-	(4,080)	(686)
Production	(642)	(20)	-	(3,627)	(1,286)
Increase/(decrease)	(680)	37	-	(7,707)	(1,972)
At January 1, 2020	4,657	607	-	33,821	11,096
At December 31, 2020	3,977	644	-	26,114	9,124
Reserves attributable to non-controlling interest in Shell subsidiaries at December 31, 2020	-	322	-	-	322

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

[B] Included 40 million boe consumed in operations (natural gas: 225 thousand million scf; synthetic crude oil: 1 million barrels).

[C] Included 7 million boe consumed in operations (natural gas: 42 thousand million scf).

OIL AND GAS INFORMATION continued

PROVED RESERVES

The proved oil and gas reserves of Shell subsidiaries and the Shell share of the proved oil and gas reserves of joint ventures and associates are set out in more detail in "Supplementary information – oil and gas (unaudited)" on pages 265-282.

Before taking production into account, our proved reserves decreased by 686 million boe in 2020. This comprised of decreases of 614 million boe from Shell subsidiaries and of decreases of 72 million boe from the Shell share of joint ventures and associates.

After taking production into account, our proved reserves decreased by 1,972 million boe in 2020 to 9,124 million boe at December 31, 2020.

SHELL SUBSIDIARIES

Before taking production into account, Shell subsidiaries' proved reserves decreased by 614 million boe in 2020. This comprised decreases of 7 million barrels of crude oil and natural gas liquids and 664 million boe (3,848 thousand million scf) of natural gas and an increase of 57 million barrels of synthetic crude oil. The 614 million boe decrease is the net effect of a net decrease of 607 million boe from revisions and reclassifications, an increase of 88 million boe from extensions and discoveries, and a net decrease of 95 million boe related to purchases and sales of minerals in place. On January 15th 2021 Shell announced that the Shell Petroleum Development Company of Nigeria Limited (SPDC) had completed the sale of its 30% interest in Oil Mining Lease (OML17) in the Eastern Niger Delta, and associated infrastructure. Proved reserves at end-2020 associated with this transaction were 26 million boe.

After taking into account production of 1,144 million boe (of which 40 million boe were consumed in operations), Shell subsidiaries' proved reserves decreased by 1,758 million boe in 2020 to 8,222 million boe. In 2020, Shell subsidiaries' proved developed reserves (PD) decreased by 872 million boe to 6,978 million boe, and proved undeveloped reserves (PUD) decreased by 886 million boe to 1,244 million boe.

SHELL SHARE OF JOINT VENTURES AND ASSOCIATES

Before taking production into account, the Shell share of joint ventures and associates' proved reserves decreased by 72 million boe in 2020. This comprised a decrease of 31 million barrels of crude oil and natural gas liquids and a decrease of 41 million boe (232 thousand million scf) of natural gas. The 72 million boe decrease comprises a net decrease of 73 million boe from revisions and reclassifications and an increase of 1 million boe from extensions and discoveries.

After taking into account production of 142 million boe (of which 7 million boe were consumed in operations), the Shell share of joint ventures and associates' proved reserves decreased by 214 million boe to 902 million boe at December 31, 2020.

The Shell share of joint ventures and associates' PD decreased by 169 million boe to 791 million boe, and proved undeveloped reserves (PUD) decreased by 45 million boe to 111 million boe.

For further information, see "Supplementary Information – oil and gas (unaudited)" on pages 265-282.

PROVED UNDEVELOPED RESERVES

In 2020, Shell subsidiaries and the Shell share of joint ventures and associates' PUD decreased by 932 million boe to 1,355 million boe. There were decreases of 339 million boe due to maturation to proved developed – mainly 98 million boe in Brazil, 95 million boe in the USA and 146 million boe spread across other countries. There were also decreases of 682 million boe due to other revisions resulting mainly from a combination of lower year average price and reductions in planned

capital expenditure (mainly in Australia (354 million boe), USA (121 million boe) and Brazil (100 million boe)), partly offset by net increases of 89 million boe due to extensions and discoveries.

In addition to the maturation of 339 million boe from PUD to PD, 75 million boe was matured to PD from contingent resources through PUD as a result of project execution during the year.

PUD held for five years or more (PUD5+) at December 31, 2020, amounted to 184 million boe, a decrease of 74 million boe compared with the end of 2019. These PUD5+ remain undeveloped because development either requires the installation of compression equipment and the drilling of additional wells, which will be executed when required to support existing gas delivery commitments (Russia), or will take longer than five years because of the complexity and scale of the project (Australia and the UK).

The decrease in PUD5+ during 2020 was driven mainly by changes in Jansz-Lo (Australia) and Clair (UK).

The fields with the largest PUD5+ at December 31, 2020, were Lunkskoye (Russia), Gorgon and Jansz-Lo (Australia) and Clair (UK).

During 2020, we spent \$6.5 billion on development activities related to PUD maturation.

DELIVERY COMMITMENTS

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

In the past three years, we met our contractual delivery commitments, with the notable exceptions of Egypt, Trinidad and Tobago, and Malaysia. In the period 2021-2023, we are contractually committed to deliver to third parties, joint ventures and associates a total of 7,490 billion scf of natural gas from our subsidiaries, joint ventures and associates. The sales contracts contain a mixture of fixed and variable pricing formulae that are generally referenced to the prevailing market price for crude oil, natural gas or other petroleum products at the time of delivery.

In the period 2021-2023, we expect to meet our delivery commitments for almost all the areas in which they are carried, with an estimated 71.9% coming from PD, 5.5% through the delivery of gas that becomes available to us from paying royalties in cash, and 22.6% from the development of PUD as well as other new projects and purchases.

The key exceptions are:

- BG Egypt Development NOV: The government decision to divert gas from the offshore West Delta Deep Marine fields to domestic use has caused a tangible shortfall of 770 billion scf (83% of the promised gas delivery), expected to continue in the near future leaving LNG gas commitment mostly under force majeure;
- Trinidad and Tobago (East Coast Marine Area and North Coast Marine Area), where PD for all fields fail the economic test at the yearly average price for natural gas. But we expect to cover 86% of our delivery commitments from existing developed resource volumes and new projects, resulting in an expected true shortfall of some 103 billion scf; and
- In Malaysia, one of the third-party gas supply lines which was under maintenance has not been repaired during 2020. Force majeure has been declared, and no penalties have been incurred, resulting in an expected true shortfall of some 72 billion scf (54% of the promised gas delivery).

Summary of proved oil and gas reserves of Shell subsidiaries and Shell share of joint ventures and associates (at December 31, 2020)

Based on average prices for 2020

	Crude oil and natural gas liquids (million barrels)	Natural gas (thousand million scf)	Synthetic crude oil (million barrels)	Total (million boe)[A]
Proved developed				
Europe	108	1,817	-	421
Asia	1,609	12,850	-	3,825
Oceania	68	3,699	-	707
Africa	316	1,341	-	548
North America				
USA	539	669	-	654
Canada	12	720	644	780
South America	675	925	-	834
Total proved developed	3,327	22,021	644	7,769
Proved undeveloped				
Europe	76	886	-	229
Asia	174	755	-	304
Oceania	5	520	-	93
Africa	63	1,022	-	239
North America				
USA	189	132	-	212
Canada	3	575	-	102
South America	140	203	-	176
Total proved undeveloped	650	4,093	-	1,355
Total proved developed and undeveloped				
Europe	184	2,703	-	650
Asia	1,783	13,605	-	4,129
Oceania	73	4,219	-	800
Africa	379	2,363	-	787
North America				
USA	728	801	-	866
Canada	15	1,295	644	882
South America	815	1,128	-	1,010
Total	3,977	26,114	644	9,124
Reserves attributable to non-controlling interest in Shell subsidiaries	-	-	322	322

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

OIL AND GAS INFORMATION continued

EXPLORATION

We continue to focus and high-grade our portfolio of growth options.

In February 2020:

We acquired a 70% interest as operator of the UK Southern North Sea licences P2304 and P1929 which contain the Resolution gas discovery. Our appraisal programme consists of 3D seismic and a contingent appraisal well.

We added 4,553 square kilometres of exploration licences in the UK and Netherlands Southern North Sea across multiple plays.

We signed a farm-out agreement with Ecopetrol into the Colombia Offshore COL-5, Purple Angel, and Fuerte Sur blocks, as operator with a 50% working interest. Government ratification was obtained in December 2020.

Two exploration blocks, C-M-659 and C-M-713, awarded through Brazil's 16th National Petroleum Agency (ANP) bid round, were ratified. These Shell-operated blocks (Shell interest 40%) are located in the outboard Campos Basin and cover an area of around 1,800 square kilometres. The joint venture has a commitment to acquire 3D seismic in both blocks and to drill one well in Block C-M-659.

In March 2020:

We completed the sale and purchase agreement signed in October 2019 for the acquisition of Total E&P Deep Offshore Borneo B.V. and all its interests in the deep-water exploration Block CA-1 (Shell interest 86.95%) production-sharing agreement (PSA). We assumed operatorship of Block CA-1, with a total area of around 5,800 square kilometres which is largely unexplored. The deal also gave us access to the Jagus East oil field which lies within CA-1.

An exploration and production-sharing agreement for Block 55 in the south-east of the Sultanate of Oman was ratified by Royal Decree. Oman Shell now has a 100% working interest and operatorship of Block 55, with a total area of 7,564 square kilometres. The agreement includes a work programme of regional studies, seismic acquisition and other potential exploration activities.

In US Gulf of Mexico Lease Sale 254, we acquired seven blocks across multiple plays in the US Gulf of Mexico.

In July 2020, we signed a sales and purchase agreement for the Esenin deal, a 50% farm-in into two Gazprom Neft-held blocks on the Gydan peninsula in north-west Siberia, Russia. The deal was finalised in November 2020. The blocks cover an area of around 3,850 square kilometres.

In September 2020, Shell and Kosmos Energy executed a portfolio transaction under which Kosmos divested seven deep-water exploration licences to Shell across four countries: Suriname, São Tomé and Príncipe, Namibia and South Africa. Suriname (Block 42) represents a new country entry for Shell with a 33.33% participating interest. In São Tomé and Príncipe, Shell will expand its position in two blocks – (Block 6 by 25% working interest and Block 11 by 35% working interest) – and enter two others (10 and 13) with a 35% interest in both. In both Namibia and South Africa, Shell will deepen its position by 45% working interest in the two blocks, PEL0039 and NCUD. The agreement received all necessary regulatory approvals and third-party consents in December 2020, with the exception of South Africa which is expected to be completed in 2021.

In November 2020:

We agreed a farm-in transaction with CNOOC E&P Mexico, acquiring a participating interest (Shell interest 30%) in the deep-water round 1.4 Block 4 exploration licence in the offshore Mexico Perdido. This transaction is subject to regulatory approval.

We agreed a farm-in transaction with Impact Africa Limited to acquire a 50% participating interest in the frontier deep-water blocks Transkei/Algoa (ER252) off the east coast of South Africa, with an area of around 46,000 square kilometres. Pursuant to the agreement, we will secure the operatorship from the counterparty. The agreement is subject to customary conditions including regulatory approvals.

In the delayed US Gulf of Mexico Lease Sale 256 held in November 2020, Shell secured a further 19 blocks.

In December 2020:

Our exploration presence in offshore Egypt was bolstered by entries into new blocks in the West Mediterranean and the Red Sea. For the West Mediterranean, Herodotus Block 3 North Ras Kanaïs (Shell interest 30%) was ratified in December 2020 with more than 4,400 square kilometres of acreage. Red Sea Block 3 (Shell interest 90%, operator) was ratified in December 2020 and covers more than 3,000 square kilometres in an under-explored area south of the Gulf of Suez. Some blocks have been awarded but are yet to be ratified; Red Sea Block 4 (Shell interest 63%, operator) and Herodotus Blocks 6 (North Marina, Shell interest 63%) and 7 (North Cleopatra Offshore, Shell interest 63%) all of which are awaiting government ratification.

In Brazil, we were awarded Block C-M-757 (Outboard Campos Basin) (Shell interest 100%) in the Permanent Offer Bid Round. This is awaiting ratification.

In total, the net undeveloped acreage in our exploration portfolio increased by around 9.4 million acres in 2020. The largest contributions were licence entries in São Tomé and Príncipe, the Sultanate of Oman, the Arab Republic of Egypt, Namibia and the Nation of Brunei. There were some relinquishments and divestments, with the largest being in Australia, Norway and Italy.

 For further information, see "Supplementary Information – oil and gas (unaudited)" on pages 265-282.

LOCATION OF OIL AND GAS EXPLORATION AND PRODUCTION ACTIVITIES

Location of oil and gas exploration and production activities [A] (at December 31, 2020)

	Exploration	Development and/or Production	Shell operator [B]
Europe			
Albania	•		•
Bulgaria	•		•
Cyprus		•	
Germany	•	•	
Italy	•	•	
Netherlands	•	•	•
Norway	•	•	•
UK	•	•	•
Asia			
Brunei	•	•	•
China		•	•
Indonesia		•	
Kazakhstan	•	•	
Malaysia	•	•	•
Myanmar	•		
Oman	•	•	•
Philippines	•	•	•
Qatar		•	•
Russia	•	•	
Turkey	•		•
Oceania			
Australia	•	•	•
Africa			
Egypt	•	•	•
Mauritania	•		•
Morocco	•		
Namibia	•		•
Nigeria	•	•	•
Sao Tome and Principe	•		
South Africa	•		•
Tanzania		•	•
Tunisia		•	•
North America – USA			
Mexico	•		•
USA	•	•	•
North America – Canada			
Canada	•	•	•
South America			
Argentina	•	•	•
Bolivia	•	•	•
Brazil	•	•	•
Colombia	•		•
Suriname	•		•
Trinidad & Tobago	•	•	•
Uruguay	•		•

[A] Includes joint ventures and associates. Where a joint venture or an associate has properties outside its base country, those properties are not shown in this table.

[B] In several countries where "Shell operator" is indicated, Shell is the operator of some but not all exploration and/or production ventures.

OIL AND GAS INFORMATION

continued

OIL AND GAS PRODUCTION AVAILABLE FOR SALE

Crude oil and natural gas liquids [A]

				Thousand barrels		
	2020		2019		2018	
	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates
Europe						
Denmark	—	—	7,490	—	13,036	—
Italy	11,342	—	9,747	—	10,921	—
Norway	6,914	—	7,025	—	13,528	—
UK	30,061	—	30,677	—	31,431	—
Other [B]	609	1,084	723	1,135	795	1,417
Total Europe	48,926	1,084	55,662	1,135	69,711	1,417
Asia						
Brunei	387	17,094	196	20,002	283	18,738
Kazakhstan	37,769	—	34,269	—	32,432	—
Malaysia	18,494	—	21,993	—	24,650	—
Oman	74,854	—	76,493	—	76,847	—
Russia	20,816	9,050	22,442	9,413	22,003	10,403
Other [B]	30,101	7,629	28,796	7,709	28,769	7,768
Total Asia	182,421	33,773	184,189	37,124	184,984	36,909
Total Oceania [B]	7,416	—	10,058	—	8,883	—
Africa						
Nigeria	48,620	—	56,589	—	53,102	—
Other [B]	8,485	—	7,802	—	8,265	—
Total Africa	57,105	—	64,391	—	61,367	—
North America						
USA	165,169	—	171,204	—	140,035	—
Canada	8,128	—	11,506	—	13,111	—
Total North America	173,297	—	182,710	—	153,146	—
South America						
Brazil	131,339	—	126,366	—	118,681	—
Other [B]	5,072	729	3,900	—	3,414	—
Total South America	136,411	729	130,266	—	122,095	—
Total	605,576	35,586	627,276	38,259	600,186	38,326

[A] Reflects 100% of production of subsidiaries except in respect of production-sharing contracts (PSCs), where the figures shown represent the entitlement of the subsidiaries concerned under those contracts.

[B] Comprises countries where 2020 production was lower than 10,100 thousand barrels or where specific disclosures are prohibited.

Synthetic crude oil

	Thousand barrels		
	2020		2019
	Shell subsidiaries	Shell subsidiaries	Shell subsidiaries
North America - Canada		18,920	19,076
			19,514

Natural gas [A]

	Shell subsidiaries	Shell share of joint ventures and associates	Million standard cubic feet		
			2020	2019	2018
Europe					
Denmark	—	—	24,433	—	45,027
Germany	35,918	—	41,846	—	40,368
Ireland	—	—	—	—	44,833
Netherlands	—	131,648	—	244,286	—
Norway	187,627	—	182,683	—	239,253
UK	65,012	—	62,174	—	82,695
Other [B]	13,005	—	15,062	—	16,422
Total Europe	301,562	131,648	326,198	244,286	468,598
Asia					
Brunei	21,025	159,846	22,185	160,648	21,205
China	46,750	—	44,510	—	42,419
Kazakhstan	86,999	—	84,499	—	78,575
Malaysia	226,791	—	226,277	—	237,102
Philippines	40,549	—	44,374	—	44,017
Russia	4,301	142,418	4,563	134,807	4,044
Thailand	—	—	—	—	25,973
Other [B]	411,979	118,153	407,899	118,253	378,785
Total Asia	838,394	420,417	834,307	413,708	832,120
Oceania					
Australia	633,580	20,646	686,956	20,840	648,735
New Zealand	—	—	—	—	40,153
Total Oceania	633,580	20,646	686,956	20,840	688,888
Africa					
Egypt	104,946	—	92,169	—	148,721
Nigeria	190,982	—	234,332	—	232,899
Other [B]	27,438	—	30,266	—	30,669
Total Africa	323,366	—	356,767	—	412,289
North America					
USA	255,383	—	389,130	—	355,075
Canada	164,451	—	220,005	—	247,890
Total North America	419,834	—	609,135	—	602,965
South America					
Bolivia	45,015	—	48,501	—	55,480
Brazil	73,914	—	78,526	—	68,865
Trinidad and Tobago	141,576	—	159,698	—	104,454
Other [B]	9,609	830	8,662	—	8,062
Total South America	270,114	830	295,387	—	236,861
Total	2,786,850	573,541	3,108,750	678,834	3,241,721
					702,330

[A] Reflects 100% of production of subsidiaries except in respect of PSCs, where the figures shown represent the entitlement of the subsidiaries concerned under those contracts.

[B] Comprises countries where 2020 production was lower than 41,795 million scf or where specific disclosures are prohibited.

OIL AND GAS INFORMATION

continued

AVERAGE REALISED PRICE BY GEOGRAPHICAL AREA

Crude oil and natural gas liquids

	2020		2019		2018	
	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates
Europe	39.51	39.05	65.11	58.08	68.23	64.24
Asia	38.73	42.51	58.16	65.25	64.06	70.66
Oceania	21.29	—	51.51	—	61.63	—
Africa	41.23	—	65.39	—	71.02	—
North America - USA	34.17	—	54.56	—	61.87	—
North America - Canada	27.17	—	36.61	—	43.72	—
South America	36.01	37.28	56.68	—	62.67	—
Total	36.72	42.31	57.56	65.05	63.96	70.43

Synthetic crude oil

	2020			2019			2018		
	Shell subsidiaries								
North America - Canada			31.13			50.27		48.90	

Natural gas

	2020		2019		2018	
	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates
Europe	3.66	3.76	5.59	4.95	7.08	4.06
Asia	2.68	4.19	2.66	6.34	2.99	7.06
Oceania	6.21	3.15	8.22	3.91	8.66	4.15
Africa	2.55	—	2.92	—	3.02	—
North America - USA	1.72	—	2.27	—	3.12	—
North America - Canada	1.61	—	1.37	—	1.35	—
South America	1.35	1.90	2.33	—	3.50	—
Total	3.31	4.06	3.95	5.80	4.63	5.74

AVERAGE PRODUCTION COST BY GEOGRAPHICAL AREA

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

	2020		2019		\$/boe	
	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates	Shell subsidiaries	Shell share of joint ventures and associates
Europe	20.50	11.44	14.14	5.76	15.03	6.37
Asia	5.54	6.83	6.30	6.17	6.52	6.24
Oceania	8.92	20.23	9.17	24.49	8.41	32.18
Africa	9.43	—	8.44	—	8.25	—
North America - USA	12.50	—	11.78	—	12.78	—
North America - Canada	10.52	—	11.88	—	11.58	—
South America	5.12	—	6.26	—	8.60	—
Total	8.49	6.94	8.95	6.48	9.66	6.81

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

Synthetic crude oil

	\$/barrel		
	2020	2019	2018
	Shell subsidiaries	Shell subsidiaries	Shell subsidiaries
North America - Canada	18.28	19.29	20.15

OIL PRODUCTS

Key statistics

	\$ million, except where indicated		
	2020	2019	2018
Segment earnings [A]	(494)	6,139	6,025
Including:			
Revenue (including inter-segment sales)	134,930	288,279	327,022
Share of profit of joint ventures and associates [A]	988	1,179	1,101
Interest and other income	(93)	273	393
Operating expenses [B]	13,511	15,730	17,615
Depreciation, depletion and amortisation	10,473	4,461	3,165
Taxation charge [A]	(898)	1,319	1,211
Identified Items [B]	(6,489)	(93)	231
Adjusted Earnings [B]	5,995	6,231	5,794
Capital expenditure	3,236	4,654	4,389
Cash capital expenditure [B]	3,328	4,907	4,643
Refinery utilisation (%) [C]	72	78	78
Refinery processing intake (thousand b/d)	2,063	2,564	2,648
Oil Products sales volumes (thousand b/d)	4,710	6,561	6,783

[A] See Note 4 to the "Consolidated Financial Statements" on pages 230-232. Segment earnings are presented on a current cost of supplies basis.

[B] See "Non-GAAP measures reconciliations" on pages 305-306.

[C] With effect from January 1, 2020, Shell discloses utilisation instead of availability to improve transparency on refinery production volumes. Utilisation is defined as the actual usage of the plants as a percentage of the rated capacity.

OVERVIEW

Our Oil Products business is part of an integrated value chain that refines crude oil and other feedstocks into products that are moved and marketed around the world for domestic, industrial and transport use. The products we sell include gasoline, diesel, heating oil, aviation fuel, marine fuel, low-carbon fuels, lubricants, bitumen and sulphur. We also trade crude oil, oil products and petrochemicals. We provide access to electric vehicle charge points at home, at work and on-the-go, including at our forecourts and at a range of public locations.

Our Oil Products activities comprise Refining and Trading, and Marketing. These are referred to as classes of business. Marketing includes Retail, Lubricants, Business-to-Business (B2B), Pipelines and Low-Carbon Fuels (biofuels and renewable natural gas (RNG)). In Trading and Supply, we trade crude oil, oil products and petrochemicals to optimise feedstocks for Refining, to supply our Marketing businesses and third parties, and for our own profit. We also manage Oil Sands activities – the extraction of bitumen from mined Oil Sands and its conversion into synthetic crude oil. Our Oil Sands activities were previously reported under Upstream. As of January 1, 2020, they are reported under Oil Products.

BUSINESS CONDITIONS

In 2020, oil markets experienced unprecedented developments in demand driven by the COVID-19 pandemic. At the start of 2020, global oil demand for the year was expected to grow by 1.2 million barrels per day (b/d). Then in January, oil demand started to contract because demand fell in China as lockdown was imposed to contain the virus outbreak. In subsequent months, oil demand contracted further as the outbreak in China evolved into a global pandemic and lockdowns were introduced across the world. In April, oil demand fell to its lowest level, around 22 million b/d below year-average demand in 2019, according to an estimate of the International Energy Agency (IEA). Contraction of such magnitude has never been recorded before. Country lockdowns deeply impacted transportation sectors, especially passenger road and passenger air in Organisation for Economic Co-operation and Development (OECD) economies. In subsequent months, oil demand started recovering, but only partially, because resurgences of COVID-19 triggered re-imposition of social distancing and travel restrictions. By the fourth quarter, global oil demand was still estimated to be around 5.5 million b/d below the 2019 level, according to the Oil Market Report

published by the IEA in January 2021. Averaged for the full year, oil demand contracted by around 9 million b/d, or 9%, to 91.2 million b/d. Oil demand fell by 5.7 million b/d in OECD economies, and by 3.2 million b/d in non-OECD economies. By contrast, oil demand in 2019 was 0.8 million b/d higher than in 2018.

Industry gross refining margins weakened in 2020 because demand for oil products was significantly reduced by the fall in economic activity and increase in travel restrictions caused by COVID-19. Demand for transportation fuels such as gasoline for passenger cars and kerosene for air transportation was hit particularly hard. During most of the second half of the year, mobility and the resulting demand for transportation fuels improved in some parts of the world, especially in China and South-east Asia. At the end of the year, new waves of COVID-19 infections in Europe and the Americas severely limited any global increase in demand for transportation fuels.

On January 1, 2020, the new International Maritime Organization low-sulphur shipping fuel specification came into effect, limiting the sulphur content of maritime fuel to 0.5%. This had a limited effect on margins because of the economic slowdown in 2020 and because companies had prepared for the new regulations by building inventory in the second half of 2019.

The destruction of demand caused by COVID-19 led to industry idling some refinery capacity. Permanent refinery closures were also announced in 2020, but construction of new capacity did occur during the year, especially in the Middle East and Asia.

See "Market overview" on pages 38-40.

REFINERY UTILISATION

With effect from January 1, 2020, Shell discloses utilisation instead of availability to improve transparency on refinery production volumes. Utilisation is defined as the actual usage of the plants as a percentage of the rated capacity.

Utilisation was 72% in 2020, compared with 78% in 2019. Lower utilisation in 2020 was mainly because of lower demand and economic optimisation of sites.

OIL PRODUCTS SALES

Oil Products sales volumes decreased by 28% in 2020 compared with 2019. The decrease in sales volumes was largely driven by the COVID-19 pandemic affecting Marketing volumes. There was also a reporting change effective from January 1, 2020 and certain additional Oil Products contracts held for trading purposes were reported on a net rather than a gross basis. This reporting change decreased sales volumes by 10%.

EARNINGS 2020-2019

Segment earnings in 2020 came to a loss of \$494 million, 108% lower than in 2019. Earnings in 2020 included a net charge of \$6,489 million, compared with a net charge of \$93 million in 2019 which is described at the end of this section.

Excluding the impact of the net charges, earnings in 2020 were \$5,995 million, compared with \$6,231 million in 2019. Marketing accounted for 76% of these 2020 earnings, Refining for -19% and Trading & Supply for 43%.

The decrease in Oil Products earnings, excluding the net charge, was \$236 million (4%) lower compared with 2019. This was driven by lower Refining and Trading margins (around \$2,400 million), lower Marketing margins (around \$600 million), partly offset by lower operating expenses (around \$2,000 million) and other items mainly including tax movements (around \$700 million).

The decrease in earnings of \$236 million, analysed by class of business was as follows:

- Refining and Trading earnings were \$101 million lower than in 2019, mainly because of lower realised refining margins driven by lower demand because of the pandemic and its effect on the economy. This was partly offset by higher earnings from crude and oil products trading and optimisation, lower operating expenses and favourable deferred tax movements.
- Marketing earnings were \$135 million lower than in 2019, mainly driven by lower sales volumes due to the impact of the pandemic. This was largely offset by strong margins in Retail and Lubricants on account of better margin management, higher penetration of premium fuels and lower operating expenses.

Segment earnings in 2020 included a net charge of \$6,489 million.

This included:

- impairment charges of \$5,530 million (across sites, reflecting revisions to medium- and long-term price outlook assumptions in light of: changes in supply and demand fundamentals in the energy market; macroeconomic conditions; the COVID-19 pandemic; expenditure at Pulau Bukom in Singapore including transformation; and the shutdown of the Convent refinery in Louisiana, USA);
- restructuring costs of \$365 million (mainly shutdown of Convent, Bukom transformation and various initiatives across Oil Products);
- other net charges of \$552 million (mainly onerous contract provisions due to shutdown of Convent); and
- a net charge of \$101 million due to the fair value accounting of commodity derivatives.

These charges were partly offset by:

- net gains from disposal of assets of \$59 million.

Segment earnings in 2019 included a net charge of \$93 million.

This included:

- impairment charges of \$337 million (mainly expenditure at Bukom and other assets);
- costs of \$84 million relating to restructuring (various initiatives across Oil Products);
- net charge of \$66 million due to the fair value accounting of commodity derivatives; and
- other net charges of \$26 million (mainly provision for discount rate change).

The above were partly offset by:

- net gains of \$329 million from disposal of assets; and
- gains from one-off tax items of \$91 million (tax rate changes in Alberta, Canada).

EARNINGS 2019-2018

Segment earnings in 2019 of \$6,139 million were 2% higher than in 2018. Earnings in 2019 included a net charge of \$93 million described above. Earnings in 2018 included a net gain of \$231 million, reflecting gains on disposal of assets of \$273 million (mainly our Oil Products assets in Argentina and other smaller disposals), a net gain from fair value accounting of commodity derivatives of \$224 million, gains from one-off tax items of \$91 million (mainly corporate income tax rate changes in the Netherlands and the USA) and other net gains of \$50 million (which included a one-off gain from the Ontario cap-and-trade scheme). These were partly offset by impairment charges of \$309 million and redundancy and restructuring charges of \$98 million.

Excluding the impact of these items, earnings in 2019 were \$6,231 million, compared with \$5,794 million in 2018. Marketing accounted for 75% of these 2019 earnings, Refining for 4% and Trading & Supply for 21%.

The increase in Oil Products earnings, excluding the net charge, was \$437 million (8%) compared with 2018. The increase was driven by higher Marketing margins (around \$500 million), benefit from foreign exchange (around \$250 million) and the change in accounting policy IFRS 16 (around \$140 million). This was partly offset by lower Refining and Trading margins (around \$400 million) and other impacts resulting in a net charge of around \$50 million. Marketing margins benefited from stronger unit margins. These were partly offset by lower earnings from Raízen, the joint venture (Shell interest 50%) in Brazil, caused by adverse foreign exchange and lower fuel margins. Refining and Trading margins were lower than in 2018, mainly because of lower realised refining margins caused by adverse price variance across all regions, driven by lower global demand growth and an increase in worldwide refining capacity.

CASH CAPITAL EXPENDITURE

Cash capital expenditure (cash capex) was \$3.3 billion in 2020, compared with \$4.9 billion in 2019.

Cash capital expenditure in Refining and Trading decreased by \$1.3 billion mainly because of cash preservation initiatives (lower capital expenditure spends including turnaround deferrals). In Marketing, cash capital expenditure decreased by \$0.3 billion as a result of cash preservation initiatives and reduced spending in US pipelines projects as they are nearing completion. Our cash capital expenditure is expected to be around \$4-4.5 billion in 2021.

PORTRFOIO AND BUSINESS DEVELOPMENTS

Shell announced its plans to reshape its portfolio of assets and products to meet the cleaner energy needs of its customers in the coming decades. Significant portfolio and business developments during 2020 included:

- In the USA, in February 2020, our subsidiary Equilon Enterprises LLC, doing business as Shell Oil Products US (Shell) completed the sale of the Martinez refinery to PBF Holding Company LLC in the USA for a consideration of \$1.2 billion, which included the refinery and inventory.
- Also in the USA, in March 2020, we announced our intention to sell the Puget Sound refinery in Washington State and Mobile site in Alabama.
- In August 2020, Pilipinas Shell Petroleum Corporation, a subsidiary of Royal Dutch Shell in which we have an interest of 55%, announced that it will permanently shut down its Tabangao Refinery in Batangas City, Philippines, and convert it to a full import terminal.
- In November 2020, we announced that we had begun transforming our Shell Pulau Bukom manufacturing site in Singapore into an energy and chemicals park. This is part of our strategy to integrate our refining portfolio with Chemicals, resulting in approximately six high-value energy and chemicals parks, of which Bukom will be one. Bukom will switch from a crude-oil, fuels-based product slate towards new low-carbon value chains. Crude processing capacity at Bukom will be reduced by around half.
- In November 2020, we announced that we are shutting down the Convent Refinery in Louisiana, USA. Shell continues to assess market interest for the potential divestment of the asset during and after the shutdown, but does not intend to operate it in the future.
- In January 2021, Shell reached an agreement with Postlane for the sale of A/S Dansk Shell in Denmark, which consists of the Fredericia Refinery and local trading and supply activities.
- In January 2021, Shell signed an agreement to acquire 100% of ubitricity, a leading European provider of on-street charging for electric vehicles. The acquisition was completed in February 2021.
- In January 2021, Shell announced the signing of commercial agreements to invest in Varennes Carbon Recycling, the first waste to low-carbon fuels plant in Québec, Canada. Shell will have a 40% interest in the plant, which will use technology developed by Enerkem. The facility will produce low-carbon fuels and renewable chemicals products from non-recyclable waste. Commissioning of the first phase of the facility is scheduled for 2023.

BUSINESS AND PROPERTY

Refining and Trading

Refining

We have interests in 13 refineries worldwide, (after converting Tabangao in the Philippines into a terminal and deciding in November 2020 to shut down Convent, in Louisiana, USA). We have the capacity to process a total of 2.2 million barrels of crude oil per day (Shell share, before it was announced that Bukom's crude capacity would reduce by around 200 thousand b/d). The distribution of our refining capacity is 46% in Europe and Africa, 33% in the Americas and 21% in Asia.

Shell's Refining business is transforming. We will further concentrate our refineries portfolio to meet our strategic aims and to capitalise on the strong integration between our customers, trading operations, chemical plants and, increasingly, our low-carbon fuels output.

The six sites expected to form our energy and chemicals parks include Deer Park and Norco in the USA, Scotford in Canada, Pernis in the Netherlands, Rheinland in Germany and Pulau Bukom in Singapore,

Our Bukom refinery will move from a crude-oil, fuels-based product slate towards new, low-carbon products. It will reduce its crude processing capacity as a result by around 200 thousand b/d sometime in July 2021.

In 2020, Pilipinas Shell Petroleum Corporation (PSPC) approved the transformation of the Tabangao refinery into an import terminal. Shell also decided to shut down the Convent Refinery in Louisiana, USA, starting the process in November 2020.

Trading and Supply

Through our main trading offices in London, Houston, Singapore and Rotterdam, we trade crude oil, refined products, chemical feedstocks and environmental products. Trading and Supply trades in physical and financial contracts, lease storage and transportation capacities, and manages shipping and wholesale commercial fuel activities globally.

Operating in around 25 countries, with more than 125 Shell and joint-venture terminals, we believe our supply and distribution infrastructure is well positioned to make deliveries around the world.

Shipping and Maritime enables the safe delivery of the Shell Trading and Supply contracts. This includes supplying feedstocks for our refineries and chemical plants, and finished products such as gasoline, diesel and aviation fuel to our Marketing businesses and customers.

Shell Wholesale Commercial Fuels provides fuels for transport, industry and heating. Our range of products, from reliable main-grade fuels to premium products, is designed to provide tangible vehicle and business benefits.

Oil Sands

Synthetic crude oil is produced by mining bitumen-saturated sands, extracting the bitumen, and transporting it to a processing facility where hydrogen is added to make a wide range of feedstocks for refineries. The Athabasca Oil Sands Project (AOSP) includes the Albion Sands mining and extraction operations, the Scotford upgrader and the Quest carbon capture and storage (CCS) project.

We have a 50% interest in 1745844 Alberta Ltd. (formerly known as Marathon Oil Canada Corporation), which holds a 20% interest in the Athabasca Oil Sands Project. With effect from January 1, 2020, Oil Sands is reported under Oil Products. It was previously reported under Upstream. Prior-period information has been restated for comparative purposes.



The Quest CCS facility in Alberta, Canada.

Marketing

Retail

Shell is the world's largest mobility retailer, by number of sites, with almost 46,000 service stations operating in nearly 80 countries at the end of 2020. We operate different models across these markets, from full ownership of retail sites through to brand licensing agreements.

Every day, around 30 million customers visit these sites to buy fuel, convenience items including beverages and fresh food, and services such as lubricant changes and car washes. We offer our business customers Shell Fleet Solutions, through which they can obtain items including fuel cards, road services and carbon-neutral offers.

We have more than 100 years' experience in fuel development. Aided by our partnership with Scuderia Ferrari, we have concentrated on developing fuels with special formulations designed to clean engines and improve performance. We sold such fuels under the Shell V-Power brand in 64 countries in 2020.

In a growing number of markets, we are offering customers lower-emission products and services, including biofuels, electric vehicle fast charging, hydrogen and various gaseous fuels such as LNG. In 2020, we launched carbon-neutral driving offers in five new countries. Across the seven countries where we now offer carbon-neutral driving, we helped offset customer emissions from more than 1 billion litres of fuel by buying carbon credits linked to projects that plant and protect forests, wetlands and other natural ecosystems.

Shell operates more than 60,000 electric vehicle charge points. This includes over 1,000 charge points at Shell forecourts and new locations as well as operated charge points owned by our individual and business customers.

In January 2021, Shell signed an agreement to acquire 100% of ubitricity, a leading European provider of on-street charging for electric vehicles. The move represents a further step in Shell's efforts to support drivers as they switch to lower-carbon transport. The acquisition was completed in February 2021.



Shell offers electric vehicle drivers access to Shell Recharge points in 19 countries.

We have around 50 hydrogen retail sites in Europe and North America, where drivers can fill up their vehicles with hydrogen fuel.

Lubricants

Shell Lubricants has been the number one global finished lubricants supplier in terms of market share for 14 consecutive years, according to Kline & Company data for 2019. Across more than 160 markets, we produce, market and sell technically advanced lubricants for passenger cars, motorcycles, trucks, coaches, and machinery used in the manufacturing, mining, power generation, agriculture and construction sectors.

We also manufacture premium lubricants for conventional vehicles and Shell E-fluids for electric vehicles using gas-to-liquids (GTL) base oils that are made from natural gas at our Pearl GTL plant in Qatar (see "Integrated Gas" on pages 46-52).

We have a global lubricants supply chain with a network of four base oil manufacturing plants, 32 lubricant blending plants, eight grease plants and four GTL base oil storage hubs.

Through our marine activities, we primarily provide the shipping and maritime sectors with lubricants, but also with fuels, chemical products and related technical and digital services. We supply 259 grades of lubricants and six types of fuel to vessels worldwide, ranging from large ocean-going tankers to small fishing boats.

Business-to-Business

Our Business-to-Business (B2B) activities encompass the sale of fuels, speciality products and services to a broad range of commercial customers.

Shell Aviation provides aviation fuel, lubricants and low-carbon solutions globally. In 2020, we collaborated with many organisations to develop a scalable supply of sustainable aviation fuel made from renewable raw materials and waste products. In partnership with World Energy, Shell Aviation has agreed to supply up to 6 million gallons of sustainable aviation fuel to Amazon Air.

Shell Bitumen supplies customers across 60 markets and provides enough bitumen to resurface 500 kilometres of road lanes every day. It also invests in research and development to create innovative products.

Shell Sulphur Solutions is a business that manages the complete value chain of sulphur, from refining to marketing. The business provides sulphur for use in applications such as fertiliser, mining and chemicals. It also develops new technologies for sulphur that benefit sectors such as agriculture.

Pipelines

Shell Pipeline Company LP (Shell interest 100%) operates 9 tank farms across the USA, owns all of the interest in one such tank farm and, through its subsidiaries, has a majority ownership interest in the other 8 tank farms. It transports around 2 billion barrels of crude oil and refined products a year through around 6,000 kilometres of pipelines in the Gulf of Mexico and five US states. Our various non-Shell-operated ownership interests provide a further 14,000 pipeline kilometres.

We carry more than 40 types of crude oil and more than 20 grades of fuel and chemicals, including gasoline, diesel, aviation fuel, chemicals and ethylene.



The Falcon pipeline will run through 155 kilometres of Pennsylvania, West Virginia and Ohio.

OIL PRODUCTS continued

Shell Midstream Partners, L.P., a midstream master limited partnership, owns, operates, develops and acquires pipelines and other midstream assets in the USA. Its assets consist of interests in entities that own pipelines and terminals for crude oil and refined products. These serve as key infrastructure that transports crude oil produced onshore and offshore to the refining markets of the US Gulf Coast and Midwest. Shell Midstream Partners also delivers refined products from these markets to major demand centres. Its assets also include interests in entities that own natural gas and refinery gas pipelines. These transport offshore natural gas to market hubs, and deliver refinery gas from plants and refineries to chemical sites along the Gulf Coast. Shell controls the general partner.

See "Governance – Related Party Transactions" on page 185 for information on transactions between Shell and Shell Midstream Partners, L.P.

Low-Carbon Fuels

Biofuels

In 2020, around 9.5 billion litres of biofuels went into Shell's fuels worldwide, which includes Raízen sales.



Harvesting crops used for the processing of biofuel by Raízen, Brazil.

Raízen, our joint venture in Brazil (Shell interest 50%), produced around 2.5 billion litres of ethanol and around 4.4 million tonnes of sugar from sugar cane in 2020. In 2015, Raízen opened its first cellulosic ethanol plant at its Costa Pinto mill in Brazil. This produced almost 25 million litres of ethanol in 2020.

In February 2021, Raízen announced the acquisition of Biosev, adding an additional 50% of production capacity in low-carbon fuels. It will allow to increase Raízen's bioethanol production capacity to a 3.75 billion litres a year. The transaction contributes to Shell's target to be a net-zero emissions energy business by 2050, in step with society.

RNG

Renewable natural gas (RNG), also known as biomethane, is gas derived from processing organic waste in a controlled environment until it is fully interchangeable with conventional natural gas. Shell has taken a final investment decision to construct, own and operate its first renewable compressed natural gas (R-CNG) fuelling site in the USA. This will be at Shell's products distribution complex in Carson, California. The R-CNG will be sourced from Shell's portfolio of anaerobic digestion projects.

BUSINESS ACTIVITIES WITH SUDAN, SYRIA AND CUBA

Sudan

We ceased all operational activities in Sudan in 2008. In 2020, we registered a trademark right in Sudan (north) and paid \$8 to the General Intellectual Property Register Office, and \$79 in agent and handling fees.

The renewal of the trademark rights is not indicative of any sales of products in Sudan

Syria

We ceased all operational activities in Syria in 2011. In 2020, we renewed our trademark rights in Syria and paid \$1,914 to the Directorate of Industrial and Commercial Property Protection, and \$551 in agent and handling fees. The renewal of the trademark rights is not indicative of any sales of products in Syria.

Cuba

We do not have any operational activities in Cuba. In January 2021, we renewed a trademark right in Cuba and paid \$300 to the Cuban Industrial Property Office, and \$420 in agent and handling fees. The registration of this trademark right is not indicative of any sales of products in Cuba.

OIL PRODUCTS DATA TABLES

The tables below reflect Shell subsidiaries and instances where Shell owns the crude oil or feedstocks processed by a refinery. The tables include Martinez refinery until the date of divestment in February 2020, Tabangao refinery until the date of transformation into a terminal in August 2020 and Convent refinery until the date of shutdown in December 2020. Other joint ventures and associates are only included where explicitly stated.

Oil products – cost of crude oil processed or consumed [A]

	\$/barrel		
	2020	2019	2018
Total	35.03	54.97	59.94

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

Crude distillation capacity [A]

	Thousand b/stream day [B]		
	2020	2019	2018
Europe	1,059	1,057	1,056
Asia	573	767	767
Africa	90	90	90
Americas	1,028	1,171	1,261
Total	2,750	3,085	3,174

[A] Average operating capacity for the year, excluding mothballed capacity.

[B] Stream day capacity is the maximum capacity with no allowance for downtime.

Oil products – crude oil processed [A]

	Thousand b/d		
	2020	2019	2018
Europe	810	829	897
Asia	292	498	545
Africa	54	55	66
Americas	719	1,004	1,041
Total	1,875	2,386	2,549

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

Refinery processing intake [A]

	Thousand b/d		
	2020	2019	2018
Crude oil	1,876	2,342	2,434
Feedstocks	187	222	214
Total	2,063	2,564	2,648
Europe	854	875	896
Asia	302	517	543
Africa	54	55	66
Americas	853	1,117	1,143
Total	2,063	2,564	2,648

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

Refinery processing outturn [A]

	Thousand b/d		
	2020	2019	2018
Gasolines	771	952	966
Kerosines	158	417	321
Gas/Diesel oils	774	818	965
Fuel oil	140	223	284
Other	279	282	321
Total	2,122	2,692	2,858

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

Oil Products sales volumes [A][B]

	Thousand b/d		
	2020	2019	2018
Europe			
Gasolines	224	334	323
Kerosines	165	317	294
Gas/Diesel oils	610	720	745
Fuel oil	(42)	138	178
Other products	(19)	278	314
Total	938	1,787	1,854

Asia

Gasolines	346	408	373
Kerosines	98	208	210
Gas/Diesel oils	455	535	543
Fuel oil	308	330	407
Other products	383	518	620
Total	1,590	2,000	2,153

Africa

Gasolines	43	46	42
Kerosines	11	13	10
Gas/Diesel oils	59	70	74
Fuel oil	1	2	2
Other products	6	6	6
Total	120	137	134

Americas

Gasolines	1,136	1,419	1,446
Kerosines	103	239	236
Gas/Diesel oils	496	582	567
Fuel oil	87	120	117
Other products	240	277	276
Total	2,062	2,637	2,642

Total product sales [C][D]

Gasolines	1,749	2,207	2,184
Kerosines	377	777	750
Gas/Diesel oils	1,620	1,907	1,929
Fuel oil	354	590	704
Other products	610	1,079	1,216
Total	4,710	6,561	6,783

[A] Excludes deliveries to other companies under reciprocal sale and purchase arrangements, that are in the nature of exchanges. Sales of condensate and natural gas liquids are included.

[B] Includes the Shell share of Raizen's sales volumes.

[C] Certain contracts are held for trading purposes and reported net rather than gross. The effect in 2020 was a reduction in oil product sales of approximately 1,284,000 b/d (2019: 546,000 b/d; 2018: 458,000 b/d). With effect from January 1, 2020 certain contracts held for trading purposes and reported net for Europe and Asia regions are consolidated in Europe.

[D] Reported volumes in 2020 and 2019 include the Shell joint ventures' sales volumes from key countries.

OIL PRODUCTS

continued

MANUFACTURING PLANTS AT DECEMBER 31, 2020

Refineries in operation

Location	Asset class	Shell interest (%) [A]	Crude distillation capacity	Thousand barrels/stream day, 100% capacity [B]		
				Thermal cracking/ visbreaking/ coking	Catalytic cracking	Hydro- cracking
Europe						
Denmark	Fredericia	●	100	74	44	—
Germany	Miro [C]		32	313	40	96
	Rheinland	●●	100	354	49	—
	Schwedt [C]		38	233	45	59
Netherlands	Pernis	●●	100	443	—	53
Asia						
Singapore	Pulau Bukom [D]	●●	100	504	81	38
Africa						
South Africa	Durban [C]	●	36	180	25	37
Americas						
Argentina	Buenos Aires [C]	●●●	50	108	20	22
Canada						
Alberta	Scotford	●	100	100	—	—
Ontario	Sarnia	●	100	85	5	21
USA						
Louisiana	Norco	●	100	250	29	119
Texas	Deer Park	●●	50	341	96	75
Washington	Puget Sound	●●●	100	149	25	58

[A] Shell interest is rounded to the nearest whole percentage point; Shell share of production capacity may differ.

[B] Stream day capacity is the maximum capacity with no allowance for downtime.

[C] Not operated by Shell

[D] Bukom capacity is as on December 31, 2020 prior to the transformation. Crude processing capacity is expected to decrease by around 200 thousand b/d after the transformation sometime in July 2021.

- Integrated refinery and chemical complex
- Refinery complex with cogeneration capacity
- Refinery complex with chemical unit(s)
- Other

BRANDED RETAIL SITES [A]

	2020	2019	2018
Europe	8,071	7,978	7,888
Asia [B]	10,387	10,138	9,754
Oceania [B]	1,071	1,038	1,030
Africa	2,622	2,494	2,502
Americas	23,461	23,021	23,223
Total	45,612	44,669	44,397

[A] Excludes sites closed for more than six months.

[B] Asia includes Turkey and Russia; Oceania includes French Polynesia, Guam, Palau and New Caledonia.

CHEMICALS

Key statistics

	\$ million, except where indicated		
	2020	2019	2018
Segment earnings [A]	808	478	1,884
Including:			
Revenue (including inter-segment sales)	14,571	17,485	23,568
Share of profit of joint ventures and associates [A]	567	546	684
Interest and other income	–	(7)	(53)
Operating expenses [B]	3,235	3,430	3,594
Depreciation, depletion and amortisation	1,116	1,074	1,034
Taxation charge [A]	7	(2)	339
Identified Items [B]	(154)	(263)	(192)
Adjusted Earnings [B]	962	741	2,076
Capital expenditure	2,608	4,068	3,140
Cash capital expenditure [B]	2,640	4,090	3,212
Chemical plant utilisation (%) [C]	80	76	84
Chemicals sales volumes (thousand tonnes)	15,036	15,223	17,644

[A] See Note 4 to the "Consolidated Financial Statements" on pages 230-232. Segment earnings are presented on a current cost of supplies basis.

[B] See "Non-GAAP measures reconciliations" on pages 305-306

[C] With effect from January 1, 2020, Shell discloses utilisation instead of availability to improve transparency on chemicals production volumes. Utilisation is defined as the actual usage of the plants as a percentage of the rated capacity.

OVERVIEW

Our Chemicals business supplies customers with a range of base and intermediate chemicals used to make products that people use every day. We also have major manufacturing plants which are located close to refineries, and our own marketing network.

BUSINESS CONDITIONS

Cracker margins were volatile during 2020 because of how COVID-19 affected demand. Overall margins, however, were broadly similar to those in 2019. The effect on chemicals depended on end use. Some sectors, such as automotive, were hit particularly hard, while others, such as packaging, showed robust demand. Chinese demand recovered relatively quickly because the virus was swiftly brought under control. Overall chemicals demand was not hit as hard as GDP. West European cracker margins were supported by the sudden fall in the price of crude oil in March and April. The fact that crude oil was at a lower price than in 2019 reduced naphtha feedstock costs, which reduced product prices. This in turn put pressure on US ethane cracker margins, although plentiful ethane supply helped counter the impact.

See "Market overview" on pages 38-40.

CHEMICAL PLANT UTILISATION

With effect from January 1, 2020, Shell discloses utilisation instead of availability to improve transparency on chemicals production volumes. Utilisation is defined as the actual usage of the plants as a percentage of the rated capacity.

Chemicals manufacturing plant utilisation was 80% in 2020 compared with 76% in the full year 2019, mainly because of higher maintenance activities in Asia and Europe in 2019, and the impact of strike actions in the Netherlands in 2019.

CHEMICALS SALES

In 2020, Chemicals sales volumes were 15,036 thousand tonnes, which was 1% lower than 2019 sales volumes of 15,223 thousand tonnes due to lower demand.

EARNINGS 2020-2019

Segment earnings in 2020 of \$808 million were 69% higher than in 2019. Earnings in 2020 included a net charge of \$154 million, compared with a net charge in 2019 of \$263 million, which is described at the end of this section.

Excluding the impact of these charges, earnings in 2020 were \$962 million, compared with \$741 million in 2019.

The increase in Chemicals earnings, excluding the net charges, was \$221 million (30%) compared with 2019. This was driven by higher margins (around \$130 million) because of a favourable price environment, lower operating expenses (around \$50 million) as a result of various initiatives, and favourable tax movements (around \$60 million) partly offset by other costs (around \$20 million).

Segment earnings in 2020 included a net charge of \$154 million.

This included:

- impairment charges of \$4 million;
- costs related to restructuring of \$38 million (various initiatives across Chemicals);
- net loss from disposal of assets of \$1 million; and
- other net charges of \$115 million (mainly legal provision).

These charges were partly offset by:

- a net gain from fair value accounting of commodity derivatives of \$4 million.

Segment earnings in 2019 included a net charge of \$263 million.

This included:

- net charges of \$247 million (mainly legal provisions);
- loss of \$11 million from disposal of assets;
- costs of \$5 million related to restructuring; and
- impairment charge of \$4 million.

These charges were partly offset by:

- gain from one-off tax items of \$5 million (tax rate changes in Alberta, Canada).

EARNINGS 2019-2018

Segment earnings in 2019 of \$478 million were 75% lower than in 2018. Earnings in 2019 included a net charge of \$263 million described above. Earnings in 2018 included a net charge of \$192 million, reflecting impairment charges of \$76 million, a net loss from disposal of \$50 million, redundancy and restructuring charges of \$2 million, and other net charges of \$97 million (related to onerous contracts in connection with decommissioning the Stanlow site). These were partly offset by gains from one-off tax items of \$27 million, (mainly corporate income tax rate changes in the Netherlands), and a net gain of \$6 million from fair value accounting of commodity derivatives.

Excluding the impact of these items, earnings in 2019 were \$741 million, compared with \$2,076 million in 2018.

The decrease in earnings, excluding the net charges, was \$1,335 million (64%) compared with 2018. This was driven by lower margins (around \$1,500 million), partly offset by lower operating costs (around \$140 million) and the change in accounting policy relating to IFRS 16 leases (around \$20 million). Margins were impacted by lower realised base chemicals and intermediate margins and by higher maintenance activities in Asia and Europe, including the impact of strike action in the Netherlands in 2019.

CASH CAPITAL EXPENDITURE

Cash capital expenditure (cash capex) was \$2.6 billion in 2020, compared with \$4.1 billion in 2019.

Cash capex decreased by \$1.5 billion, mainly because of lower spend on account of the COVID-19 pandemic impact in the construction of our cracker facilities in Pennsylvania and cash preservation initiatives. Our cash capex expenditure is expected to be around \$3 billion to \$3.5 billion in 2021.

PORTFOLIO AND BUSINESS DEVELOPMENTS

Significant portfolio and business developments during 2020:

- In the USA, in March 2020, we announced our intention to sell the Mobile site in Alabama.

BUSINESS AND PROPERTY**Manufacturing**

Our plants produce a range of base chemicals, including ethylene, propylene and aromatics, and intermediate chemicals such as styrene monomer, propylene oxide, solvents, detergent alcohols, ethylene oxide and ethylene glycol. We have the capacity to produce around 6.5 million tonnes of ethylene a year. We are expanding our product portfolio to include sustainable chemicals, more intermediates and performance chemicals such as polyethylene and polycarbonate. We operate chemical plants worldwide and have a global balance of locations, feedstocks and products that allows us to seize commercial opportunities and get through cycles of lower margins.

Shell's Chemicals business is transforming and will be further integrated with our Refining business. In addition to our standalone, chemicals-only production sites, the six sites (Deer Park and Norco in the USA, Scotford in Canada, Pernis in the Netherlands, Rheinland in Germany and Pulau Bukom in Singapore) are expected to form our energy and chemicals parks. Growth will shift towards performance chemicals and recycled feedstocks.

Marketing

In 2020, we supplied more than 15 million tonnes of petrochemicals to around 1,000 industrial customers worldwide. Products made from chemicals improve everyday life in health care, construction, transport, electronics, agriculture and sports. As global demand for chemicals increases, we plan to grow our business, by understanding and responding to our customers' needs.

BUSINESS ACTIVITIES WITH SUDAN AND SYRIA**Sudan**

We ceased all operational activities in Sudan in 2008.

Syria

We ceased supplying polyols, via a Netherlands-based distributor, to private sector customers in Syria in 2018. Polyols are commonly used for the production of foam in mattresses and soft furnishings.

CHEMICALS DATA TABLES

The tables below reflect Shell subsidiaries and instances where Shell owns the crude oil or feedstocks processed by a refinery. The tables also include Martinez until the date of divestment in February 2020. Other joint ventures and associates are only included where explicitly stated.

Ethylene capacity [A]

	Thousand tonnes/year		
	2020	2019	2018
Europe	1,701	1,701	1,701
Asia	2,530	2,530	2,529
Americas	2,268	2,268	2,268
Total	6,499	6,499	6,498

[A] Includes the Shell share of capacity entitlement (offtake rights) of joint ventures and associates, which may be different from nominal equity interest. Nominal capacity is quoted at December 31.

Chemicals sales volumes [A]

	2020	2019	2018
Europe			
Base chemicals	3,490	3,666	4,069
Intermediates and others	1,990	1,872	1,994
Total	5,480	5,538	6,063
Asia			
Base chemicals	1,192	1,057	2,140
Intermediates and others	2,969	2,848	3,082
Total	4,161	3,905	5,222
Americas			
Base chemicals	2,936	3,261	3,842
Intermediates and others	2,459	2,519	2,517
Total	5,395	5,780	6,359
Total product sales			
Base chemicals	7,618	7,984	10,051
Intermediates and others	7,418	7,239	7,593
Total	15,036	15,223	17,644

[A] Excludes feedstock trading and by-products.

Major chemical plants in operation [A]

Location	Ethylene	Styrene monomer	Ethylene glycol	Higher olefins [C]	Thousand tonnes/year, Shell share capacity [B]	
					Additional products	
Europe						
Germany	315	—	—	—	—	A
Netherlands	971	815	153	—	—	A, I
UK	415	—	—	—	—	0
Asia						
China	1,100	650	415	—	A, I, P	
Singapore	281	1,069	1,159	—	A, I, P, O	
	1,149	—	—	—	A, I	
Americas						
Canada	—	475	548	—	A, I	
USA	836	—	—	—	A, I	
	—	—	400	1,390	I	
Norco	1,432	—	—	—	—	A
Total	6,499	3,009	2,675	1,390		

[A] Major chemical plants are large integrated chemical facilities, typically producing a range of chemical products from an array of feedstocks, and are a core part of our global Chemicals business.

[B] Shell share of capacity of subsidiaries, joint arrangements and associates (Shell- and non-Shell-operated), excluding capacity of the Infinium additives joint ventures.

[C] Higher olefins are linear alpha and internal olefins (products range from C4 to C2024).

[D] Not operated by Shell

[E] The polyethylene, polypropylene and olefins production mentioned refers to Shell share of capacity of our non-operated joint ventures Petchem Corporation of Singapore (PCS) and The Polyolefin Company (TPC) which are in Jurong Island.

A Aromatics, lower olefins
I Intermediates
P Polyethylene, polypropylene
O Other

Other chemical locations [A]

	Location	Products
Europe		
Germany	Karlsruhe	A
	Schwedt	A
Netherlands	Pernis	A, I, O
Americas		
Argentina	Buenos Aires	I
Canada	Sarnia	A, I
USA	Mobile	A
	Puget Sound	I

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

A Aromatics, lower olefins
I Intermediates
O Other

Earnings

	\$ million		
	2020	2019	2018
Segment earnings	(2,952)	(3,273)	(1,479)
Comprising:			
Net interest [A]	(2,991)	(3,080)	(2,075)
Taxation and other [B]	39	(194)	596
Identified Items	460	109	327
Adjusted Earnings	(3,412)	(3,383)	(1,806)

[A] Mainly Shell's interest expense (excluding accretion expense) and interest income.

[B] Other earnings mainly comprise net foreign exchange gains and losses on financing activities, headquarters and central functions' costs not recovered from business segments, and net gains on sale of properties. This also includes Shell's share of joint ventures and associates' interest income/(expense) and net foreign exchange gains/(losses) on financing activities.

OVERVIEW

The Corporate segment covers the non-operating activities supporting Shell. It comprises Shell's holdings and treasury organisation, self-insurance activities and headquarters and central functions. All finance expense and income and related taxes are included in Corporate segment earnings rather than in the earnings of business segments.

The holdings and treasury organisation manages many of the Corporate entities. It is the point of contact between Shell and external capital markets, conducting a wide range of transactions, such as raising debt instruments and transacting foreign exchange. Treasury centres in London and Singapore support these activities.

Headquarters and central functions provide business support in communications, finance, health, human resources, information technology, legal services, real estate and security. They also provide support for shareholder-related activities. The central functions are supported by business service centres, which process transactions, manage data and produce statutory returns, among other services. Most headquarters and central-function costs are recovered from the business segments. Costs that are not recovered are retained in Corporate.

EARNINGS 2020-2018

Segment earnings in 2020 were an expense of \$2,952 million, compared with \$3,273 million in 2019 and \$1,479 million in 2018.

Net interest decreased by \$89 million compared with 2019. This was primarily due to a decrease in interest expense following reductions in interest rates, partly offset by a reduction in interest income generated on cash balances. In 2019, net interest increased by \$1,005 million compared with 2018. This was primarily due to the adoption of IFRS 16 and reduced capitalised interest.

Taxation and other earnings increased by \$233 million in 2020, compared with 2019. This largely reflected favourable deferred tax impacts due to the strengthening Brazilian real on financing positions and a reduction in Shell's share of financing expenses from joint ventures and associates, partly offset by a foreign exchange loss from adverse exchange rate movements. In 2019, taxation and other earnings decreased by \$790 million compared with 2018, because of reduced tax credits from financing and one-off charges, and unfavourable exchange rate movements producing net foreign exchange losses.

SELF-INSURANCE

We mainly self-insure our risk exposure. Capital is set aside to meet self-insurance obligations (see "Risk factors" on page 35). We seek to ensure this capital is at least as much as would be held in third-party insurance markets. Periodic surveys of key assets provide knowledge and best practices aimed at reducing exposure to hazards. Follow-up actions are monitored to completion.

INFORMATION TECHNOLOGY AND CYBER-SECURITY

Given our digitalisation efforts and increasing reliance on information technology (IT) systems for our operations, we continually monitor external

developments and actively share information on threats and security incidents. Shell employees and contract staff are subject to mandatory courses and regular awareness campaigns aimed at protecting us against cyber-threats. We periodically test and adapt cyber-security response processes and seek to enhance our security monitoring capability.

Given our dependence on IT systems for our operations and the increasing role of digital technologies across our business, we are aware that cyber-security attacks could cause significant harm to Shell in the form of loss of productivity, loss of intellectual property, regulatory fines and/or reputational damage. As a result, we continuously measure and, where required, further improve our cyber-security capabilities to reduce the likelihood of successful cyber-attacks. Our cyber-security capabilities are embedded into our IT systems, and our IT landscape is protected by various detective and protective technologies. The identification and assessment capabilities are built into our support processes and adhere to industry best practices. The security of IT services, operated by external IT companies, is managed through contractual clauses and additionally through formal supplier assurance reports for critical IT services.

Shell is frequently subjected to cyber-attacks and the pandemic in 2020 caused an increase in such activity. COVID-19 necessitated a switch from office to remote working, which changed and increased the attack surface. Shell's CyberDefence Team responded by enhancing cyber-security controls for remote connectivity, strengthening its monitoring/detection, and taking additional measures to improve cyber-awareness.

In 2020, malicious actors infiltrated several companies and government agencies through a supply chain attack via SolarWinds Orion software. They injected malware into an update that was distributed to SolarWinds' customers globally, allowing the actors to access SolarWinds systems and from there attempt to access other systems. Shell uses SolarWinds software. We detected the malicious SolarWinds applications in our environment, and isolated and removed them. No evidence has been found that any Shell systems were accessed by the attackers. Shell has followed the US Cybersecurity and Infrastructure Security Agency's guidance to rebuild and/or patch affected systems.

In 2020, none of the cyber-security events led to known breaches of our business-critical IT landscape and, as such, did not result in any material business impact. When significant incidents happen, they are addressed through a robust incident management framework and, if needed, will result in appropriate follow-up actions, including notifications towards regulators. See "Risk factors" on Page 33.

BRAND VALUE

In January 2021, Shell's brand value was estimated at \$42.2 billion in Brand Finance Global 500 2021, the annual report by leading brand valuation consultancy Brand Finance. This was down 11% compared with 2020, but up 33% compared with 2016. According to the valuation the Shell brand remains the most valued in the oil and gas industry and the gap to second place widened from \$761 million in 2020 to \$4.7 billion in 2021. The report also showed that Shell's brand rating stayed at AAA, unchanged from 2020.

LIQUIDITY AND CAPITAL RESOURCES

We manage our businesses to deliver strong cash flows to fund investment for profitable growth. Management's priorities for applying Shell's cash are first the reduction of net debt to \$65 billion and, on achieving this milestone, distributing a total of 20-30% of cash flow from operations to shareholders. Remaining cash will be allocated to disciplined and measured capital expenditure growth and further debt reduction.

FINANCIAL CONDITION AND LIQUIDITY

Despite the weak macroeconomic and commodity price environment during the COVID-19 pandemic, Shell Group generated cash flow from operations of \$34.1 billion and free cash flow of \$20.8 billion in 2020. Through the course of the year, Shell took decisive actions (including reducing costs, rebasing the dividends and not continuing with the next tranche of the share buyback programme following completion of the seventh tranche) to increase liquidity and underpin the strength of the balance sheet, positioning the business to navigate the challenging environment and supporting long-term value creation. Reflecting mitigating actions taken, net debt decreased to \$75.4 billion at December 31, 2020 (December 31, 2019: \$79.1 billion). Gearing increased to 32.2% at December 31, 2020, compared with 29.3% at December 31, 2019 due to the reduction in equity mainly driven by lower earnings in 2020. Note 14 to the Consolidated Financial Statements on page 241-243 provides information on our debt arrangements, including net debt and gearing definitions.

LIQUIDITY

We satisfy our funding and working capital requirements from the cash generated from our operations, the issuance of debt and divestments. In 2020, access to the international debt capital markets remained strong, with our debt principally financed from these markets through central debt programmes consisting of:

- a \$10 billion global commercial paper (CP) programme, with maturities not exceeding 270 days;
- a \$10 billion US CP programme, with maturities not exceeding 397 days;
- an unlimited Euro medium-term note (EMTN) programme (also referred to as the Multi-Currency Debt Securities Programme); and
- an unlimited US universal shelf (US shelf) registration.

All these CP, EMTN and US shelf issuances are issued by Shell International Finance B.V., the issuance company for Shell, with its debt being guaranteed by Royal Dutch Shell plc (the Company). We plan to file a new US shelf registration statement with the Securities and Exchange Commission shortly after the filing of our Annual Report on Form 20-F.

We also maintain committed credit facilities. The core facilities, totalling \$10 billion, were extended in December 2020 with \$2 billion now expiring in 2021 and \$8 billion in 2025. Each facility includes a further one-year extension option at the discretion of each lender. Both remained undrawn at December 31, 2020. These core facilities and internally available liquidity provide back-up coverage for our CP programmes. In addition, in April 2020, to increase liquidity amid COVID-19-related uncertainties, Shell entered into a dual currency \$7.2 billion and EUR 4.4 billion revolving credit facility expiring in April 2021, with two six-month extension options at our discretion. This facility remains undrawn. The extension options have not been exercised, and the facility will expire in April 2021. Other than certain borrowing by local subsidiaries, we do not have any other committed credit facilities.

Our total debt increased by \$11.6 billion to \$108 billion at December 31, 2020. The total debt excluding leases will mature as follows: 16% in 2021; 6% in 2022; 7% in 2023; 6% in 2024; and 64% in 2025 and beyond. The portion of debt maturing in 2021 is expected to be repaid from a combination of cash balances, cash generated from operations, divestments and the issuance of new debt.

In 2020, we issued \$6.3 billion of bonds under our US shelf registration and \$6.7 billion equivalent under our EMTN programme. Periodically, for working capital purposes, we issued CP. We believe our working capital is sufficient for current requirements.

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

MARKET RISK AND CREDIT RISK

We are affected by the global macroeconomic environment as well as financial and commodity market conditions. This exposes us to treasury and trading risks, including liquidity risk, market risk (interest rate risk, foreign exchange risk and commodity price risk) and credit risk. See "Risk factors" on page 34 and Note 19 to the "Consolidated Financial Statements" on pages 251-255. The size and scope of our businesses require a robust financial control framework and effective management of our various risk exposures.

We utilise various financial instruments for managing exposure to commodity price, foreign exchange and interest rate movements. Our treasury and trading operations are highly centralised and seek to manage credit exposures associated with our substantial cash, commodity, foreign exchange and interest rate positions. Our portfolio of cash investments is diversified to avoid concentrating risk in any one instrument, country or counterparty. Other than in exceptional cases, the use of external derivative instruments is confined to specialist trading and central treasury organisations that have appropriate skills, experience, supervision, control and reporting systems. Credit risk policies are in place to ensure that sales of products are made to customers with appropriate creditworthiness, and include detailed credit analysis and monitoring of customers against counterparty credit limits. Where appropriate, netting arrangements, credit insurance, prepayments and collateral are used to manage credit risk. We maintain a committed credit facility. Management believes it has access to sufficient debt funding sources (capital markets) and to undrawn committed borrowing facilities to meet foreseeable requirements.

PENSION COMMITMENTS

We have substantial pension commitments, the funding of which is subject to capital market risks (see "Risk factors" on page 32). We address key pension risks in a number of ways. Principal among these is the Pensions Forum, chaired by the Chief Financial Officer, which oversees Shell's input to pension strategy, policy and operation. A risk committee supports the forum in reviewing the results of assurance processes in respect of pensions risks. In general, local trustees manage the funded defined benefit pension plans, with contributions paid based on independent actuarial valuations in accordance with local regulations. Our total employer contributions to funded and unfunded defined benefit pension plans were \$0.6 billion in 2020 and are estimated to be \$1.6 billion in 2021. See Note 17 to the Consolidated Financial Statements on pages 246-249.

Capitalisation table

	\$ million	
	December 31, 2020	December 31, 2019
Equity attributable to Royal Dutch Shell plc shareholders	155,310	186,476
Current debt	16,899	15,064
Non-current debt	91,115	81,360
Total debt [A]	108,014	96,424
Total capitalisation	263,324	282,900

[A] Of total debt, \$79.4 billion (2019: \$65.7 billion) was unsecured and \$28.6 billion (2019: \$30.7 billion) was secured. See Note 14 to the "Consolidated Financial Statements" on pages 241-243 for further disclosure on debt.

LIQUIDITY AND CAPITAL RESOURCES continued

STATEMENT OF CASH FLOWS

Cash flow from operating activities in 2020 was an inflow of \$34.1 billion, compared with \$42.2 billion in 2019, mainly due to lower earnings. The decrease in cash flow from operating activities in 2019, compared with \$53.1 billion in 2018, was mainly due to lower earnings and an unfavourable working capital impact.

Cash flow from investing activities in 2020 was an outflow of \$13.3 billion, compared with an outflow of \$15.8 billion in 2019. The decreased cash outflow was mainly due to lower capital expenditure in 2020. The increased cash outflow in 2019 compared with \$13.7 billion in 2018 was mainly due to lower proceeds from the sale of equity securities, partly offset by higher proceeds from sale of assets in 2019.

Cash flow from financing activities in 2020 was an outflow of \$7.2 billion, compared with outflows of \$35.2 billion in 2019 and \$32.5 billion in 2018, due to lower dividends payments to Royal Dutch Shell plc shareholders of \$7.4 billion (2019: \$15.2 billion; 2018: \$15.7 billion), net issuance of debt of \$5.6 billion (2019: \$3.4 billion net repayment; 2018: \$8.3 billion net repayment), and lower repurchases of shares of \$1.7 billion (2019: 10.2 billion; 2018: \$3.9 billion).

Cash and cash equivalents were \$31.8 billion at December 31, 2020 (December 31, 2019: \$18.1 billion; December 31, 2018: \$26.7 billion).

CASH FLOW FROM OPERATING ACTIVITIES

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

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

DIVESTMENT AND CASH CAPITAL EXPENDITURE

The level of divestment proceeds and cash capital expenditure in 2020 and 2019 reflects our discipline, and focus on capital efficiency and cash preservation.

Divestment proceeds

	2020	2019	\$ million 2018
Integrated Gas	503	723	3,156
Upstream	1,909	5,384	3,364
Oil Products	1,368	1,517	540
Chemicals	26	22	1
Corporate	205	225	3,405
Total divestment proceeds	4,010	7,871	10,465

Cash capital expenditure is used to monitor investing activities on a cash basis, excluding items such as lease additions which do not necessarily result in cash outflows in the period. The capital discipline demonstrated in 2020 allowed us to deliver cash capital expenditure of less than \$20 billion in line with the financial framework initiatives announced in March 2020.

Cash capital expenditure

	2020	2019	\$ million 2018
Integrated Gas	4,301	4,299	3,819
Upstream	7,296	10,205	12,134
Oil Products	3,328	4,907	4,643
Chemicals	2,640	4,090	3,212
Corporate	262	418	269
Total cash capital expenditure	17,827	23,919	24,078

Cash flow information [A]

		\$ billion	2020	2019	2018
Cash flow from operating activities excluding working capital movements					
Integrated Gas	10.8		14.8		16.3
Upstream	9.8		19.9		21.4
Oil Products	7.0		10.7		8.5
Chemicals	1.8		1.7		2.8
Corporate	0.1		(0.3)		0.7
Total	29.5		47.0		49.7
(A) Increase/(decrease) in inventories	4.5		(2.6)		2.8
(A) Increase/(decrease) in current receivables	9.6		(0.9)		2.0
Increase/(decrease) in current payables	(9.5)		(1.2)		(1.3)
(A) Increase/(decrease) in working capital	4.6		(4.8)		3.4
Cash flow from operating activities	34.1		42.2		53.1
Cash flow from investing activities	(13.3)		(15.8)		(13.7)
Cash flow from financing activities	(7.2)		(35.2)		(32.5)
Currency translation differences relating to cash and cash equivalents	0.2		0.1		(0.4)
Increase/(decrease) in cash and cash equivalents	13.8		(8.7)		6.4
Cash and cash equivalents at the beginning of the year	18.1		26.7		20.3
Cash and cash equivalents at the end of the year	31.8		18.1		26.7

[A] See the "Consolidated Statement of Cash Flows" on page 220.

DIVIDENDS

Subject to Board approval, Shell aims to grow the dividend per share by around 4% every year, and once the Group's net debt level has reached \$65 billion, the Group will target the distribution of 20-30% of its cash flow from operations to shareholders. The Group may choose to return cash to shareholders through a combination of dividends and share buybacks.

When setting the level of shareholder remuneration, the Board looks at a range of factors, including the macro-environment, the underlying business earnings and cash flow of Shell Group, the current balance sheet, future investment and divestment plans, and existing commitments. We returned \$7.4 billion to our shareholders through dividends in 2020.

The fourth quarter 2020 interim dividend of \$0.1665 per share will be payable to shareholders on the register at February 19, 2021. See Note 23 to the "Consolidated Financial Statements" on page 259. The Board expects that the first quarter 2021 interim dividend will be \$0.1735 per share, representing an increase of around 4% on the fourth quarter 2020 interim dividend.

PURCHASES OF SECURITIES

On July 26, 2018, the Company announced the commencement of a share buyback programme of at least \$25 billion, subject to further progress with debt reduction and oil price conditions. On March 23, 2020, the Company announced that in light of the economic and oil price environment, it had decided not to continue with the next tranche of the share buyback programme following the completion of the tranche announced on January 30, 2020. On April 14, 2020, the seventh tranche of the share buyback programme was completed, and no further tranches were undertaken in 2020.

As at December 31, 2020, 496 million A shares with a nominal value of €34.7 million (\$41.8 million) and 39 million B shares with a nominal value of €2.8 million (\$3.2 million) (6.85% of the Company's total issued share capital at December 31, 2020) had been cumulatively purchased and cancelled since the beginning of this programme, for a total cost of \$15.8 billion including expenses, at an average price of \$29.45 per share.

This was in accordance with the authorities granted by shareholders at the 2018 Annual General Meeting (AGM) for the Company to repurchase up to a maximum of 10% of its issued ordinary shares, excluding treasury shares (834 million ordinary shares), and at the 2019 AGM, to repurchase up to a maximum of 815 million ordinary shares, such authority to expire at the earlier of the close of business on August 21, 2020 and the end of the 2020 AGM. At the 2020 AGM, shareholders granted a renewal of this authority, to repurchase up to a maximum of 783 million ordinary shares, such authority to expire at the earlier of the close of business on August 19, 2021 and the end of the 2021 AGM. As at December 31, 2020, 783 million ordinary shares could still be repurchased under the current AGM authority. The purpose of the share repurchases in 2018 to 2020 was to reduce the issued share capital of the Company.

A new resolution will be proposed at the 2021 AGM to renew the authority for the Company to purchase its own share capital, up to specified limits, for a further year. This proposal will be described in more detail in the 2021 Notice of Annual General Meeting.

Shares are also purchased by the employee share ownership trusts and trust-like entities (see the "Other regulatory and statutory information" on page 185) to meet delivery commitments under employee share plans. All share purchases are made in open-market transactions.

The table below provides information on purchases of shares in 2020 by the Company and affiliated purchasers. Purchases in euros and sterling are converted into dollars using the exchange rate on each transaction date.

LIQUIDITY AND CAPITAL RESOURCES

continued

Purchases of equity securities by issuer and affiliated purchasers in 2020 [A]

Purchase period	A shares			B shares			A ADSs [B]	
	Number purchased for employee share plans	Number purchased for cancellation [C]	Weighted average price (\$)[D]	Number purchased for employee share plans	Number purchased for cancellation [C]	Weighted average price (\$)[D]	Number purchased for employee share plans	Weighted average price (\$)[D]
January [E]	—	23,106,521	29.63	—	—	—	1,003,452	59.76
February	—	11,306,918	25.32	—	5,518,503	24.45	—	—
March	—	12,229,299	18.48	—	9,904,356	14.88	133,692	31.25
April	813,021	3,905,280	18.19	1,874,926	7,800,412	17.31	—	—
May	—	—	—	—	—	—	—	—
June	—	—	—	—	—	—	20,109	35.09
July	—	—	—	—	—	—	—	—
August	—	—	—	—	—	—	—	—
September	—	—	—	—	—	—	26,570	26.74
October	—	—	—	—	—	—	—	—
November	3,244,447	—	15.68	113,348	—	13.9	1,509,662	31.36
December	2,783,283	—	18.52	—	—	—	934,246	36.87
Total 2020	6,840,751	50,548,018	24.14	1,988,274	23,223,271	17.9	3,627,731	40.62
January	—	—	—	—	—	—	1,525,265	37.23
Total 2021	—	—	—	—	—	—	1,525,265	37.23

[A] Reported as at settlement date

[B] American Depository Shares

[C] Under the share buyback programme

[D] Includes stamp duty and brokers' commission

[E] January 2020 number of A shares purchased for cancellation has been revised

CONTRACTUAL OBLIGATIONS

The table below summarises our principal contractual obligations at December 31, 2020, by expected settlement period. The amounts presented have not been offset by any committed third-party revenue in relation to these obligations.

Contractual obligations

	Less than 1 year	Between 1 and 3 years	Between 3 and 5 years	5 years and later	\$ billion
Debt [A]	12.8	10.3	12.9	42.3	78.3
Leases	6.1	9.6	7.1	20.0	42.8
Purchase obligations [B]	21.4	24.9	18.1	47.8	112.2
Other long-term contractual liabilities [C]	0.1	0.7	0.6	1.2	2.6
Total	40.4	45.5	38.7	111.3	235.9

[A] See Note 14 to the "Consolidated Financial Statements" on pages 241-243. Debt contractual obligations exclude interest, which is estimated to be \$1.8 billion payable in less than one year, \$3.3 billion between one and three years, \$2.9 billion between three and five years, and \$16.0 billion in five years and later. For this purpose, we assume that interest rates with respect to variable interest rate debt remain constant at the rates in effect at December 31, 2020, and that there is no change in the aggregate principal amount of debt other than repayment at scheduled maturity as reflected in the table. Leases definition follows IFRS 16, which was implemented as of January 1, 2019. Lease contractual obligations include interest.

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

[C] Includes all obligations included in "Trade and other payables" and provisions related to onerous contracts included in "Decommissioning and other provisions" in "Non-current liabilities" in the "Consolidated Balance Sheet" that are contractually fixed as to timing and amount. In addition to these amounts, Shell has certain obligations that are not contractually fixed as to timing and amount, including contributions to defined benefit pension plans (see Note 17 to the "Consolidated Financial Statements" on pages 246-249) and obligations associated with decommissioning and restoration (see Note 18 to the "Consolidated Financial Statements" on page 250).

GUARANTEES AND OTHER OFF-BALANCE SHEET ARRANGEMENTS

There were no guarantees and other off-balance sheet arrangements at December 31, 2020, or December 31, 2019, that were reasonably likely to have a material effect on Shell.

The Shell Transport and Trading Company Limited and BG Group Limited have each issued a dividend access share to Computershare Trustees (Jersey) Limited (the Trustee). For the years 2020, 2019 and 2018, the Trust recorded income before tax of £2,777 million, £5,484 million and £5,328 million respectively. In each period, this reflected the amount of dividends received on the dividend access shares.

At December 31, 2020, the Trust had total equity of £nil (December 31, 2019: £nil; December 31, 2018: £nil), reflecting assets of £7 million (December 31, 2019: £3 million; December 31, 2018: £3 million) and unclaimed dividends of £7 million (December 31, 2019: £3 million; December 31, 2018: £3 million). The Trust only records a liability for an unclaimed dividend, to the extent that dividend cheque payments have not been presented within 12 months, have expired or have been returned unpresented.

FINANCIAL INFORMATION RELATING TO THE ROYAL DUTCH SHELL DIVIDEND ACCESS TRUST

The results of operations and financial position of the Royal Dutch Shell Dividend Access Trust (the Trust) are included in the consolidated results of operations and financial position of Shell. Certain condensed financial information in respect of the Trust is given below. See "Royal Dutch Shell Dividend Access Trust Financial Statements" on pages 294-297.

ENVIRONMENT AND SOCIETY

OUR APPROACH TO SUSTAINABILITY

Our core values of honesty, integrity and respect for people – first laid out in the Shell General Business Principles more than 40 years ago – underpin our approach to sustainability.

A commitment to contribute to sustainable development was added in 1997. These principles, together with our Code of Conduct, apply to the way we do business and to our conduct with the communities where we operate.

Since 1997, we have worked to embed this sustainability commitment into our strategy, our business processes and decision-making. Sustainability is core to our project planning and operational activities. We aim to provide more and cleaner energy solutions in a responsible manner – in a way that balances short- and long-term interests, and that integrates economic, environmental, and social considerations into decision-making.

Today, we continue to build on these foundations while driving change across the organisation to help society meet its most pressing challenges, including those related to climate change, the environment, diversity and inclusion, and human rights. We seek the views of various groups and individuals about the role of an organisation like Shell in addressing these challenges.

Sustainability reporting boundary and guidelines

Data in this section are reported on a 100% basis in respect of activities where a Shell company is the operator (unless noted otherwise). Reporting on this operational control basis differs from that applied for financial reporting purposes in the "Consolidated Financial Statements" on pages 216-264. Detailed data and information on our 2020 environmental and social performance are expected to be published in the Shell Sustainability Report in April 2021.

We use certain guidelines to inform our reporting on sustainability issues:

- As a member of the World Business Council for Sustainable Development, we support the organisation's updated criteria for membership from 2022, which includes requirements for corporate transparency.
- We report in line with guidelines developed by IPIECA, the global oil and gas industry association for advancing environmental and social performance.
- The recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) help to guide and inform our reporting. For more information, see the "Climate change and energy transition" section.
- In January 2021, we agreed to adopt the Stakeholder Capitalism Metrics, a set of environmental, social and governance metrics released by the World Economic Forum and its International Business Council.

OUR STRATEGY: POWERING PROGRESS

In February 2021, we announced our updated business strategy, called Powering Progress. It has four main goals in support of our purpose – to power progress together by providing more and cleaner energy solutions:

- generating shareholder value: growing value through a dynamic portfolio and disciplined capital allocation;
- achieving net-zero emissions: working with our customers and across sectors to accelerate the transition to net-zero emissions;
- powering lives: powering lives through our products and activities, and by supporting an inclusive society; and
- respecting nature: protecting the environment, reducing waste and making a positive contribution to biodiversity.

Powering Progress is underpinned by our core values and our focus on safety. These include our commitment to doing business in an ethical and transparent way.

 For more information on what we mean by becoming a net-zero emissions business, please refer to "Climate change and energy transition" on pages 94-107.

IMPACT OF THE COVID-19 PANDEMIC – HELPING COLLEAGUES, CUSTOMERS AND COMMUNITIES

The COVID-19 pandemic continues to have a serious impact on people's health and livelihoods around the world. During 2020, we worked hard to assist in the global fight against the virus, and to support recovery efforts while taking care of our employees, our customers and the communities we work with.

In January 2020, Shell set up our Global Health Alert Monitoring Team to equip Shell staff and companies with information and guidance to remain operational in a responsible way. Certain elements of this approach were adopted as the industry standard by the joint health committee of two acknowledged industry associations: the International Association of Oil & Gas Producers (IOGP), and IPIECA, the global oil and gas industry association for advancing environmental and social performance.

More information on the steps we took to protect our staff is expected to be published in the Shell Sustainability Report in April 2021.

UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

The UN's 17 Sustainable Development Goals (SDGs) seek to address the world's biggest challenges, including ending poverty, improving health and education, making cities sustainable and tackling climate change.

Governments are responsible for prioritising and implementing approaches that meet the SDGs, but achieving these tasks will require unprecedented collaboration and collective action across businesses, governments and civil society.

We will play our part in helping governments and societies to achieve the SDGs. The goals were one of the considerations in the development of our Powering Progress strategy. Actions we take as part of our Powering Progress strategy can help directly contribute to 13 of the SDGs, while indirectly contributing to others. See our website shell.com for information on how Shell and our Powering Progress strategy are contributing to the SDGs.

BOARD OVERSIGHT FOR SUSTAINABILITY

We describe Shell's overall governance framework on pages 128-129. It provides information on the roles of the Board, its committees, and the Executive Committee. The Safety, Environment and Sustainability Committee (SESCo) advises the Board on safety, environment including climate change, and Shell's overall sustainability performance. More information on the SESCo's role and activities during 2020 is provided on page 143-144.

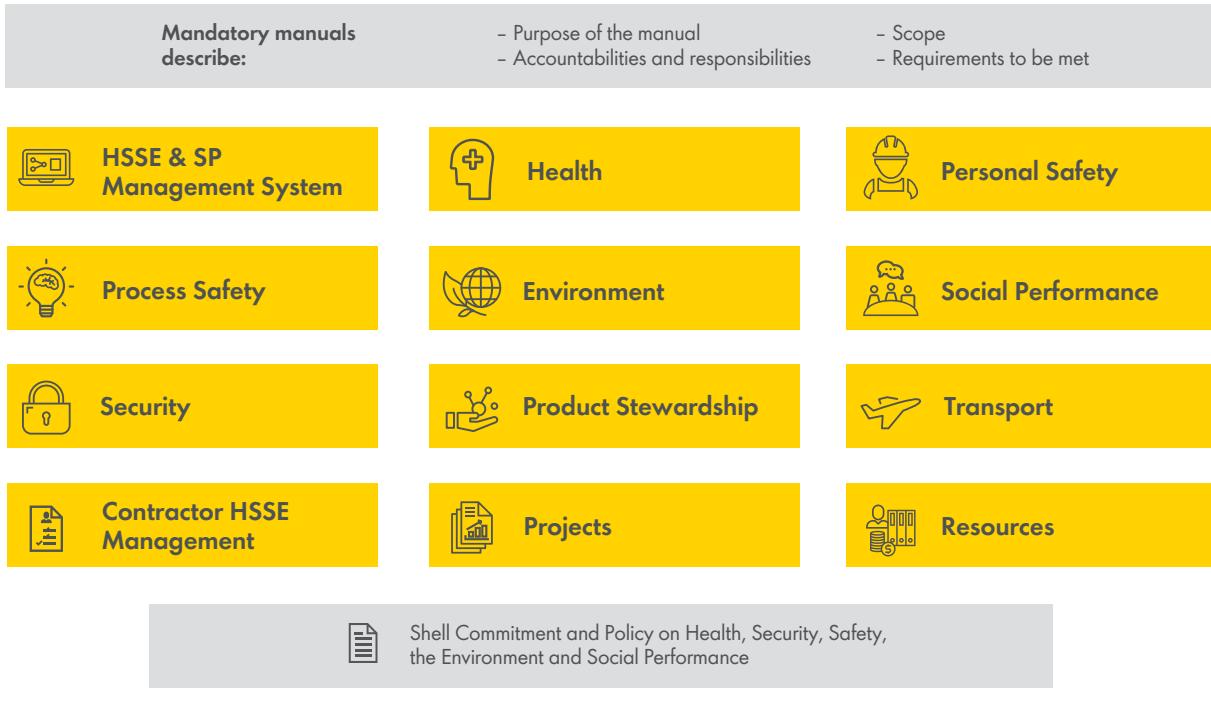
The Annual Report on Remuneration (see page 170) provides details of how the Shell scorecard captures key performance indicators for safety, environment and climate.

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, while seeking to protect the environment and establish mutually beneficial relationships with communities. All ventures that a Shell company operates must conduct their activities in line with our business principles.

HSSE & SP Control Framework

The HSSE & SP Control Framework defines mandatory standards, requirements and accountabilities. The framework applies to Shell entities and Shell-operated ventures, including employees and contractor staff.



HSSE & SP CONTROL FRAMEWORK

We aim to minimise the environmental impact of new projects and existing operations, and we engage with local communities and non-governmental organisations (NGOs) to understand and respond to their concerns. Shell conducts an environmental, social and health impact assessment for every major project. We determine whether a project qualifies as major by considering its cost and capacity, including the potential consequences of adverse incidents. This helps us to understand and manage how our projects could affect the surrounding environment and local communities. We have standards and a governance structure to help manage potential impacts. We are committed to the safety of our people and contractors. The Shell HSSE & SP Control Framework (CF) specifies the standards for health, safety, security, environment and social performance (HSSE & SP) and the scope for applying these standards. The CF consists of a series of mandatory manuals that align with the Shell Commitment and Policy on HSSE & SP and the Shell Code of Conduct. They are supported by guidance documents and complemented by assurance protocols.

The CF applies to every Shell entity and Shell-operated venture, including all employees and contract staff. The CF defines standards and accountabilities at each organisational level and sets out the procedures and processes that we require people to follow. We require that all significant HSSE & SP risks associated with our business activities are assessed and managed to make them as low as reasonably practicable. Our HSSE & SP functions provide expert advice and support for our businesses.

The Process Safety and HSSE & SP Assurance team provides assurance to the Board on the effectiveness of the HSSE & SP CF through an audit programme. The full Shell portfolio comprises about 200 organisational

groups covered by this programme. Audits are performed with a frequency of between three and five years, depending on the overall risk and complexity of a particular facility or organisational group. Overall, this results in a rolling five-year plan, with every annual plan being approved by the Board. On average, the assurance team conducts about 50 audits per year. The scope of the audits is designed to test risk areas as defined in the CF. This includes the overall HSSE & SP management system and specific requirements for areas such as personal safety, environment and contractor management. Based on audit outcomes, the audit frequency for an entity may be increased. Audit findings and action items identified are documented and tracked to completion by the relevant business.

We expect joint ventures not operated by Shell to apply standards and principles substantially equivalent to our own. We support these joint ventures in their implementation of these standards and principles, and we offer to assist them in their review of the effectiveness of their implementation. Even if such a review is not conducted, we periodically evaluate HSSE & SP risks faced by the ventures that we do not operate. If one of these joint ventures does not meet our HSSE & SP expectations, we seek to improve performance by working with our partners to develop and implement remedial action plans.

Shell aims to work with suppliers that behave in a safe, economically, environmentally and socially responsible manner. Our approach to suppliers is set out in our Shell General Business Principles and Shell Supplier Principles. These cover expectations in areas such as business integrity, health and safety, environment, and human rights.

SAFETY

A focus on safety is one of the pillars that supports our Powering Progress strategy. We build and operate our facilities with the aim of preventing incidents that may damage or harm our employees, contract staff, nearby communities, the environment or our assets. We strive to help improve safety throughout the energy industry by sharing our safety standards and experience with other operators, contractors and professional organisations, including the International Association of Oil & Gas Producers (IOGP) and the Energy Institute.

Safety risks are managed across our businesses through the use of standards, controls and compliance systems. We combine this with a culture of care and an ambition to learn and continually improve. We strive to reduce risks and to minimise the potential impact of any incident.

Our standards also apply to any joint ventures we operate. 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 require and assure ourselves that people responsible for tasks involving a significant safety hazard have the necessary training, skills and competencies. We also take human performance into account when deciding how to approach safety. This means that in order to minimise the risk of people being harmed, we seek to optimise the way people, culture, equipment, work systems and processes interact.

We employ many contractors and we work with them so that they understand our safety requirements. Together we seek to improve safety performance by building skills and expertise, and by creating an inclusive and safe work environment. We expect everyone working for us to comply with our mandatory Life-Saving Rules which set out simple "do's and don'ts" for activities with the highest potential safety risks. Employees are expected to discuss, coach and intervene so that everyone understands how the rules apply to a particular work task. If employees break these rules, we seek to understand why, but individuals may face disciplinary action up to and including termination of employment if they do not follow the Life-Saving Rules. If contract staff break the Life-Saving Rules, they can be removed from the worksite.

The COVID-19 pandemic necessitated new kinds of risk assessments beyond those that are normally conducted in our industry. The results led to us adopting extra measures to take care of our employees, our contractors, our customers and the communities we work with. We identified potential impacts beyond our local operations, and we continue to work hard to help the global fight against the virus and to support recovery efforts.

We took many practical steps to protect the health of our staff, including requiring or encouraging office-based staff to work from home, based on the advice of local authorities. From March 2020, the average occupancy rate of our 18 largest offices fell to around 10% for the rest of the year. Our information technology (IT) teams ensured that thousands of people could work from home each day. At the same time, measures were taken to protect colleagues' health where operations had to be maintained by staff on sites. We created a wide range of tools and resources which also addressed potential mental, physical and social health issues. For example, we set up a programme called Care for Self to encourage staff to pay attention to their physical and mental well-being, and to support them as they did so.

Safety strategy

In 2019, the Board and the Executive Committee spent considerable time reflecting on the worrying safety performance, measured by the number of fatalities, and what needed to change across Shell to prevent fatalities and all other serious incidents. This included conducting a full review of Shell's safety approach, which covered the effectiveness of current preventative tools, such as the Life-Saving Rules and Goal Zero ambition.

We have made progress in improving the safety of operations since the early 2000s. This was largely because of a stronger safety culture, guided by our Goal Zero ambition to achieve no harm and no leaks, more effective standards, and requirements such as the Life-Saving Rules. In recent years the vast majority of fatalities had no link to a breach of the Life-Saving Rules. Sadly, we have been unable to eliminate all fatal incidents involving Shell employees and contractors.

In 2020, we started what is expected to be a multi-year effort to refresh our approach to safety. The purpose is to avoid life-changing injuries and fatalities by building on existing strong foundations. We aim to achieve this with an increased and deliberate focus on human performance. We recognise that people are key to executing complex tasks and to finding solutions to problems. We call the belief that we can always improve, enhance individual capabilities, learn from mistakes and successes, and speak up without being punished a learner mindset. We seek to create conditions that encourage employees and contractors to share ideas and concerns without fear of rejection or punishment. In addition to specific training, events like our annual Safety Day 2020 provided Shell teams and contractors with the chance to reflect on this concept.

We are now building on our current approach to safety with a more consistent focus on the way people, culture, equipment, work systems and processes all interact. The majority of our fatalities over the last five years were down to the complex interaction between these elements. We aim to better understand the gap between how we anticipate work will be done safely and how the work is actually carried out. We continue to work to prevent incidents by maintaining safety barriers and providing training. We acknowledge that people make mistakes and not all incidents may be preventable. As a result, we started to focus more on how people can "fail safely", and on their response in the moment to avoid the risk of a serious injury. This approach is a change of philosophy, put into practice by improving processes for planning and completing work, and debriefing afterwards. In 2020, tangible changes were piloted and deployed for application by employees and contractors. For example, in 2020, we used earlier experience with drones, remote sensing technology, robots and digital technology, such as augmented reality, as lockdowns caused by the COVID-19 pandemic disrupted the movement of people. This technology enabled us to carry out more remote monitoring and to continue to assure data to meet safety and environmental performance reporting standards.

Personal and process safety

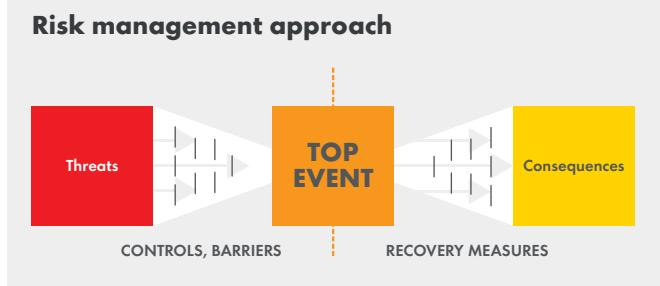
We continue to strengthen the safety culture and leadership among our employees and contract staff. This aligns with our focus on caring for people. Our safety goal is to achieve no harm and no leaks across all Shell company operations. We call this our Goal Zero ambition.

We expect everyone to consider two aspects of their tasks: the hazards that could potentially cause serious harm, and the effectiveness of the barriers in place to avoid serious harm if an incident occurs. In addition to our ongoing safety awareness programmes, we hold an annual global Safety Day to give employees and contractors time to reflect on how to prevent incidents. During Safety Day 2020, we asked all our staff and contractors to reflect on the importance of showing care for each other and ensuring that we are in control of risks with robust barriers in place, particularly under the current challenges of the pandemic. More information on how we implement these measures is expected to be published in our Shell Sustainability Report in April 2021.

Process safety management is about keeping hazardous substances inside pipes, tanks and vessels, and ensuring that well fluids are contained during well construction and well intervention so that they do not harm people or the environment. It starts at the design and construction stage of projects and continues throughout the life cycle of facilities to ensure they are safely operated, well maintained and regularly inspected. Our global

standards and operating procedures define our expectations for the controls and physical barriers required to mitigate risks of incidents. For example, to mitigate the risk of an uncontrolled release of hydrocarbons, offshore wells are to be designed with at least two independent barriers in the direction of flow. We regularly inspect, test and maintain these barriers to ensure they meet our standards. In the event of a loss of containment such as a spill or a leak, our standards require the use of independent recovery measures to stop the release from becoming catastrophic. This system of barriers and recovery measures is called a "bow-tie", a model that visually represents a system where personal and process safety hazards are managed through prevention and response barriers.

We have embedded a set of process safety fundamentals to strengthen barriers that involve critical safety tasks carried out by frontline staff. These fundamentals provide guidelines for good operating practice that should prevent unplanned releases.



We routinely prepare and practise our emergency response to potential incidents such as a spill or a fire. This involves working closely with local services and regulatory agencies to jointly test our plans and procedures. These tests continually improve our readiness to respond. If an incident does occur, we have procedures to reduce the impact on people and the environment.

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, NGOs and governments to find ways of reducing transport safety risks.

Shell employees and contractors drove a combined distance of around 470 million kilometres on business in 2020 in over 50 countries. We run road safety programmes that promote safe driving techniques and behaviour in a number of countries where we operate, for example in India, Malaysia, and the UK. We require everyone driving more than 7,500 kilometres a year on Shell company business on public roads and those who drive in countries with higher road safety risks to take a defensive driving course. We also run an annual online defensive driving course for all who drive on public roads while on Shell company business. Fatigue is one of the most significant risks when on the road. In 2020, at the Shell-operated QGC facility in Queensland, Australia, we worked with four universities and eight contracting companies to evaluate fatigue detection devices and to find the one that performed best in testing. The collaboration was the largest of its kind and involved evaluating around 100 devices on long stretches of Australia's road network. As a result, we aim to start introducing recommended devices in Malaysia in 2021.

We also work to improve general road safety in several communities and countries where we operate, through organisations such as the Global Road Safety Partnership. For example, in India, we continue our road safety campaign which includes eye testing of third-party professional drivers. In 2020, around 20,000 Shell employees and contractors completed such testing.

Safety performance

In 2020, despite the unprecedented challenges faced, Shell and its contractor partners had the safest year that we have ever experienced. It was the first year with zero fatal injuries, and also the best ever process safety performance at ventures operated by Shell. Tragically, two contractors died after they caught COVID-19 during the course of their work for Shell.

Our Total Recordable Case Frequency (injuries per million working hours) was 0.7 in 2020, compared with 0.9 in 2019. There were 103 operational Tier 1 and 2 process safety events in 2020, compared with 130 in 2019. Detailed information on our 2020 safety performance is expected to be published in the Shell Sustainability Report in April 2021.

From 2021, the Total Recordable Case Frequency (TRCF) will be replaced on the Group scorecard by Serious Incidents and Fatalities Frequency (SIF-F). The new metric reflects the number of serious incidents and fatalities per 100 million working hours. The Executive Committee and the Safety, Environment and Sustainability Committee (SESCo) have endorsed the change. Several industry safety leadership groups confirm that root causes for serious and high-potential incidents are often different from the majority of lower-consequence events. Shell's shift is intended to help focus attention on improving its safety systems, and it targets the prevention of life-altering injuries, which aligns with the emphasis on human performance and Goal Zero. We will continue to report on TRCF for benchmarking purposes.

We require incidents to be investigated so we can understand the underlying causes, including technical, behavioural, organisational and human factors. We share learnings and implement mitigations at the site and in the country and business where the incident occurred. We seek to turn incident findings into improved standards or better ways of working that can be applied widely across similar Shell facilities. This is part of embedding the learner mindset approach across the organisation and engaging with contractors to share these learnings.

For example, in 2020, we continued to implement learnings from a tragic roll-over incident that occurred in Pakistan in 2017 and which was not under our operational control. Pakistan continues to be among the countries with the highest risks for road transport. The investigation offered several learnings. Our focus has now moved from technical standards to driver professionalism, including aspects such as fitness to work, training and coaching on the job. One of the most significant risks when on the road is fatigue. Shell Pakistan Limited is managing this through the creation of enhanced awareness for this topic, reduced duty hours and better rest facilities.

In 2021, Shell will take a further step to focus our efforts to enhance safety. We will transition from applying our 12 Life-Saving Rules to using the simplified set of nine Life-Saving Rules of the International Association of Oil & Gas Producers (IOGP). A common approach across the industry makes working within the supply chain easier and can accelerate the adoption of safety measures.

ENVIRONMENT

For many years we have had guiding principles and standards that seek to protect the environment. Now we are stepping up our environmental ambitions and shaping them to contribute to the UN Sustainable Development Goals.

Our environmental ambitions include protecting and enhancing biodiversity – the plant and animal life that is vital for the planet. We are also focusing on using water and other resources more efficiently across all our activities, reusing as much of them as we can.

We are reducing waste from our operations and increasing recycling of plastics. We are helping to improve air quality by reducing emissions from our operations and providing cleaner ways to power transport and industry. Working with our partners and suppliers and developing new collaborations is key. We will join with others across industry, governments, our customers and supply chains to protect nature.

In February 2021, we launched our new environmental framework which focuses on four priority areas: biodiversity, water, circular economy and waste, and air quality. We have set environmental ambitions for 2030 and later, as well as shorter-term goals:

- We will reduce the amount of fresh water consumed in our facilities, starting by reducing fresh-water consumption by 15% by 2025 compared with 2018 levels in areas where there is high pressure on fresh-water resources.
- By 2030, we will increase the amount of recycled plastic in our packaging to 30% and ensure that the packaging we use for our products is reusable or recyclable.
- We are aiming for zero waste by increasing reuse and recycling in our business and supply chains.
- We will demonstrate an overall positive impact on biodiversity from our new projects in areas rich in biodiversity, called critical habitats. This will include investing in conservation and taking steps to safeguard and, where possible, enhance local environments.

We will continue to look for opportunities to go further and will report our progress in a transparent way. We use external standards and guidelines, such as those developed by the World Bank and the International Finance Corporation, to inform our approach. We follow global environmental standards for managing our emissions and discharges, for conserving biodiversity, and for minimising our water use and impact on water resources.

Shell's global environmental standards cover our environmental performance. They include details of how to manage emissions of greenhouse gases (GHG), consume energy more efficiently, reduce gas flaring, prevent spills and leaks of hazardous materials, use less fresh water and conserve biodiversity. We seek to apply our global environmental standards wherever we operate. When planning new major projects, we conduct detailed environmental, social and health impact assessments.

 See also "Control Framework" on page 86, more information on how we manage our GHG emission in "Climate change and energy transition" on page 106, and read about our new environmental framework on our website shell.com.

We believe some areas are too sensitive to enter. Therefore, we made the commitment that we will not explore for or develop oil and gas resources in natural and/or cultural World Heritage Sites.

We aim to minimise the impact of our projects on biodiversity and ecosystems by applying the mitigation hierarchy, a decision-making framework that involves a sequence of four key actions: avoid, minimise, restore and offset. We first aim to avoid impacts on biodiversity and ecosystems. Where our operations have affected biodiversity and communities that rely on biodiversity for their livelihoods, we seek to help restore damaged habitats. We also look for opportunities to make a positive contribution to conservation, also known as a net-positive impact (NPI). For example, to offset and compensate for clearing vegetation and habitat while developing gas resources, the Shell-operated QGC gas project in Australia manages the Valkyrie property, an area with a rich ecosystem. We monitor and measure the impact and seek ways to improve the mitigation strategy.

Managing our impacts on water and ensuring the availability of fresh water is a growing challenge in some parts of the world. Increasing demand for water resources, growing stakeholder expectations and concerns, and water-related legislation may reduce the access to water for our operations. We manage water use carefully, and tailor our use of fresh water to local conditions and requirements. We sometimes use alternatives to fresh water in our operations. These include water that has been recycled from our operations, processed sewage water and desalinated water. For example, the QGC project in Australia produces liquefied natural gas (LNG) from natural gas in a water-scarce region of the Surat Basin in Queensland. Water is produced as a natural by-product during the extraction of gas. Two water plants treat the produced water so that it is suitable for use by local farmers, industry and town water suppliers. We require that all Shell company facilities and projects are assessed to see what risks they might pose to water availability. In places where water is scarce, we develop water-management action plans for using less fresh water, increasing water recycling and closely monitoring water use.

In 2020, our intake of fresh water was 171 million cubic metres, compared with 192 million cubic metres in 2019. The reduction was partly because of divestments in Canada and the USA. Around 90% of our fresh water intake was used for manufacturing oil products and chemicals, with the rest mainly used for oil and gas production. Around 35% of fresh water intake was from public utilities, such as municipal water supplies, with the rest taken from surface water such as rivers and lakes (around 55%) and groundwater (around 10%).

Detailed information on our 2020 environmental performance is expected to be published in the Shell Sustainability Report in April 2021.

 See "Climate change and energy transition" on page 106 for more information on how we manage our GHG emissions.

SPILLS

Large spills of crude oil, oil products and chemicals associated with our operations can harm the environment, and result in major clean-up costs, fines and other damages. They can also affect our licence to operate and harm our reputation.

We have requirements and procedures designed to prevent spills. We design, operate and maintain our facilities with the intention of avoiding spills. To further reduce the risk of spills, Shell has routine programmes to reduce failures and maintain the reliability of facilities and pipelines. Our business units are responsible for organising and executing spill responses in line with Shell guidelines and relevant legal and regulatory requirements. Our offshore installations have spill response plans for when an incident occurs. These plans set out response strategies and techniques, available equipment, and trained personnel and contracts. We can engage specialist contracted services for oil-spill response, including vessels, aircraft or other equipment and resources, if required, for large spills. We conduct regular exercises that seek to ensure these plans remain effective and fit for purpose.

ENVIRONMENT AND SOCIETY continued

We have further developed our ability to respond to spills to water, and we maintain a global response support network of trained staff to support our worldwide response capability. This is also supported by our global oil spill expertise centre, which tests local capability and maintains our ability globally to respond to a significant spill into a marine environment.

We are involved in several industry consortia formed to improve well-containment capabilities. Shell Offshore Response Company LLC is a founding member of the Marine Well Containment Company, a non-profit industry consortium providing a well-containment response system for the Gulf of Mexico. Shell Response Limited was a founding member of the Subsea Well Response Project, an industry cooperative effort to enhance global well-containment capabilities, which has since become Oil Spill Response Limited, an industry consortium.

Site-specific emergency response plans are maintained in case there is an onshore spill. Like the offshore response plans, these are designed to meet Shell guidelines and relevant local legal and regulatory requirements. The onshore response plans also provide for the initial assessment of incidents and the mobilisation of resources to manage them. In the event of spills on land, businesses are supported by our global Soil & Groundwater team which reviews and implements appropriate remedies. The global Soil & Groundwater Team is engaged throughout the life cycle of our assets. For example, during acquisition and divestment of assets, the team conducts due diligence to identify land contamination liabilities. Through research and development initiatives, the team collaborates with regulators in developing, modifying, and applying sustainable remediation techniques.

Spills still occur for reasons such as operational failure, accidents or unusual corrosion. In 2020, there were 68 operational spills of more than 100 kilograms compared with 67 in 2019. The weight of operational spills of oil and oil products in 2020 was 0.4 thousand tonnes, compared with 0.2 thousand tonnes in 2019. At the time of publication of this Report, there were four spills under investigation in Nigeria that may result in adjustments.

Spills in Nigeria

In the Niger Delta, over the last 10 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 Nigeria's Niger Delta region continue to be caused by crude oil theft or sabotage of oil and gas production facilities, and by illegal oil refining, including the distribution of illegally refined products.

In 2020, the Shell Petroleum Development Company of Nigeria Limited (SPDC) managed to reduce the number of operational spills of more than 100 kilograms to around 0.02 thousand tonnes of crude oil (10 incidents) compared with around 0.03 thousand tonnes of crude oil (seven incidents) in 2019. This was a year-on-year reduction in operational spills of one-third by weight.

To reduce the number of operational spills, SPDC has an ongoing work programme to appraise, maintain and replace key sections of pipelines and flow lines. Over the last nine years, about 1,330 kilometres of pipelines and flow lines have been replaced. This is organised through a pipeline and flow line integrity management system that proactively addresses pipeline integrity. It puts barriers in place where necessary, and recommends when and where pipeline sections should be replaced to prevent failures. In 2018, this integrity management system was enhanced to manage threats arising from frequent pipeline sabotage or vandalism.

Spills caused by sabotage reduced in 2020

In 2020, about 90% oil spills of more than 100 kilograms from the SPDC joint venture's facilities were caused by the illegal activities of third parties. In 2020, the volume of crude oil spills of more than 100 kilograms caused

by sabotage was 1.4 thousand tonnes (122 incidents), compared with 2.3 thousand tonnes (156 incidents) in 2019. The decrease in incidents and volumes was because of improved security and surveillance, including community-based pipeline surveillance.

SPDC continues to undertake initiatives to prevent and reduce spills caused by theft from or sabotage of its facilities in the Niger Delta. In 2020, 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 also daily overflights of the most vulnerable segments of the pipeline network to identify any new spills or illegal activity. SPDC has also introduced anti-theft protection mechanisms for key infrastructure such as wellheads and manifolds. The programme to protect wellheads with steel cages continues to help deter theft.

By the end of 2020, 364 cages had been installed, including 73 cages upgraded with CCTV. Only 15 breaches were successful out of 1,706 registered attempts.

Faster response and remediation

Irrespective of the cause, SPDC works to clean up and remediate areas affected by spills originating from its facilities. SPDC reduced the average time to complete recovery of free-phase oil – oil that forms a separate layer and is not mixed with water or soil – from about 13 days in 2016 to about one week in 2020. This is the average time it takes to safely access a damaged site to start joint investigation visits (JIV) with regulators, impacted communities, and in some cases with non-governmental organisations, to clean up oil not mixed with water or soil.

Clean-up activities include bio-remediation which stimulates micro-organisms that naturally break down and use carbon-rich oil as a source of food and energy, effectively removing it. Once clean-up and remediation operations are completed, the work is inspected and, if satisfactory, approved and certified by the Nigerian regulators. With operational spills, SPDC also pays compensation to affected people and communities.

SPDC has been working with the International Union for Conservation of Nature (IUCN) since 2012 to enhance remediation techniques and protect biodiversity at sites affected by oil spills in SPDC's areas of operation in the Niger Delta. Based on this collaboration, SPDC has launched further initiatives to help strengthen its remediation and restoration efforts. In 2020, SPDC, IUCN, the Nigerian Conservation Foundation and Wetlands International worked together on the Niger Delta Biodiversity Technical Advisory Group, which continues to monitor biodiversity recovery at remediated sites.

SPDC also works with a range of stakeholders in the Niger Delta to build greater trust in spill response and clean-up processes. Local communities participate in remediation work for operational spills. Due to the restrictions of COVID-19 there were fewer opportunities to collaborate but the engagement and partnership with communities continued. Various NGOs have sometimes gone on joint investigation visits with SPDC, government regulators and members of affected communities to establish the cause and volume of oil spilled.

SPDC has also implemented several programmes to raise awareness of the negative effects of crude oil theft and illegal oil refining. Examples include community-based pipeline surveillance, and promoting of alternative livelihoods through Shell's flagship youth entrepreneurship programme, Shell LiveWIRE.

Bodo clean-up process

In 2015, SPDC, on behalf of the SPDC joint venture and the Bodo community, signed a memorandum of understanding (MOU) granting SPDC access to begin cleaning up areas affected by two operational spills that occurred in 2008. The MOU also provided for the selection of two international contractors to conduct the clean-up under the oversight of an independent project director. The clean-up project was delayed in 2016 and for most of 2017 because of access challenges from the community. Engagement with the Bodo community and other stakeholders began in September 2015 and was managed by the Bodo Mediation Initiative.

After two years of engagement, in September 2017, it was possible to start the first phase of clean-up and remediation activities. The clean-up consists of three phases:

- 1) removal of oil floating on water surfaces;
- 2) remediation of soil; and
- 3) planting of mangroves and monitoring.

The first phase was completed in August 2018. The contract procurement process for phase two was completed in 2019. Remediation activities in the field started in November 2019. During 2020, work had to be put on hold because of COVID-19 restrictions. Currently, we expect to finalise the activities by about May 2023.

In 2020, the Niger Delta Biodiversity Technical Advisory Group assessed the initial field reports from two pilot sites containing freshwater and swamp forests. The advisory group set out its aims and timeline for work at both sites. Field visits to these remote locations were disrupted by COVID-19 restrictions. The advisory group is also analysing other potential pilot sites identified by SPDC, and planning an engagement session with regulatory agencies in Nigeria.

Ogoniland: commitment to the United Nations Environment Programme

SPDC remains committed to the implementation of the 2011 United Nations Environmental Programme (UNEP) Report on Ogoniland which assessed contamination from oil operations in the region and recommended actions to clean it up. Over the last nine years, SPDC has acted on all and completed most of the UNEP recommendations that were specifically addressed to it as the operator of the joint venture.

The clean-up efforts are led by the Hydrocarbon Pollution and Remediation Project (HYPREP), an agency established by the federal government. In 2018, HYPREP awarded contracts for the first set of remediation projects. In 2019, 21 contractors started operations on 21 lots which add up to 12 of the 67 polluted sites recorded in the UNEP report. Of those 67 sites, two are waste sites without hydrocarbon pollution. In January 2020, HYPREP awarded a further 29 contracts for remediation on 29 lots covering eight polluted sites. The contractors took up remediation activities in the fourth quarter of 2020. Although remediation works continue to make progress, challenges remain. These include re-pollution, lack of contractor funding, land disputes and security issues in Ogoniland.

The UNEP report recommended creating an Ogoni Trust Fund (OTF) with \$1 billion capital, to be co-funded by the Nigerian government, the SPDC joint venture and other operators in the area. The SPDC joint venture remains fully committed to contributing \$900 million to the fund as its share over five years. SPDC JV partners contributed the first instalment of \$180 million for the clean-up by July 2018 and released the second instalment of \$180 million in 2019. HYPREP did not request the release of any funds in 2020. The UNEP continues to monitor the progress of the clean-up exercise via its observer status at both the HYPREP's Governing Council and the Ogoni Trust Fund. Its agencies such as UNDP, UNITAR and UNOPS provide services to HYPREP in the areas of livelihood programmes, training and project services.

HYDRAULIC FRACTURING

Shale oil and gas resources remain a critical part of a modern energy system as we move towards renewable sources. Shale resources are abundant and offer a relatively affordable source of energy. According to US Energy Information Administration (EIA) estimates, there are 7,576.6 trillion cubic feet of unproven technically recoverable wet shale gas resources and 418.9 billion barrels of unproven technically recoverable tight oil resources spread across 46 countries. We believe that developing these resources is critical for meeting the energy needs of growing societies around the world.

The oil and gas industry has used hydraulic fracturing to unlock tight/shale oil and gas resources in vertical wells for decades. In the past 20 years, hydraulic fracturing has also been used in horizontal wells to recover natural gas and oil. The technology has opened up vast resources that were previously thought to be unrecoverable. Hydraulic fracturing has been used by the industry in more than 2.5 million oil and gas wells, many of them in the USA. Hydraulic fracturing involves pumping a fluid that is typically 99.9% water and sand and around 0.1% chemical additives into tight sand or shale rock at high pressure. This creates threadlike fissures – typically the diameter of a human hair – in the rock, making space through which the hydrocarbons can flow more easily.

At Shell, we believe we can explore, develop and produce tight/shale oil and gas resources safely and responsibly. Our operations are underpinned by our Principles for Producing Tight/Shale Oil and Gas (known as Onshore Operating Principles). These provide a framework for protecting the environment and the communities in which we operate. These operating principles cover safety, air quality, water protection and usage, land use and engagement with local communities. We review the Onshore Operating Principles annually and update them as new technologies, challenges and regulatory requirements emerge. We also support appropriate and fit-for-purpose regulations.

We work to reduce greenhouse gas (GHG) emissions associated with our oil and gas development and production. Shell's shale assets implement GHG management plans and have a robust Leak Detection and Repair (LDAR) programme. We are working on multiple fronts to develop cutting-edge technologies that enhance our LDAR programme and enable earlier detection and repair of leaks. As per the Onshore Operating Principles, we seek to minimise routine gas flaring at shale assets. See our website shell.com for more information about the GHG management practices, such as the "Onshore Operating Principles in Action: Methane Fact Sheet".

See also "Climate change and energy transition" on page 106.

The availability and quality of water, local environmental conditions and regulatory requirements vary from basin to basin. Therefore, each shale asset develops a tailor-made water management strategy, identifying short- and long-term water needs, options for water sourcing, recycling and sharing, options for treatment and disposal, and options for transportation and storage. The people operating our shale assets aim to minimise the use of water. Depending on local hydro-geologic conditions, they typically use a combination of fresh water, brackish groundwater, produced water and waste water. They actively strive to reduce and ideally eliminate freshwater intake for drilling and hydraulic fracturing operations, by increasing recycling capacity and using municipal water.

Potable groundwater aquifers are isolated from the hydrocarbon-producing shale formations by hundreds of metres of impermeable rock. We often need to drill through potable groundwater aquifers to reach shale formations. We therefore design our drilling, hydraulic fracturing and production activities in ways that aim to maintain isolation from potable groundwater aquifers. Before drilling a well, we conduct a hazard

ENVIRONMENT AND SOCIETY continued

assessment in which we analyse risks to groundwater aquifers and develop control measures to reduce those risks. When we drill, we have at least two physical barriers, consisting of steel casing and cement, between the wellbore and potable groundwater aquifers. We continuously monitor wellbore integrity before, during and after hydraulic fracturing and during production activities.

Chemical additives are needed in hydraulic fracturing fluid to carry sand, reduce friction and prevent the growth of bacteria. We have been working to optimise the composition of our hydraulic fracturing fluids since 2015. As a result, we have reduced chemical additive volumes by around 50-60% compared with 2015. Currently, on a volume basis, around 0.1% of our hydraulic-fracturing fluid is chemical additives. We support disclosure of the chemical additives used in hydraulic-fracturing fluids for Shell-operated wells. See our website shell.com for more information about our water management practices, such as the "Onshore Operating Principles in Action: Water Fact Sheet".

SEISMICITY

As oil and gas fields mature, seismic activity may occur, depending on the unique geology of individual fields. An example is the Groningen onshore gas field in the Netherlands, where induced earthquakes have occurred since the 1990s. Some of these earthquakes have damaged houses and other structures in the region, resulting in complaints, claims and lawsuits from local home-owners and residents. Actions have been taken to improve safety, liveability and economic prospects in the region. Nederlandse Aardolie Maatschappij B.V. (NAM, Shell interest 50%) operates the gas field. The Dutch government has taken over policy setting and execution of these mitigating actions and the "duty of care" from NAM. NAM continues to carry the costs. The government is also currently instructing NAM on production levels. Production from the onshore Groningen gas field in the Netherlands is expected to stop by 2022 or shortly thereafter.

 See "Upstream" on page 55.

Overall, we believe it is relatively unlikely that hydraulic fracturing or well operations for disposing of produced water will induce seismicity that is felt on the surface. Despite this, Shell still takes precautionary measures around induced seismicity, and proactively manages the risk in accordance with, and sometimes beyond, regulatory requirements. We have added precautionary measures around induced seismicity to our Onshore Operating Principles and developed internal guidelines that we apply to our shale assets. They outline a risk assessment process and provide a framework for risk management. Subsurface and surface conditions vary from basin to basin, which means that management practices need to reflect the risk profile of each basin and provide customised responses to the risks. We support fit-for-purpose, science-based state and provincial regulations. See our website shell.com for more information about our induced seismicity management practices, such as the "Onshore Operating Principles in Action: Induced Seismicity Fact Sheet".

ENVIRONMENTAL COSTS

We are subject to a variety of environmental laws, regulations and reporting requirements in the countries where we operate. Infringing any of these laws, regulations and requirements could harm our reputation and ability to do business, and result in significant costs, including clean-up costs, fines, sanctions and third-party claims.

Ongoing operating expenses include the costs of preventing unauthorised discharges into the air and water, and the safe disposal and handling of waste.

We place a premium on developing effective technologies that are also safe for the environment. But when operating at the forefront of technology, there is always the possibility that a new technology has environmental impacts that were not assessed, foreseen or determined to be harmful when originally implemented. While we believe we take reasonable precautions to limit these risks, we could be subject to additional remedial, environmental and litigation costs as a result of operations' unknown and unforeseen impacts on the environment. Although these costs have so far not been material to us, no assurance can be given that this will always be the case.

SECURITY

Our operations expose us to criminality, civil unrest, activism, terrorism, cyber-disruption and acts of war that could have a material adverse effect on our business (see "Risk factors" on pages 28-37). We seek to obtain the best possible information to enable us to assess threats and risks. This includes building strong and open relationships with government security agencies. Risk mitigation includes strengthening the security of sites, reducing our exposure as appropriate, journey management, information risk management, crisis management and business continuity measures. We conduct training and awareness campaigns for staff, and provide them with travel advice and access to 24/7 assistance while travelling. We consistently verify the identity of our employees and contract staff, and control their access to our sites and activities, both physical and logistical. We manage and exercise crisis response and management plans.

CONTRIBUTION TO SOCIETY

Shell's businesses are part of society and contribute to it by buying and selling goods and services across economies in various countries and jurisdictions. Our employees, suppliers and contractors are part of the local communities where Shell operates.

In 2020, Shell paid \$47.3 billion to governments (2019: \$61.3 billion). We paid \$3.4 billion in corporate income taxes and \$3.5 billion in government royalties, and collected \$40.4 billion in excise duties, sales taxes and similar levies on our fuel and other products on behalf of governments. In 2020, Shell spent \$39.3 billion (2019: \$44.9 billion) on goods and services from more than 29,000 suppliers globally. For more information about our approach to tax and transparency, see Shell's Tax Contribution Report, available via our website shell.com.

Supply chain engagement

Our suppliers are critical to our ability to run our businesses. They are involved in almost every step of our operations – and are often key to having a positive impact on local communities and achieving successful business outcomes. 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.

The way we engage with our contractors and suppliers is based on our Shell Supplier Principles which are embedded in contracts. They require contractors and suppliers:

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

More information about how we engage with contractors and suppliers is expected to be published in the Shell Sustainability Report in April 2021.

NEIGHBOURING COMMUNITIES

Engaging with communities is part of our approach to managing human rights and providing access to remedy. Our global requirements for social performance aim to ensure that we operate responsibly by avoiding or minimising the negative social effects of our operations. The requirements also help us to maximise the benefits of our activities, such as employment and contractual opportunities that can support local economies.

The requirements set clear rules and expectations for how we engage with and respect communities that may be affected by our operations. We require major projects and facilities operated by Shell to have a social performance plan that defines actions for managing potential negative and positive effects on communities. A key part of these plans is identifying the social environment and stakeholders who may be vulnerable to our operations. Another key component is an appropriate community feedback mechanism for listening to queries and responding to them, or resolving complaints in a timely manner. We have specific requirements to avoid, minimise or mitigate potential impacts on the traditional lifestyles and cultural heritage of indigenous people. We also have specific requirements to avoid, minimise or mitigate their involuntary resettlement.

Early in 2020, we launched a new global community feedback tool (CFT). This enables us to globally track and respond to all queries, complaints and positive and negative feedback that we receive. It allows our network of about 100 community liaison officers (CLO) to document all types of feedback. It is accessible via a mobile app and can be used to send feedback received in the field to those who can act to resolve issues. Asset managers can generate reports to help them analyse trends, detect underlying causes, and decide appropriate action.

The CLOs continue to act as a bridge between local communities and our businesses. The CLOs are in our community centres on workdays, receiving visitors and listening to questions or complaints. Members of the community can also contact CLOs via dedicated telephone lines. It is the job of CLOs to take any concerns back to the Shell facility and involve people who are best placed to take action.

We are using a tool based on the United Nations Guiding Principles' criteria to measure the effectiveness of our mechanisms for managing community feedback on our operations.

In 2019, we had assessed the community feedback mechanisms (CFMs) of 32 sites, and in 2020, we helped 14 of these sites to improve their CFMs. The improvement measures involved included:

- promoting public access to and transparency of the sites' CFMs;
- improving written procedures so they are better aligned with global good practice and more reflective of local circumstances;
- providing clear steps for recognising alternative options for communities to seek remedy; and
- respecting people's anonymity and data privacy.

In 2020, we also developed a guide to help sites make their CFMs effective and address local needs. In 2021, we plan to further improve the quality of sites' CFMs.

 [See our website shell.com for more information about our work with communities.](http://shell.com)

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 our Shell General Business Principles and in our Code of Conduct. Our approach is informed by the United Nations Guiding Principles on Business and Human Rights.

We work closely with other companies and non-governmental organisations to improve how we apply these principles. We focus on four priority areas where respect for human rights is critical to how we operate: communities, security, labour rights, and supply chain. For each of these areas, we have systems to identify potential impacts and to avoid and mitigate them. For example, our HSSE & SP Control Framework (CF) contains our mandatory standards and manuals that set out how we identify, assess, and manage our impacts on communities where we operate, including any impact on human rights. We require all our companies and contractors to respect the human rights of our workforce and neighbouring communities. Our joint-venture partners are expected to implement our CF or an equivalent.

An internal Human Rights Working Group consisting of experts from different functions advises on and supports the businesses with the implementation and review of our approach to human rights. The group includes an external adviser. A steering committee composed of senior executives provides steer and support to the work of the Human Rights Working Group.

Our approach to due diligence is informed by the United Nations Guiding Principles on Business and Human Rights. Due diligence in each focus area, including human rights, is typically exercised in countries where there may be a risk of an impact on people's human rights. It is supported by experts working within the applicable functions in Shell. We recognise how due diligence helps us to act on our commitment to respect human rights. For example, in our supply chains, where contractors and suppliers are considered to be at risk of having issues with labour rights, we engage with them to assess their management systems, before deciding whether to award a contract. Results of these supplier assessments are evaluated, and where gaps are found, we may work with suppliers and contractors to help them implement corrective action. We may also conduct on-site audits or consider terminating contracts if serious or persistent shortcomings are found.

The most common shortcomings found during our supplier assessments typically relate to policy rather than performance gaps in the following areas:

- freely chosen employment;
- child labour avoidance;
- working hours, wages and benefits;
- dormitory, housing and working conditions;
- humane treatment, equal opportunities and freedom of association; and
- supply chain and performance management.

The Shell Supplier Principles include specific labour and human rights expectations for contractors and suppliers. Shell companies use a joint industry supplier capability assessment that is delivered in collaboration with other operators. This sharing mechanism is intended to support the improvement of working conditions in the participating companies' supply chains.

 [See our website shell.com for more information about our approach to human rights.](http://shell.com)

CLIMATE CHANGE AND ENERGY TRANSITION

Shell has long recognised that greenhouse gas (GHG) emissions from the use of hydrocarbon-based energy are contributing to the warming of the climate system. In December 2015, 195 nations adopted the Paris Agreement. We welcomed the efforts made to reach this global climate agreement, which came into force in November 2016. We fully support the Paris Agreement's goal to keep the rise in global average temperature this century to well below two degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. In pursuit of this goal, we also support the vision of a transition towards a net-zero emissions energy system. Shell agrees with the statement of the Intergovernmental Panel on Climate Change (IPCC) special report, Global Warming of 1.5°C that says that in order to limit global warming to 1.5 degrees Celsius above pre-industrial levels, the world economy would need to transform in complex and interconnected ways. Meeting this challenge would require an even more rapid escalation in the scale and pace of change in the coming decades than was foreseen in the Paris Agreement.

Society faces a dual challenge: it must transition to a low-carbon energy future to manage the risks of climate change, while also extending the economic and social benefits of energy to everyone on the planet. This requires, among other things, reducing emissions while also changing how energy is produced, stored, used and made accessible to more people.

Shell recognises that society's attitude towards climate change is shifting rapidly and that it is different in different locations. Regulators in some advanced economies such as the EU and the UK have already started pushing for net-zero emissions by 2050 in an effort to achieve the 1.5 degrees Celsius stretched goal of the Paris Agreement. Potential similar developments in other key locations might lead to similar or more stringent regulatory conditions on Shell's operations and products.

On February 11, 2021, we announced Powering Progress, our new strategy. Powering Progress is our strategy to accelerate progress to net-zero emissions, purposefully and profitably. One of the pillars of this strategy is for Shell to become a net-zero emissions energy business by 2050, in step with society. We believe our net-zero target supports the most ambitious goal of the UN Paris Agreement, to limit warming to 1.5 degrees Celsius above pre-industrial levels. This will require us to transform our business, working with our customers and others, in sectors that are difficult to decarbonise. This includes aviation, shipping, road freight and heavy industries. We also believe that our total oil production peaked in 2019 and our total emissions (Scope 1, 2 and 3) peaked in 2018 at around 1.73 gigatonnes per annum.

Shell's target is to be a net-zero emissions energy business by 2050, in step with society. This means net-zero emissions from our operations – our Scope 1 and 2 emissions – and also net zero from the end use of our products that we sell – our Scope 3 emissions. Our Scope 3 emissions include our customers' emissions from the energy products we produce and sell as well as the life-cycle emissions of the energy products produced by other companies that we resell to our customers. This means that our target covers all the energy we sell, not just the oil and gas we produce and refine ourselves.

But Shell cannot get to net zero without society also being net zero. While we aim to transition slightly ahead of society, where we expect to see higher margins for our low-carbon and renewable energy products, we cannot transition too quickly or we will be trying to sell products that our customers do not want. Accordingly, other than our short-term remuneration targets, all targets are conditional on being in step with society. If society is not on the path to net zero for 2050, it is unlikely that Shell will meet its emissions targets.

We believe it is important for the Board and the management to understand what our shareholders think. Accordingly, in 2021, Shell intends to submit its energy transition strategy to shareholders for an advisory vote at our Annual General Meeting. We will submit our energy transition strategy to such an advisory vote every three years. We will also

seek an advisory vote on the progress we make each year, as disclosed in our Annual Report, starting in 2022.

SHELL'S ABSOLUTE EMISSIONS AND CARBON INTENSITY TARGETS

Our target is to be a net-zero emissions energy business by 2050, in step with society.

Shell's 2050 absolute emissions targets

We aim to achieve these targets in step with society. They are:

- net-zero Scope 1 and Scope 2 emissions from our operations by 2050; and
- net-zero Scope 3 emissions from the energy products we sell by 2050.

Shell's net carbon intensity targets

We aim to achieve these targets in step with society. They are measured by our Net Carbon Footprint (NCF) metric, and are:

- 2030 NCF reduced by 20% from 2016 NCF;
- 2035 NCF reduced by 45% from 2016 NCF; and
- 2050 NCF reduced by 100% from 2016 NCF.

The updated 2035 and 2050 targets reflect that we will start to include all actions taken to reduce emissions when we calculate our net carbon intensity. This includes the actions we take ourselves and actions taken by the users of the energy products we sell.

We will work with our customers to address the emissions created when they use products bought from us (Scope 3) and help them find ways to reduce their emissions and overall carbon footprint to net zero by 2050.

Remuneration targets

We have set specific carbon intensity targets for the following years:

- 2021 NCF reduced by 2-3% from 2016 NCF;
- 2022 NCF reduced by 4-6% from 2016 NCF; and
- 2023 NCF reduced by 6-8% from 2016 NCF.

See below, in this section, for more detail on:

- How we plan to deliver;
- Our climate target;
- Our net carbon intensity targets; and
- Our performance.

 See also the Directors' Remuneration Report on page 153-156.

Business milestones

We are taking steps to cut emissions from our existing oil and gas operations, and to avoid generating more in the future.

- We believe our annual oil production peaked in 2019, and we expect our total oil production to decline by 1-2% a year until 2030.
- We do not anticipate any new frontier exploration entries after 2025.
- Natural gas is the least polluting hydrocarbon. We expect the percentage of total gas production in our portfolio to gradually rise to 55% or more by 2030.
- By 2030, we will end routine flaring of gas, which generates carbon emissions, from the assets we operate.
- By 2025, we expect to have kept the methane emissions intensity of Shell-operated assets to below 0.2%.

HOW WE PLAN TO DELIVER

Getting the energy system on a path to net zero will require co-ordinated action between energy providers, energy users and governments. They will need to work together over the coming decades to define rapid, realistic decarbonisation pathways, sector by sector.

We will work with our customers to address the emissions created when they use products bought from us (Scope 3) and help them find ways to reduce their emissions and overall carbon footprint to net zero by 2050.

We are already taking steps to cut emissions from our existing oil and gas operations, and to avoid generating more in the future. We aim to reduce the GHG intensity of our portfolio and we continue to work on improving the energy efficiency of our existing operations. One element of our target is to achieve net-zero emissions from all our operations, as well as from the energy we need to power them.

Shell believes that society must accelerate and increase the scale of all forms of GHG reduction. We are increasing the proportion of lower-carbon products such as natural gas, biofuels, electricity and hydrogen in the mix of products we sell. For example, Amazon Air has secured up to six million gallons of sustainable aviation fuel – made partly from biomass and waste – supplied by Shell Aviation and produced by World Energy. Similarly, we have formed an alliance with Microsoft which includes supply of renewable energy to help them meet their commitment of 100% renewable energy consumption by 2025.

Our shift to energy and chemicals parks means we will reduce our production of traditional fuels by 55% by 2030, from around 100 mtpa to 45 mtpa. We plan to build on Shell's leading position in hydrogen by developing integrated hydrogen hubs to serve industry and heavy-duty transport, aiming to achieve double-digit share of global clean hydrogen sales.

It is not enough for Shell to take action on its own. We can only meet our net-zero target as part of a world that is also heading to net zero. That will require a reduction in the global supply of carbon-based energy, which can only happen if demand for carbon-based energy also reduces. So Shell, as a supplier, must work with customers on a sector-by-sector basis, to develop the right pathways to transition each sector from carbon-based energy to low-carbon solutions.

Shell's marketing business is being restructured on a sectoral basis. This in turn will help us to make progress in working with customers on a sector-by-sector basis.

Our mission is to help the millions of brand-loyal customers whom we serve every day – from individual energy consumers to large businesses – to decarbonise. We have the scale and the competitive advantage to generate profit from this shared ambition.

Our marketing platform is one of the best in the energy industry. Spanning 160 markets, every day we serve more than 30 million customers at our retail sites; and one million businesses.

Our customer access gives us first-hand insights, helping us to deliver what our customers want rather than offering what others think they need.

This will help us to grow our existing marketing platforms profitably, while also increasing the decarbonisation choices across sectors and countries.

Our global ambition is that by 2025 we are operating more than half a million electric-vehicle charging points for businesses, fleets and customers, at our retail sites and people's homes. This number is expected to rise to 2.5 million charging points operated by Shell by 2030. For drivers who are unable to switch to an electric vehicle immediately, we also offer carbon-neutral driving using nature-based carbon offsets, in seven countries including the UK.

We are positioning ourselves to profitably deliver integrated offers by cross-selling to motorists and home energy customers. Our integrated solutions will help our business customers to navigate the challenges and opportunities of decarbonisation.

One such customer is Penske Corporation in the USA. We work closely with this customer across truck leasing, logistics and automotive retail. We provide Penske Corporation with products and services ranging from fuels and lubricants, to electric-vehicle charging and renewable power.

Our approach to commercial road transport is similar to how we work with other hard-to-decarbonise sectors such as shipping and aviation. We are working with transport companies, truck manufacturers and policymakers to identify profitable pathways to decarbonisation.

We are already one of the world's largest blenders and distributors of biofuels, and we will continue to invest in and increase the production of these low-carbon fuels. Over the next decade, we will help customers in Europe, China and on the US West Coast to transition to liquefied natural gas (LNG) and biogas.

Hydrogen also offers a route to lowering emissions. We are part of the H2Accelerate consortium, which looks at ways to create infrastructure for generating and supplying hydrogen across Europe.

In Power, we are working with our customers in different markets, finding commercial ways to meet their specific needs. Our scale, reach, brand strength and trading capability set us up to succeed. An example is our deal to supply Amazon with renewable power, which is helping it to fulfil its climate pledges.

We are also supporting infrastructure development through our investments in Silicon Ranch and Cleantech Solar. Combined, these two companies have over 350 solar farms in the USA and South-east Asia. In Australia and in Oman, Shell is building its first large-scale solar farms.

Shell's infrastructure, systems integration, experience and people put us in a strong position to profitably meet the current and future needs of our customers, helping them and society to decarbonise for a net-zero emissions future.

We are restructuring so that we have marketing teams facing individual sectors. We are also developing a carbon management framework to guide decision-making on investments in assets and businesses that align with our climate target. We intend to have carbon budgets for customer-facing businesses to motivate them to find value growth by switching from high-carbon income to low-carbon income.

Shell believes that the need to reduce GHG emissions will continue to be an important driver in transforming the energy system in this century. This transformation will generate both challenges and opportunities for our existing and future portfolio.

TRANSPARENCY AND COLLABORATION

We support efforts to increase transparency and investors' understanding of companies' strategies for responding to the risks and opportunities of climate change. We do this through engagement with external stakeholders such as industry associations beyond the energy industry, standard setters, non-governmental organisations (NGOs), investors, and initiatives on different topics including climate change. With publications such as our 2020 Sustainability Report and our 2020 Industry Associations Climate Review update (both planned to be published in April 2021) we aim to provide additional information to that in this Report to address requests and recommendations from different reporting frameworks and standards. Some examples of those frameworks and engagements are described below.

- We continue to support the Task Force on Climate-related Financial Disclosures (TCFD) recommendations and apply them to our reporting. We aim to address the recommendations with this Report and other Shell publications such as the 2020 Sustainability Report and 2020 Industry Associations Climate Review update (both due to be published in April 2021), and our latest scenarios Islands, Waves, and Sky 1.5.
- As a member of the Oil and Gas Climate Initiative (OGCI) we are one of a group of 12 national and international energy companies that focus on action that has real impact now and delivers on decarbonisation in the coming decades (see Methane initiatives and collaborations, page 102).

CLIMATE CHANGE AND ENERGY TRANSITION continued

- In December 2020, eight leading energy companies including Shell announced that they had jointly developed and agreed to apply six Energy Transition Principles. These principles aim to support the collective industry acceleration to contribute to the Paris Agreement objectives by delivering progress on reducing GHG emissions, the role of carbon sinks, and the importance of transparency and alignment on climate change with trade associations. The companies are building further on this collaboration to drive more consistency and transparency in greenhouse gas reporting, and in measurement of the emissions which may occur at different points in the value chain.
- We continue to engage with the Science Based Targets initiative (SBTi), and we are a member of its Technical Working Group that is currently working to define the methodology for the oil, gas and integrated energy sector.
- Some governments have introduced carbon pricing mechanisms, which we believe can be an effective way to reduce GHG emissions across the economy at the lowest overall cost to society. We expect more governments to follow. Shell is encouraging carbon pricing mechanisms so that businesses and consumers are further incentivised to improve energy efficiency, provide and switch to lower-carbon options, and reduce carbon emissions. Such mechanisms can also help encourage projects such as CCS facilities and nature-based solutions like the planting of forests. Shell continues to work with governments to produce effective transition plans and policies.

OUR GOVERNANCE OF CLIMATE CHANGE

Climate change and risks resulting from GHG emissions are a significant risk factor for Shell. They are managed in accordance with other significant risks through the Board and the Executive Committee.

 See "Other regulatory and statutory information" on pages 182-189.

Shell's climate change risk management structure includes the work of the Board. In 2020, the Board discussed a variety of energy transition and climate change-related subjects. These included environmental topics ahead of Responsible Investment Day and Shell's announcement of its target to be a net-zero emissions energy business by 2050, in step with society. Directors received information on opportunities and priorities in the New Energies area. Throughout the year, Directors were also informed about topics of interest among investors and other stakeholder groups. These included sustainability, governance and the energy transition. During the annual strategy meeting, in virtual format, the Board discussed various topics including the energy transition and its implications.

 For more information on the activities of the Board see "Board activities and evaluation" on pages 130-133.

The Board committees play an important role in assisting the Board with regard to governance and oversight of management of climate change risks and opportunities, as described in "Governance" on page 128.

The Safety, Environment and Sustainability Committee (SESCo) assists the Board in reviewing the practices and the performance of the Shell Group of companies, primarily with respect to safety, environment including climate change, and sustainability. When reviewing these areas and deciding how to advise the Board, SESC Co takes into account Shell's General Business Principles, Code of Conduct, and HSSE & SP Control Framework. SESC Co's duties include reviewing Shell's progress towards meeting our climate targets and the energy transition. SESC Co also advises the Remuneration Committee on metrics relating to sustainable development and energy transition.

 For more information about SESC Co's activities around climate change and energy transition see page 143.

The Remuneration Committee (REMCO) is responsible for determining the Directors' Remuneration Policy, in alignment with our business strategy.

Annual scorecard

Starting in 2021, we are increasing the weight associated with GHG emissions management. The GHG emissions intensity metric and its weight (10%) will remain unaltered, but we will add a new metric that measures the execution of GHG-abatement projects with a weight of 5% (see page 170 for more information).

Performance Share Plan and Long-term Incentive Plan

For 2021 awards made under the Performance Share Plan (PSP), the weighting of the energy transition condition has doubled from 5% to 10%. For 2021, the weighting of the energy transition condition in the Long-term Incentive Plan (LTIP) will also double from 10% to 20%. The target range is a 6-8% reduction in net carbon intensity against the 2016 baseline NCF of 79 grams of carbon dioxide (CO₂) equivalent per megajoule. The other targets linked to our strategic ambitions will also evolve, with the metric connected to commercialising advanced biofuel technology broadening to a measure of growing new cleaner energy product offerings. The targets for the leading energy transition measures are commercially sensitive and will be disclosed retrospectively.

The energy transition condition was included again in the 2020 LTIP awards for Executive Directors and senior executives and was also incorporated into the Performance Share Plan awards made to around 16,500 employees globally.

See "Directors' Remuneration Report" on pages 153-156 for further information. An update on progress on the 2019 and 2020 awards is provided on pages 165.

The Audit Committee has key responsibilities in helping the Board to maintain oversight of areas such as the effectiveness of risk management and internal control. For more information on the work of the Audit Committee see page 145.

The CEO is the most senior individual with accountability for climate change risk. Shell has established specialist forums at different levels of the organisation where climate change and GHG-related matters are addressed, monitored and reviewed. Each Shell entity and each Shell-operated venture is responsible for implementing climate change policies and strategies.

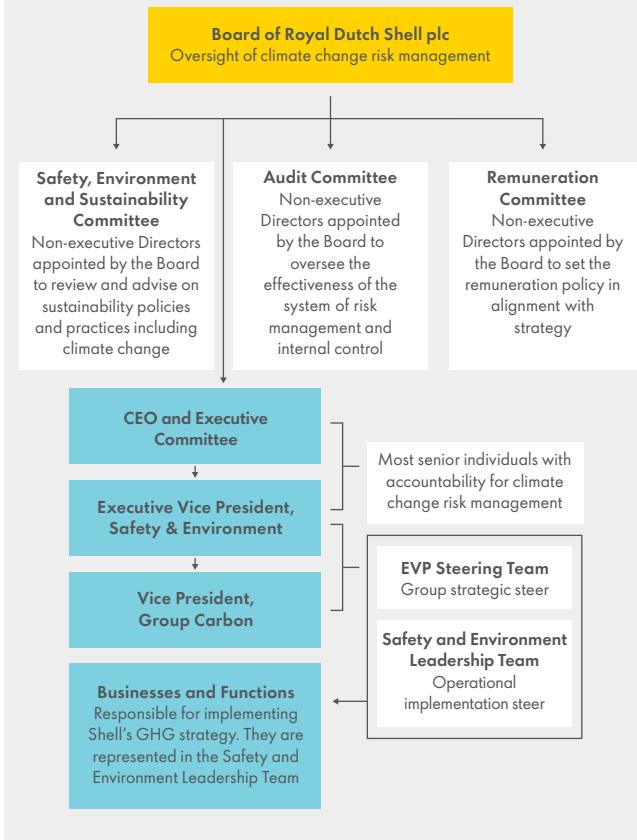
The Executive Vice President (EVP) Safety and Environment, a senior manager who reports directly to the Projects & Technology Director, is accountable for the oversight of GHG issues. This manager's department includes the Group Carbon team and the HSSE & SP Assurance and Reporting team.

Group Carbon is accountable for monitoring and examining the strategic implications of climate change for Shell. Group Carbon also reviews the effects of governmental policy and regulation. It proposes policy positions based on analysis by Shell and external organisations. The team also advises Shell companies to ensure that they are consistent in how they apply our core principles and policies when interacting with policymakers.

Group Carbon also has oversight of Shell's GHG management programme. It helps our lines of business to adopt strategies for managing greenhouse gases. The team includes managers who advise projects on the risks and opportunities of GHG-related issues.

The HSSE & SP Assurance and Reporting team is accountable for the delivery of Shell's non-financial reporting. It is also responsible for auditing the performance of Shell businesses with regards to our HSSE & SP Control Framework requirements, which include climate change risk management.

Climate change management organogram



REORGANISATION IN LINE WITH UPDATED STRATEGY

During 2020, we worked on a comprehensive organisational review in order to enable our new strategy to be effective. We call this project Reshape. The governance of topics around sustainability, including climate change, will not change at the most senior levels of Shell. We are introducing changes at specific levels of the organisation to better address the effects of the strategy update. We expect to adjust the initial structure as we go through the process. Currently, we are working towards going live with the revised organisational structure in the second half of 2021.

■ For more information, see [Strategy and outlook on page 18](#), and [Our people on page 108](#).

CLIMATE CHANGE RISK MANAGEMENT PROCESS

The framework for managing the climate change and GHG emissions risk is underpinned by Shell's Control Framework and Statement on Risk Management, which are described on pages 186 of the "Other regulatory and statutory information" section of this Report.

For the climate change and GHG emissions risk, several global teams support our businesses in GHG and energy management, comprising a network of experts in subjects related to GHG and risk management. They work globally across our lines of business and assist in:

- identifying and assessing risks;
- planning and implementing responses;
- sharing best practices; and
- monitoring, improving and completing action that affects the objectives and performance of projects and assets.

These teams have created a set of mandatory manuals and complementary guidance documents that are updated periodically and are ultimately based on our HSSE & SP Control Framework (CF). These manuals and documents provide guidance on how to monitor, communicate and report changes in the risk environment, and how to review the effectiveness of actions taken to manage identified risks, including ways to:

- ensure consistent assessment of climate risk across Shell;
- clarify expectations for risk management and reporting, including roles and responsibilities of the risk owners;
- clarify types of assurance activities that may be applicable;
- strengthen decision-making by ensuring that businesses have better awareness and understanding of climate risks (including their likelihood and potential impact) and mitigation plans; and
- enable integration of Shell's reporting.

For more detail on our definition of risk categories and their relationship to different time horizons, see page 98.

The GHG and Energy Management Manual is one of the mandatory manuals of our HSSE & SP Control Framework. It requires that effective steps are taken to track the GHG emissions from Shell's operated and non-operated facilities and the life-cycle emissions of its energy products. The manual also focuses on the efficient operation of existing equipment. This means, for example, using monitoring systems to get real-time information that we can use to make energy-saving changes and identify opportunities for energy-saving investments in the medium term. Shell's scorecard includes GHG measures that create additional incentives for our employees to reduce GHG emissions in our portfolio.

■ See "Directors' Remuneration Report" on page 153.

The global teams mentioned above support the businesses in monitoring and addressing certain physical risks of climate change. This support includes the input of specialist teams who provide direct technical assistance to facilities, based on their analysis of the potential impacts of climate change in different operating environments. For example, the specialist teams support facilities on an ad hoc basis to address potential operational issues such as flooding of a site that may affect its drainage system.

The teams also provide expertise on how to include considerations of certain potential physical climate change risks in the internal Design and Engineering Practice (DEP) requirements for new projects. The DEPs for new projects are reviewed periodically to take account of changes in the risk environment, including emerging weather and climate factors.

We review our portfolio annually to identify emerging risks from changes in GHG emissions regulations and changing physical conditions. Shell's Group Carbon team provides management with strategic insights on Shell's exposures, risks and opportunities, and recommends actions for Shell to take. Each of Shell's businesses and functions has an assurance committee that considers this risk on a regular basis and coordinates the applicable assurance activities.

At the Group level, the climate change and GHG emissions risk has been identified as a significant risk factor for Shell – see "Risk factors" on page 29. The Executive Committee and Board regularly review this risk in the same way that they do for other significant Group risk factors. Potential impacts and likelihoods are considered and discussed bi-annually. Similarly, the effectiveness of risk responses is also considered and discussed on a regular basis. Where necessary, these reviews are further supplemented by additional in-depth reviews with the relevant management teams. These reviews help to guide operational decisions, maintenance schedules and response planning.

CLIMATE CHANGE AND ENERGY TRANSITION continued

Climate change risk management at project level

Shell requires that the GHG emissions of certain assets and projects are addressed in specific ways. This is described in our internal, mandatory GHG and Energy Management Manual which is part of our HSSE & SP Control Framework (see Environment and society, page 86). This manual specifies the requirements for managing the risks associated with GHGs and energy use, and is owned and signed off by the Vice President Group Carbon. It states that projects with a material GHG footprint must get their targets approved by the Executive Vice President Safety and Environment at certain defined stages. The project's GHG-abatement plan helps to determine the nature of these targets.

Projects under development that are expected to have a material GHG footprint must meet our internal carbon performance standards or industry benchmarks. This indicates that they will be able to compete and prosper in a future where society aims to limit overall GHG emissions.

The performance standards are used as our screening criteria for measuring projects' average lifetime GHG intensity or energy efficiency per asset type. We are working to develop a complete set of standards for our businesses. Performance Standards for the Upstream and Transition pillars are in place, while those for the Growth pillar are under development. The complete set is expected to continue to evolve to incorporate new types of projects that support Shell's portfolio changes in alignment with our NZE energy business target. Our current standards are reviewed and updated annually, based on changes to legislation and external and/or internal benchmarking. The latest update was in 2020. The performance standards were signed off by the Executive Vice President (EVP) accountable for implementation in the relevant businesses, and by the EVP Safety and Environment, who represented the view of a risk owner from outside the relevant business.

We estimate the GHG emissions of facilities in two ways. We apply the performance standards, and we consider the GHG emissions from the use of the products that are manufactured. We assess GHG emissions' impacts alongside economic and technical design factors. These assessments can lead to projects being stopped or designs being changed.

During project development, we consider ways to reduce GHG emissions and whether to include them in the design. Measures considered and adopted have included:

- flaring reduction;
- carbon capture and storage (CCS) capabilities;
- exclusion of high-intensity process equipment;
- using renewable energy; and
- electrification.

Our approach continues to evolve as we increase our understanding of the shifting policy landscape and the differing paces of energy transitions in different regions.

We continue to develop our project managers' and practitioners' competencies for effective GHG emissions management in projects. The Shell Project Academy has been set up to provide competence development programmes that include different ways of learning, such as courses on specific topics and on-the-job training. These courses also aim to ensure sharing of good practice and to encourage collaboration across businesses.

CLIMATE-RELATED RISKS AND OPPORTUNITIES

Our approach for assessing and managing the risks and opportunities associated with climate change includes considering different time horizons. The time horizons and their relevance to risks, opportunities and business planning are as follows:

- Short term (up to three years): we develop detailed financial projections and use them to manage performance and expectations on a three-year cycle.
- Medium term (generally three to 10 years): most of our expected production and earnings in this period come from our existing assets.
- Long term (generally beyond 10 years): for this period, it is expected that the current Shell portfolio will change and evolve with the energy transition. Decision-making and risk identification on the thematic structure of the future portfolio are guided by the pace of society's progress and the aim of being in step with society as it moves towards the goals of the Paris Agreement.

The overall climate change risk consists of four components, based on the nature of our exposure and the options for our mitigation responses. The four components are regulatory risks, commercial risks, physical risks and societal risks:

- Regulatory risks (time horizon: short term) include increased compliance costs for assets and/or products such as carbon costs; restrictions on the use of fossil fuels; and lack of net-zero-aligned global and national policy and frameworks.
- Commercial risks (time horizon: medium to long term) include lower sales volumes and/or margins because of generally reduced or eliminated demand; the possibility of underutilised or stranded oil and gas assets; changing preferences of investors and financial institutions; and additional costs for decarbonisation of operations.
- Physical risks (time horizon ranging from short to long term) include structural damage to assets and downtime caused by acute events; reduced efficiency because of changing ambient conditions; increased operations and maintenance costs; and value-chain disruptions.
- Societal risks (time horizon: continuous) include the potential for a deteriorating relationship with the public, other companies, and governments in countries where Shell operates; class action lawsuits or similar litigation; potential stakeholder criticism related to transparency and clarity around plans and actions to achieve climate targets; and decline in reputation, brand value and competitive advantage.

 See "Risk Factors" on page 29.

Climate change and the energy transition have also created some business opportunities for Shell. See also "Our portfolio and climate change" on page 101.

Impact of climate-related risks and opportunities on strategy, planning and business decisions

For Powering Progress, we must evolve our portfolio of assets and the mix of energy that we sell, so we can meet the cleaner energy needs of our customers in the coming decades. We aim to achieve this by repositioning our traditional businesses for resilience and taking advantage of the growth opportunities created by emerging customer needs.

We assess our portfolio decisions, including investments and divestments, against the potential impacts of the energy transition to the use of lower-carbon energy. These include higher regulatory costs linked to carbon emissions and lower demand for oil and gas. We continue to transform our organisation, ensuring that our portfolio is well positioned for the future of energy. In February 2021, we announced our updated strategy (see Strategy and outlook, page 18).

We believe that our business strategy is resilient and adapted to the current implementation of the Paris Agreement, which is now progressing through the mechanism of countries developing their individual nationally determined contributions (NDCs). The Paris Agreement does not stipulate that emissions must fall in all sectors or countries simultaneously, or that all actors within the system will reduce their emissions at the same time or to the same degree. It acknowledges that emissions might even increase in some parts of the world. What is important is that overall emissions fall.

The transition to lower-carbon energy requires major changes to industrial, commercial and residential infrastructure. This takes time and substantial investment. Our annual planning cycle and periodic portfolio reviews aim to ensure that our levels of capital investment and operating expenses are appropriate in the context of an uncertain and changing external environment.

The annual business plan is our way of putting the strategy into effect. A business plan is created, which is then approved by the Board. The plan contains forecasts of Shell's cash flows, and seeks to ensure that we can service financing requirements, pay dividends and fund investment activities.

Shell's business plan includes assumptions about internal and external parameters. Some of the key assumptions relate to:

- commodity prices;
- production levels and product demand;
- exchange rates;
- future carbon costs;
- the schedules of growth programmes; and
- risks and opportunities that may have material impacts on free cash flow.

Shell's strategy recognises that the world is transitioning to a lower-carbon energy system, but acknowledges that the pace and specific path forward remain uncertain and may differ across regions and countries. This means that Shell will need to make agile business decisions in step with society.

Scenario planning is a well-established process for exploring possible future outcomes. Many factors and variables are considered in this exercise. These include the future size and cost of resource bases and macroeconomic, geopolitical, social, technological and regulatory developments. Our portfolio and strategy have been assessed against a wide range of outlooks. These include the potential impacts of various possible energy transition pathways, and changes in societal expectations around climate change. Our latest set of Shell scenarios was one of the many variables used in guiding the updated strategy which we announced in February 2021. One of the key aspects that underpin Shell's financial statements are the oil and gas price and refining margin assumptions. These price assumptions are developed with input from our scenarios and other factors.

GHG elements in the business plans consist of a GHG-emissions forecast, GHG-abatement plan and GHG costs. To assess the resilience of new projects, we consider the potential costs associated with operational GHG emissions. We have developed country-specific short-, medium- and long-term estimates of future carbon costs which are reviewed and updated annually. By 2050, our real-terms carbon cost estimates for all countries are expected to increase to at least \$100 per tonne of GHG emissions.

The process for developing our cost of carbon estimates uses short-term policy outlooks and long-term scenario forecasts, both of which reflect the current nationally determined contributions (NDCs) submitted by countries as part of the Paris Agreement and evolving national policy developments. NDCs under the Paris Agreement are subject to revisions every five years. The United Nations estimate that the current NDCs are consistent with limiting the rise in global average temperature to around three degrees Celsius above pre-industrial levels. In the coming decades, we expect countries to tighten their NDCs to meet the goals of the Paris Agreement. We expect to update our estimates as countries update their NDCs and climate policies. Accordingly, we believe our estimates appropriately reflect society's current implementation of the Paris Agreement. We continue to test the robustness of our projects with a material GHG footprint by using long-term carbon cost estimates that are consistent with limiting the rise in global average temperature to well below two degrees Celsius.

Shell's annual carbon cost exposure is expected to increase over the next decade because of evolving carbon regulations. This expected increase is based on forecasts of Shell's equity share of emissions from operated and non-operated assets, and real-terms carbon cost estimates which range from \$5 to \$110 per tonne of GHG emissions in 2030. This exposure also takes into account the estimated impact of free allowances as relevant to assets based on their location. The regulatory carbon cost estimate is refreshed on an annual basis as part of the development of our business plan.

OUR CLIMATE TARGET

As indicated at the beginning of this section, our long-term climate target is to be a net-zero emissions energy business by 2050, in step with society's progress towards achieving the goal of the UN Paris Agreement on climate change. This target supports the most ambitious goal of the Paris Agreement on climate change to limit the global temperature rise to 1.5 degrees Celsius. We referred to the database developed for the IPCC special report *Global Warming of 1.5°C* while setting this target. We started with all the 1.5 degrees Celsius scenarios and then selected the scenarios which focused on earlier action and placed less reliance on the use of carbon sinks to produce the 1.5 degrees Celsius pathway we have used for target setting.

CLIMATE CHANGE AND ENERGY TRANSITION

continued

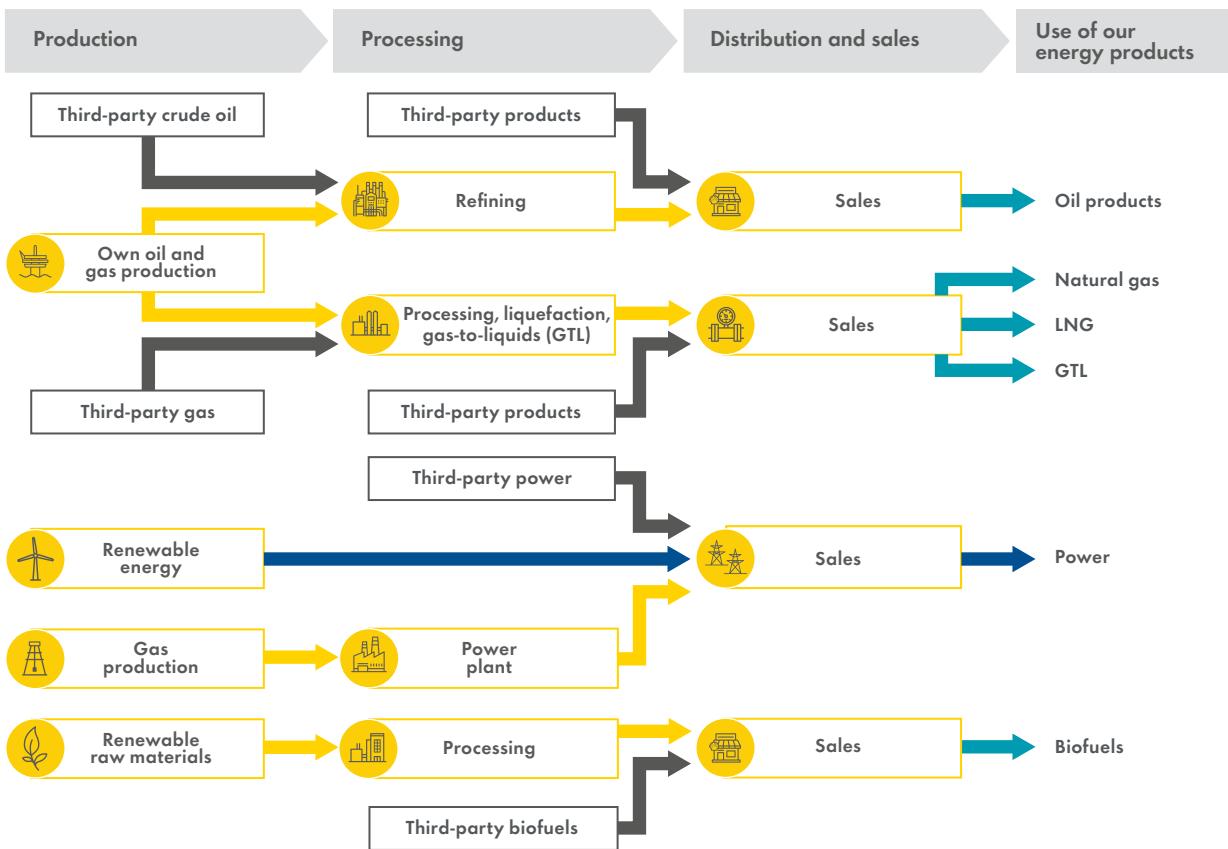
OUR NET CARBON INTENSITY TARGETS

Shell's carbon intensity is the average intensity, weighted by sales volume, of the energy products sold by Shell. This is tracked, measured and reported using the Net Carbon Footprint (NCF) metric and methodology. Our NCF calculation includes the life-cycle greenhouse gas emissions associated with each unit of energy we sell that is used by our customers. This includes the emissions associated with the production, processing, transport and end use of these products. Also included are emissions from other elements of this life cycle not owned or controlled by Shell, such as

oil and gas that we process but do not produce, or emissions from oil products and electricity marketed by Shell that have not been processed or generated at a Shell facility. The calculation also subtracts emissions for those that are stored by using carbon capture and storage (CCS) or are offset using natural carbon sinks, such as forests and wetlands. Chemicals and lubricants products, which are not used to produce energy, are excluded from the scope of this metric. The carbon intensity of the energy products we sell is expressed in grams of carbon dioxide equivalent (CO_2e) per megajoule consumed.

Scope of our Net Carbon Footprint

Emissions from energy products included within the Net Carbon Footprint framework



Scope includes Shell's CO_2 sinks such as CCS and nature-based solutions (NBS)

- Emissions from bringing own products to market
- Emissions from bringing third-party products to market
- Power distribution
- Emissions from use of sold products

Impact of physical risks and adaptation measures

The physical effects of climate change may increase Shell's exposure to hazards that could potentially include, for example, higher air and sea temperatures, rising sea levels, an increased chance of flooding and droughts, wildfires and more severe tropical storms. They could potentially impact our operations and supply chains. There could also be potential financial implications, such as increased operating costs and lower revenue because of decreased efficiency.

The potential impacts of physical risks to Shell facilities, where processes, equipment and safety could be affected, are reasonably understood in Shell's oil and gas businesses. For example, rising temperatures could potentially impact the efficiency of our plants, increase equipment corrosion and decrease gas pipeline capacity. Rising sea levels could potentially impact our coastal facilities through increased coastal erosion and flooding, damage to jetties, and salt-water intrusion in freshwater intake.

The potential impacts of physical risks to the wider environment and their indirect effect on our facilities is an area that we continue to monitor and evaluate within the local context. Such risks could potentially disrupt our operations by affecting people, infrastructure or supply chains. For example, wildfires and droughts could disrupt feedstock supply for biofuels or make it difficult to access assets, including areas that support our nature-based solutions programme. Floods, meanwhile, could affect staff and communities in low-lying areas.

Measures to adapt to climate change could help reduce the impact of some of these physical climate change risks. These measures can range from local actions for a specific facility, to more general changes, such as adjustments to engineering design codes and alterations to the set limits and conditions within which facilities are deemed safe to operate. For example, Shell has already completed or started to implement solutions like pumping sand on beaches in to order to stabilise them, dredging works, and using a hovercraft for transport between islands.

OUR PORTFOLIO AND CLIMATE CHANGE

We aim to grow our business in areas that will be essential in the energy transition, and where we see growth in demand over the next decade.

We are seeking cost-effective ways of managing GHG emissions in line with our NCF ambition. We also intend to help customers choose options with lower carbon intensity by bringing to market products with lower carbon intensity, in line with demand. We seek to help reduce global GHG emissions by:

- supplying more natural gas to replace coal for power generation;
- developing carbon capture and storage (CCS);
- implementing energy-efficiency measures in our operations where reasonably practicable;
- developing new fuels for transport such as advanced biofuels and hydrogen;
- maintaining a focus on using natural gas and renewable electricity to generate power; and
- working with nature-based solutions.

 See further information on portfolio decisions in "Integrated Gas" on page 47, "Upstream" on page 54, "Oil Products" on page 72, and "Chemicals" on page 78.

NATURAL GAS

Natural gas is the least polluting hydrocarbon. It produces less than one-tenth of the air pollution that coal does when burned to generate electricity. Increasing the role that gas plays in the energy mix is one way countries can take action as the world moves to a net-zero emissions future.

Natural gas is an abundant, secure and readily available source of energy, one of the few that can be used across power generation, industry, the built environment and transport. Gas has significant advantages when used to generate power alongside renewables: it can quickly compensate for dips in supply from solar or wind generation, and can rapidly respond to surges in demand.

In 2020, gas accounted for around 47% of Shell's total production. We are a leading producer, marketer and trader of liquefied natural gas (LNG) and gas-to-liquids (GTL) products. In our new strategy, launched in February 2021, one of the energy transition milestones by 2030 is that we expect the percentage of total gas production in our portfolio to gradually rise to around 55% or more.

 See "Integrated Gas" part on page 46.

Methane emissions

Natural gas consists mainly of methane. Methane is a potent greenhouse gas and has a much higher global warming impact than CO₂. Efforts to address climate change therefore require the industry to reduce both deliberate and unintended methane emissions.

The IEA estimates that natural gas operations have an average methane leakage rate of 1.7%. At this rate, natural gas emits between 45% and 55% less GHG than coal when burned at a power plant. Higher levels of methane emissions reduce this benefit.

In 2018, Shell announced an industry-leading target of keeping its methane emissions intensity below 0.2% by 2025. This target covers all the Shell-operated oil and gas facilities in our Upstream and Integrated Gas businesses. The baseline and target intensities are expressed as percentage figures, representing estimated methane emissions from Shell-operated oil and gas facilities as a percentage of the total amount of gas marketed, or the quantity of marketed oil and condensate where facilities have no marketed gas (for example, those that re-inject produced gas). Methane emissions include those from unintentional leaks, venting and incomplete combustion, for example, in flares and turbines.

The largest contributor to our reported methane emissions in 2020 was the flaring and venting of gas (including equipment venting) in our upstream oil and gas operations. We are working to reduce methane emissions from these sources by reducing the overall level of flaring and venting. We also continue to implement programmes across our sites to identify and stop unintended leaks and to replace or repair high-emission equipment, such as high-bleed pneumatic devices. We continue to work on confirming that we have identified all potential methane sources and reported our emissions from these sources in line with regulations and industry standards.

CLIMATE CHANGE AND ENERGY TRANSITION continued

Since 2018, we have tested drone-based leak detection cameras and sensors in our Permian Basin shales asset, where we have more than 400 sites. In 2020, we signed a contract with Avitas, a GE Venture, to expand the use of drones to enhance our existing leak detection and repair programme in the Permian Basin. As a result, we started the drone programme on one of our shales businesses, across sites that have the potential to emit methane.

We played an active role in the advisory committee of The University of Texas at Austin's Project Astra which plans to establish a proof-of-concept network of methane detection sensors in the Permian Basin for high-frequency monitoring.

We have also tested fixed-based methane detection sensors in our Rocky Mountain House (Canada) asset.

At our Shell ONEgas facilities in the North Sea, we have reduced methane emissions by around 55%, (around 2,000 tonnes) since 2017. We have done this through improvements that reduce gas venting, such as minimising valve leakage and substituting nitrogen for natural gas when purging potentially explosive oxygen from equipment. ONEgas also continues efforts to improve the accuracy of its measurement of methane emissions. It is planning a trial of drone-mounted sensors in 2021, to see whether they provide a better way of quantifying emissions from platforms.

Methane initiatives and collaborations

We participate in a number of voluntary initiatives to encourage industry-wide action to reduce methane emissions.

In 2017, we joined the Climate and Clean Air Coalition Oil and Gas Methane Partnership. This brings together industry, governments and NGOs to improve the quantification of methane emissions globally and to work on reducing them.

Also in 2017, Shell formed an industry coalition, supported by organisations such as the Environmental Defense Fund, the UN Environment Programme and the World Bank, to develop a set of Methane Guiding Principles. These principles focus on:

- continually reducing methane emissions;
- advancing strong performance across gas value chains;
- improving the accuracy of methane emissions data;
- advocating sound policies and regulations on methane emissions; and
- increasing transparency.

Shell has been involved in developing all actions associated with the Methane Guiding Principles, including the establishment of a major global outreach programme. This programme seeks to address gaps in knowledge about managing methane emissions. It provides high-quality educational material and courses covering methane science, methane reduction strategies and planning, measurement techniques, technology, policy, and where to get guidance and support. The publicly accessible programme consists of two courses: an executive course for senior managers and executives, and masterclasses for managers of frontline staff. By the end of 2020, the Methane Guiding Principles had been signed by 23 companies.

In 2020, we became a founding signatory to the Oil and Gas Methane Partnership 2.0, the new gold-standard reporting framework that is designed to enhance reporting accuracy and transparency on methane emissions in the oil and gas sector.

The Methane Guiding Principles

The Methane Guiding Principles focus on reducing methane emissions across the natural gas supply chain



1. Continually reduce methane emissions
2. Advance strong performance across the gas supply chain
3. Improve accuracy of methane emissions data
4. Advocate sound policy and regulations on methane emissions
5. Increase transparency

Shell is a member of the Oil and Gas Climate Initiative (OGCI), a CEO-led effort to lead the industry's response to climate change. One of OGCI's focus areas is methane management. In 2018, OGCI announced a target of reducing the collective average methane intensity of its members' aggregated upstream gas and oil operations by one-fifth, to below 0.25% by 2025, with an ambition to achieve 0.2%, which would be a reduction of one-third.

Methane emissions performance

In 2020, our overall methane intensity was 0.06% for facilities with marketed gas and 0.01% for facilities without marketed gas. Intensities at facility level ranged from below 0.01% to 0.6%. We believe our methane emissions are calculated using the best methods currently available: a combination of industry-standard emission factors (established emission rates per throughput or per piece of equipment), engineering calculations and some actual measurements. There are still uncertainties associated with quantifying methane emissions with the available methodologies. To reduce these uncertainties, our Upstream and Integrated Gas businesses are rolling out methane improvement programmes to further improve data quality and reporting. The improvement programmes will also continue leak detection and repair initiatives, and make use of methane abatement opportunities. By 2025, all Shell-operated facilities are expected to have implemented more robust quantification methodologies. Externally, we continue to work on new technologies and improved quantification methods through partnerships and other initiatives such as the OGCI.

Detailed information on our approach to managing methane emissions and performance is expected to be published in the Shell Sustainability Report in April 2021.

RENEWABLES AND ENERGY SOLUTIONS

Renewables and Energy Solutions, formerly New Energies, encompasses Shell's low-carbon businesses. These include Shell's activities in integrated power, hydrogen, nature-based solutions (NBS) and carbon capture and storage (CCS). We want to find ways of helping customers – be they households or businesses – to switch to low-carbon and renewable electricity. That is why we are also developing digitally-enabled platforms that will provide customers with services that make it easier for them to decarbonise and accelerate their progress in this area. We could invest on average \$2-3 billion each year in our Renewables and Energy Solutions business.

See "Integrated Gas" on page 50.

Power

Electricity is the fastest-growing part of the energy system and when generated from renewable sources has a major role to play in reducing GHG emissions. Shell is building an interconnected power business that is designed to be sustainable and offer long-term opportunities. We aim to sell some 560 terawatt hours of electricity a year by 2030, which is twice as much electricity as we sell today. Our integrated power strategy will help Shell in its broader aim to accelerate its transformation into a provider of net-zero emissions energy products and services.

See "Integrated Gas" on page 50.

Low-carbon fuels

Shell believes that low-carbon fuels will play a valuable role in reducing carbon dioxide (CO₂) emissions from the transport sector in the coming decades. Low-carbon fuels projects and operations around the world form part of a wider commitment to provide a range of energy choices for customers.

In 2020, around 9.5 billion litres of biofuels went into Shell's petrol and diesel worldwide. This helped us to make progress towards achieving our climate ambition while complying with applicable mandates and targets in the markets where we operate. Through our own long-established sustainability clauses in supply contracts, we request that all biofuels we buy are produced in ways that are environmentally and socially responsible throughout the production chain. Currently, most available biofuels are produced from cereals, vegetable oils and sugar cane. From cultivation to use, biofuels can emit significantly less CO₂ compared with conventional gasoline. This depends on several factors, such as how the feedstock is cultivated and the way the biofuels are produced. Other challenges include concerns over labour rights, the amount of water used in the production process, and competition for land use between biofuels and food crops.

Over three-quarters of the biofuels we buy are from North American or European feedstock producers. Both regions have regulations for agricultural practices including in relation to sustainability.

We continue to support the adoption of international sustainability standards, including those of the Round Table on Responsible Soy (RTRS), the Roundtable on Sustainable Palm Oil (RSPO) and Bonsucro, an organisation for the certification of sugar cane. We also support the Roundtable on Sustainable Biomaterials (RSB) and the International Sustainability and Carbon Certification (ISCC) scheme for feedstocks. We aim to increase the percentage of volumes that are certified according to these robust multi-stakeholder standards.

Currently, more than 97% of our purchased volumes of biofuels are either covered by our supplier-agreed contract sustainability clauses or certified as sustainable by an independent auditor. We aim to increase the percentage of volumes that are certified according to robust multi-stakeholder standards.

The Raízen joint venture (Shell interest 50%, not operated by Shell) in Brazil has produced low-carbon biofuel from sugar cane since 2011. Through Raízen, Shell is a significant biofuels producer. Raízen hosts the first commercial advanced bioethanol facility and the fourth largest renewable natural gas (RNG) facility in the world.

As part of our target to be a net-zero energy business by 2050, in step with society, we seek to reduce the carbon intensity of the products we sell. This means transforming our refining footprint, keeping sites in key locations but manufacturing low-carbon fuels suitable for use as aviation, road transport and shipping fuels or as a chemical feedstock (for liquid crackers). In 2020, our Rheinland refinery in Germany produced nearly 100 million litres of renewable diesel, produced from sustainably sourced vegetable fats and oils. Our production strategy is anchored around access to competitive feedstock, commercialisation of advanced technology, supportive government policy, and building internal capability.

We are also investing in new facilities that are able to produce sustainable low-carbon fuel suitable for use as aviation, road transport and shipping fuels or chemical feedstock for liquid crackers. Shell's hydro-processed esters and fatty acids (HEFA) technology yields up to 65% low-carbon fuels compared to fossil diesel and aviation equivalent. If HEFA technology is used with green hydrogen – produced by using renewable electricity to split water into hydrogen and oxygen through electrolysis – it can increase the energy content and further reduce the carbon content of the fuels produced.

We are working on a project to add a HEFA facility at our Pernis refinery in the Netherlands. If this project went ahead, production would start in around three to four years. The proposed facility could convert waste fats and oils and other sources into sustainable low carbon vehicle and aviation fuels. A final investment decision has not yet been taken.

CLIMATE CHANGE AND ENERGY TRANSITION continued

In January 2021, Shell announced the signing of commercial agreements to invest in Varennes Carbon Recycling, a plant in Québec, Canada, that will turn waste into chemicals and biofuels. This plant, a joint venture with Enerkem, Proman, Suncor and Invest Quebec (Shell interest 40%), will produce biofuels and renewable chemical products using non-recyclable waste from the industrial, commercial and institutional sectors, from construction, renovation and demolition debris and from residual forest biomass.

In line with our strategy of developing more sustainable feedstocks for transport, we are investing in renewable natural gas (RNG) for use in natural-gas-fuelled vehicles in the USA and Europe. RNG is produced from biogas collected from landfill sites, or via the anaerobic digestion of food waste or manure. It is then processed until it is fully interchangeable with conventional natural gas. The use of RNG in natural-gas vehicles, either in the form of compressed natural gas (CNG) or LNG, offers customers a way to lower their carbon footprint.

The heavy-duty road transport sector is starting to use RNG in its efforts to decarbonise. Shell recently won tenders to supply RNG to fuel around 300 of the Los Angeles (LA) bus fleet and vehicles of the West LA waste haulers fleet.

Shell has taken a final investment decision (FID) to construct, own and operate its first renewable compressed natural gas (R-CNG) fuelling site in the USA. This will be at Shell's products distribution complex in Carson, California. The R-CNG will be sourced from Shell's renewable natural gas projects in the USA, which are currently Shell Junction City in Oregon and Shell Galloway in Plains, Kansas. These convert wastes, such as dairy cow manure and agricultural residues, into pipeline-quality natural gas. Shell will be able to substantially decarbonise the transport of its products from the Carson complex by providing 100% R-CNG to its haulage partners, who are equipped with ultra-low nitrogen oxide natural gas vehicles.

CARBON CAPTURE AND STORAGE

CCS is a technology used for capturing carbon dioxide (CO₂) before it is emitted into the atmosphere, then transporting it, and injecting it into a deep geological formation for permanent storage. The majority of climate change scenarios produced by organisations such as IEA, IPCC and Shell require a large component of CCS in order to achieve the goals of the Paris Agreement. We recognise the scale of the challenge in developing CCS globally as quickly as is required.

In 2020, we refreshed our CCS strategy. We placed greater emphasis on how CCS could enable the energy transition for low-carbon fuels and power, and for industrial hub developments where CO₂ from different industrial sources is routed to a single storage location. We seek to have access to an additional 25 million tonnes a year CCS capacity by 2035.

In 2020, Shell invested around \$70 million in CCS. This included progressing opportunities and operating costs for CCS assets in which Shell has an interest.

By the end of 2020, our Quest CCS project in Canada (Shell interest 10%) had captured and safely stored more than 5.5 million tonnes of CO₂ since it began operating in 2015. Quest CCS was designed to capture about 1 million tonnes of CO₂ each year. The storage reservoir proved to have a significant capacity for CO₂ injection and strong capture reliability with less than 1% downtime annually. This means the facility could exceed its target and reduce estimated costs.

The Gorgon CCS project in Australia (Shell interest 25%, operated by Chevron) started operating in August 2019. It had stored more than 4 million tonnes of CO₂ by the end of 2020.

In Norway, Shell, our project partners and the Norwegian government took the final investment decision (FID) on the Northern Lights CCS project in 2020. This project aims to become the first carbon storage facility with capacity to transport and store CO₂ from industrial facilities in Norway and potentially from across Europe.

Shell is also involved in the Technology Centre Mongstad (TCM), in Norway. TCM is a centre for testing and improving carbon capture technology.

In the Netherlands, we have signed a joint-development agreement to assess the potential to export CO₂ from our Pernis refinery to a Rotterdam-based CO₂ transport and storage provider.

In the UK, we are collaborating with other companies to further understand the potential of CCS. Projects include how to decarbonise our own facilities, to deliver gas power and low-carbon hydrogen.

In other regions, we are pursuing opportunities which are currently in early development phases.

Shell recognises the role of policy as a key enabler for implementing CCS. We are a member of several industry organisations that actively advocate CCS, such as the Zero Emissions Platform in the EU, the American Petroleum Institute in the USA, and the Carbon Capture and Storage Association in the UK. Shell makes representations and contributes to technical and policy papers through these organisations. In 2020, Shell submitted responses to a number of consultations on aspects of CCS, individually and through industry associations, in the EU, USA, UK and other jurisdictions.

Shell is participating in the OGCI's KickStarter initiative to unlock large-scale investment in CCS. The initiative is designed to help decarbonise industrial hubs around the world and started with hubs including North America, North-west Europe and China.

NATURE-BASED SOLUTIONS

We believe that nature will play an important role in the transition to a low-carbon world. Using nature to absorb carbon dioxide helps to limit the overall stock of greenhouse gases in the atmosphere. This can serve as a temporary solution until other low-carbon alternatives are deployed at scale, or it can compensate for emissions that are unavoidable.

As customers' and society's demand for the use of low-carbon products and services grows, nature-based solutions are becoming an increasingly attractive option for emissions offsetting for a range of industries and operators.

Nature-based projects typically involve protecting or redeveloping natural ecosystems such as forests and wetlands, so they can capture and store more carbon. These projects generate carbon emission rights that can be bought by energy consumers around the world. They also support conservation of biodiversity and offer alternative sources of income to local communities.

Nature-based solutions are expected to contribute to meeting our target to be a net-zero emissions energy business by 2050, in step with society.

We have been running a nature-based solutions programme to invest in natural ecosystems since 2019. As well as investing directly in projects that protect or restore nature, we are also working with projects that already generate carbon credits for our customers. In 2020, Shell invested around \$90 million in nature-based projects that reduce or avoid emissions and can also benefit ecosystems by improving biodiversity, water quality and flood protection. This in turn can improve the livelihoods of people in local communities.

Our ambition is to invest around \$100 million per year in nature-based projects that reduce or avoid CO₂ emissions and offer other valuable ecosystem benefits. We aim to use nature-based solutions, in line with the philosophy of avoid, reduce and only then mitigate, to offset emissions of around 120 million tonnes a year by 2030, through projects of the highest independently verified quality.

In 2020, we developed a screening process with clear criteria to help ensure that we invest in nature-based solutions projects that are of high quality and integrity. The criteria include but are not limited to:

- selecting only projects that are certified under credible, high-quality and independent carbon-credit standards;
- selecting projects that deliver wider environmental and social benefits;
- working to ensure project developers maintain appropriate health, safety, security and social governance standards; and
- having an independent third party audit our internal nature-based project screening review and management processes.

In 2019, we started offering what we called "carbon-neutral driving" to our retail customers. We offered service-station customers in the Netherlands and the UK nature-based carbon credits to offset the CO₂ emissions generated by the extraction, refining, distribution and use of the Shell fuel they buy. By the end of 2020, around 18% of Shell's retail customers in the Netherlands and around 15% of our UK service-station customers were driving carbon neutral. So too were more than 200 fleet customers in 12 countries who took advantage of similar offers for businesses.

In 2020, we continued to roll out our carbon-neutral retail offer in Germany, Austria, Switzerland, and Canada, and via a third-party reseller agreement in Denmark. We also offer a growing range of products with nature-based carbon credits, including home energy in the UK, LNG in Asia, bitumen in Europe, and selected lubricants.

In 2020, we took another step to scale up our activities in natural ecosystems by acquiring Select Carbon, a specialist company that partners with farmers, pastoralists and other landowners in Australia to develop carbon farming projects, where plants are grown and soil managed to absorb carbon dioxide from the atmosphere.

For more information, see the Shell Sustainability Report, due to be published in April 2021.

OUR PERFORMANCE

Shell's carbon intensity

Shell's carbon intensity provides an annual measure of the life-cycle emissions intensity of the portfolio of energy products sold. Specifically, we calculate the carbon intensity (gCO₂e/MJ) in terms of the grams of carbon dioxide equivalent (gCO₂e) per unit of energy (MJ) sold. This is measured, tracked and reported using the Net carbon Footprint (NCF) metric and methodology.

Shell's NCF is not calculated by simply dividing total emissions by total energy, nor is it an inventory of absolute emissions. Instead, Shell calculates the life-cycle carbon intensity of each of the different energy products it sells. Once we have calculated the carbon intensity for each individual energy product, we then calculate the overall carbon intensity by taking a weighted average of the individual product intensities, with the weighting based on their sales volumes. This approach enables like-for-like comparisons across a range of energy products and allows us to establish the average carbon intensity for all the energy products we sell, including renewables.

Finally, we deduct, or "net off", any emissions that are stored in carbon sinks. For example, we subtract emissions that are stored using carbon capture and storage in our own operations. We also subtract any carbon dioxide emissions that are removed from the atmosphere and stored using natural carbon sinks created using nature-based solutions, such as reforestation.

While Shell's NCF is an intensity measure and not an inventory of absolute emissions, a notional estimate of the amount of CO₂e emissions covered by the scope of the Net Carbon Footprint calculation can be derived from the final Net Carbon Footprint value for any year.

Net carbon intensity performance

Our NCF performance

NCF in the reference year (2016) = 79 gCO ₂ e/MJ	2018	2019	2020	
NCF	gCO ₂ e/ MJ	79	78	75
Estimated total energy delivered by Shell [A]	trillion (10 ¹²) MJ	22	21.05	18.4
Estimated total GHG emissions included in NCF [B], [C]	million tonnes CO ₂ e	1,731	1,646	1,384

[A] Retail sales volumes from markets where Shell operates under trademark licensing agreements are excluded from the scope of Shell's carbon intensity metric

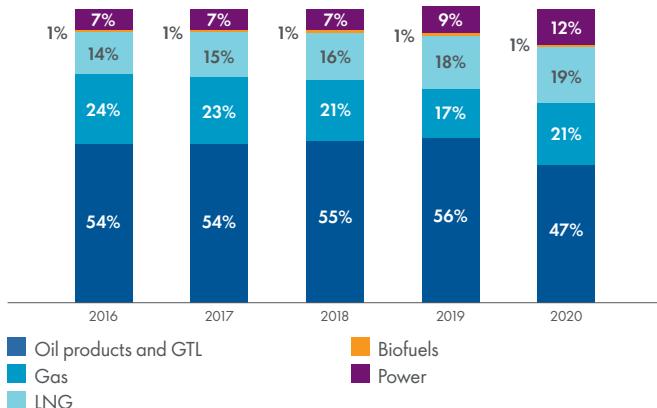
[B] The 2.2 million tonnes of carbon offsets used in 2019, and 3.9 million tonnes of carbon offsets used in 2020 have been subtracted from the estimated total GHG emissions

[C] These numbers include well-to-wheel emissions associated with energy products sold by Shell; 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

We have received third-party limited assurance on our carbon intensity, measured and reported using the Net Carbon Footprint, for the years from 2016 to 2020. Shell's NCF in 2020 was 75 gCO₂e/MJ, a 4% reduction from the previous year and a 5% reduction from the 2016 reference year. One of the major causes of this larger than expected reduction in 2020 was lower demand for energy, especially for oil and gas. Demand for oil products experienced the most significant reduction, followed by natural gas and LNG. Another important factor contributing to the reduction of the NCF was the increase in our power sales in absolute terms as well as their share of the energy mix sold by Shell. The power we sold also had a lower average emissions intensity than in previous years, which further contributed to the overall NCF reduction.

CLIMATE CHANGE AND ENERGY TRANSITION

Share of energy delivered per energy product type [A], [B], [C], [D]

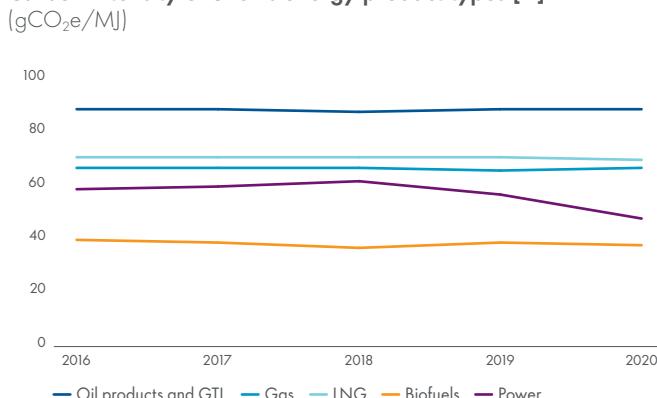


[A] Percentage of delivered energy may not add up to 100% because of rounding.
 [B] Total volume of energy products sold by Shell, aggregated on an energy basis, with electricity represented as fossil equivalents. This value is derived from energy product sales figures disclosed by Shell in the Annual Report, Form 20-F and the Sustainability Report.
 [C] Lower heating values are used for the energy content of the different products and a fossil-equivalence approach is used to account for electrical energy, so that it is assessed on the same basis as our other energy products.
 [D] Retail sales volumes from markets where Shell operated under trademark licensing agreements are excluded from the scope of Shell's carbon intensity metric.

Carbon intensity of Shell's energy product types

The graph below illustrates the carbon intensity of our delivered energy per product type from 2016 to 2020. Our NCF is calculated by taking a weighted average of these individual carbon intensities, with the weighting based on their sales volumes.

Carbon intensity of Shell's energy product types [A]



[A] Emissions included in carbon intensity of power have been calculated using the market-based method in 2020

For hydrocarbon fuels, emissions from end use by customers are by far the biggest contributors to the carbon intensity of the product. As a result, the emissions intensity of hydrocarbon fuels is expected to stay relatively unchanged over time.

This contrasts with the emissions intensity of power, which can be highly variable depending on how it has been generated. To a lesser extent, there is also a contrast between hydrocarbon fuels and biofuels, which can vary significantly in intensity depending on the feedstock and production process used.

The proportion of our renewable power sales and countries where we sell power to the market both affect Shell's overall power mix and its resulting emissions intensity. The carbon intensity of biofuels provided in the graph "Carbon intensity of Shell's energy product types" reflects the global average for biofuels sold by Shell.

Our strategy is to reduce our Net Carbon Footprint, mainly by increasing the proportion of lower-carbon products such as natural gas, biofuels, electricity and hydrogen in the mix of products that we sell to our customers.

GREENHOUSE GAS EMISSIONS

Data in this section are reported on a 100% basis in respect of activities where we are the operator. Reporting on this operational control basis differs from that applied for financial reporting purposes in the "Consolidated Financial Statements" on pages 216-264. Detailed data and information on our 2020 environmental and social performance are expected to be published in the Shell Sustainability Report in April 2021.

GHG Performance

Our direct GHG emissions (Scope 1) decreased from 70 million tonnes of CO₂ equivalent in 2019 to 63 million tonnes of CO₂ equivalent in 2020. The main contributors to this decrease were divestments, (for example, in Canada and the USA), and reduced utilisation at a number of assets caused by lower demand driven by COVID-19. The level of flaring in our Upstream and Integrated Gas businesses combined decreased by around 35% compared with 2019. In 2019, our Prelude floating LNG facility in Australia had experienced an unanticipated spike in flaring during its start-up. In February 2020, we had to shut down Prelude which resulted in a decrease of its GHG emissions by around 80% compared with 2019.

In 2015, we signed up to the World Bank's Zero Routine Flaring by 2030 initiative. This seeks to ensure that all stakeholders, including governments and companies, work together to address routine flaring. Flaring, or burning off, of gas in our Upstream and Integrated Gas businesses contributed around 6% of our overall direct GHG emissions in 2020. Around 35% of this flaring occurred at facilities where there was no infrastructure to capture the gas produced with oil, known as associated gas.

Around 45% of flaring in our Upstream and Integrated Gas facilities in 2020 occurred in assets operated by the Shell Petroleum Development Company of Nigeria Limited (SPDC). Flaring from SPDC-operated facilities decreased by around 15% in 2020 compared with 2019. SPDC, in close collaboration with its joint-venture partners and the Federal Government of Nigeria, continues to make progress towards the objective of ending the continuous flaring of associated gas. Two new gas-gathering projects (Adibawa and Otumara) came on stream at the end of 2017, followed by two more (the Forcados Yokri Integrated Project and Southern Swamp Associated Gas Gathering Solutions) in 2019.

Our indirect GHG emissions associated with imported energy (Scope 2) were 9 million tonnes in 2020 (using market-based method), down from 10 million in 2019, in part driven by divestments (for example in Canada) and lower demand for imported electricity due to reduced utilisation.

Our GHG emissions

		2018	2019	2020
Scope 1 [A]	million tonnes CO ₂	71	70	63
Scope 2 [B]	million tonnes CO ₂	11	10	9
Scope 3 [C]	million tonnes CO ₂	1,637	1,551	1,305

[A] total direct (Scope 1) GHG emissions from assets and activities under operational control boundary

[B] total indirect GHG emissions from imported energy (Scope 2) from assets and activities under operational control boundary

[C] indirect GHG emissions (Scope 3) based on the energy product sales included in the NCF boundary. See our website shell.com for more information on our NCF methodology

Greenhouse gas intensity

In 2020, the three GHG intensity metrics included in the Performance Indicators on page 45 covered over 80% of our total Scope 1 and 2 GHG emissions from assets and activities under our operational control.

The Upstream and Integrated Gas GHG intensity – measured in tonnes of CO₂ equivalent per tonne of hydrocarbon production available for sale – decreased from 0.17 in 2019 to 0.16 in 2020. This was partly because of our Prelude FLNG asset being shut down in February 2020.

The Refining GHG intensity – measured in tonnes of CO₂ equivalent per Solomon's Utilised Equivalent Distillation Capacity (UEDCTTM) – decreased from 1.06 in 2019 to 1.05 in 2020. This was mainly driven by divestment of our Martinez refinery in the USA.

The Chemicals GHG intensity – measured in tonnes of CO₂ equivalent per tonne of high value chemicals – decreased from 1.04 in 2019 to 0.98 in 2020. This was mainly because of increased utilisation following turnarounds on three of our sites in 2019.

GHG emissions and energy consumption data and information in accordance with UK regulations

GHG emissions comprise CO₂, 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 2009 American Petroleum Institute (API)

Compendium of Greenhouse Gas Emissions Methodologies, 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 (API/International Association of Oil & Gas Producers (IOGP)/IPIECA, the global oil and gas industry association for advancing environmental and social performance) indicate that a number of sources of uncertainty can contribute to the overall uncertainty of a corporate emissions inventory.

Greenhouse gas emissions

	2020	2019
Emissions (million tonnes of CO ₂ equivalent)		
Total global direct (Scope 1) [A]	63	70
UK including offshore area [B]	2.0	2.1
Total global energy indirect (Scope 2) [C]	9	10
UK including offshore area [D]	0.0	0.0
Intensity ratio (tonne/tonne)		
All facilities [E]	0.25	0.24

- [A] Emissions from the combustion of fuel and the operation of our facilities globally, calculated using global warming potentials from the IPCC's Fourth Assessment Report.
- [B] Emissions from the combustion of fuels and the operation of our facilities in the UK and its offshore area, calculated using global warming potentials from the IPCC's Fourth Assessment Report.
- [C] Emissions from the purchase of electricity, heat, steam and cooling for our own use globally, calculated using a market-based method as defined by the GHG Protocol Corporate Accounting and Reporting Standard. Using location-based methods, indirect GHG emissions from generation of purchased and consumed energy (electricity, steam, heat and cooling) were 11 million tonnes CO₂e in 2019 and 11 million tonnes CO₂e in 2020.
- [D] Emissions from the purchase of electricity, heat, steam and cooling for use by our facilities in the UK including its offshore area, calculated using a market-based method as defined by the GHG Protocol Corporate Accounting and Reporting Standard. Using location-based methods, indirect GHG emissions from generation of purchased energy consumed by our facilities were 0.06 million tonnes CO₂e in 2019 and 0.06 million tonnes in 2020.
- [E] In tonnes of total direct and energy indirect GHG emissions per tonne of crude oil and feedstocks processed and petrochemicals produced in downstream manufacturing, oil and gas available for sale, LNG and GTL production in Integrated Gas and Upstream. For an additional breakdown by segment, see Greenhouse gas intensity section above.

The energy consumption data provided below comprise own energy, generated and consumed by our facilities, and supplied energy (electricity, steam and heat) purchased by our facilities for our own use.

Energy consumption data reflect primary (thermal) energy (e.g. the energy content of fuels used to generate electricity, steam, heat, mechanical energy etc.). This includes energy from renewable and non-renewable sources. Own energy generated was calculated by multiplying the volumes of fuels consumed for energy purposes by their respective lower heating values. Own energy generated that was exported to third-party assets or to the power grid is excluded. Thermal energy for purchased and consumed electricity was calculated using actual electricity purchased multiplied by country-specific electricity generation efficiency factors (from IEA statistics). Thermal energy for purchased and consumed steam and heat was calculated from actual steam/heat purchased multiplied by a supplier-specific conversion efficiency, or generic efficiency factor where supplier-specific data were not available.

Energy consumption (billion kilowatt-hours)

	2020	2019
Own energy generated and consumed		
Total energy generated and consumed	202	220
UK including offshore area	7.6	7.6
Purchased and consumed energy		
Total purchased and consumed energy	38	44
UK including offshore area	0.2	0.2
Energy consumption		
Total energy consumed	240	264
UK including offshore area	7.8	7.8

In 2020, 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 are listed below:

- At our Clipper facility in the UK, we completed a project to optimise the use of compressors.
- At our Bukom facility in Singapore, we completed two projects to minimise energy loss from steam.
- At our Scotford upgrader facility in Canada, we completed several projects to minimise energy use and improve efficiency, for example by removing equipment from service or replacing it with more efficient equipment.
- At our Geismar facility in the USA, we improved flare staging and temperature control which resulted in lower levels of natural gas consumption.
- At our Mobile facility in the USA, we installed new equipment to increase heat transfer between heat exchangers in order to improve the energy efficiency of the units.
- At our GTL facility in Qatar, we completed several projects to reduce energy use and improve efficiency, for example by minimising the generation of excess steam and converting excess energy into electricity for export to the public grid.
- In Brazil, we reduced fuel usage of vessels by optimising how they operate in dynamic position, stand-by and navigation modes.

Detailed information on our 2020 GHG emissions and energy use is expected to be published in the Shell Sustainability Report in April 2021 and on our website.

The statements in this "Climate change and energy transition" section, including those relating to the Net Carbon Footprint targets, are forward-looking statements based on management's current expectations and certain material assumptions and, accordingly, involve risks and uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied herein.

See "About this Report" on pages iii-iv and "Risk factors" on pages 28-37.

OUR PEOPLE

Performing competitively in the evolving energy landscape requires competent and empowered people working safely together across Shell.

EMPLOYEES



87,000

employees at December 31, 2020

REGION



>70

countries in which we operate

TRAINING



234,000

formal training days for employees and joint-venture partners

FEMALE EMPLOYEES



32%

female employees

DIRECTORS



38%

women on the Board of Directors

SENIOR LEADERS



28%

women in senior leadership positions

EXPERIENCED HIRES



957

experienced people joined Shell (31% female)

OPERATIONS CENTRE HIRES



1,879

recruited for Shell Business Operations centres (50% female)

GRADUATE HIRES



160

graduate hires (49% female)

[A] All metrics except the employees metric exclude the employees in certain Upstream, Downstream and Renewables and Energy Solutions (Formerly New Energies) companies that maintain their own HR systems.

[B] As part of its restructuring plans, Shell expects to reduce 7,000-9,000 jobs by the end of 2022.

We recruit, train and remunerate people according to a strategy that aims to organise our businesses effectively. Our people are essential to the successful delivery of the Shell strategy and to sustaining business performance over the long term. Strong engagement helps us to accelerate our people's development, enhance our leadership capabilities and improve employee performance.

EMPLOYEE OVERVIEW

The employee numbers presented here are the full-time equivalent number of people employed by Shell on a full- or part-time basis, working in Shell subsidiaries, Shell-operated joint operations, seconded to non-Shell-operated joint operations, or joint ventures and associates.

At December 31, 2020, there were a total of 87,000 employees in Shell. This total consisted of employees in Shell and employees in certain Upstream, Downstream and Renewables and Energy Solutions (Formerly New Energies) companies that operate more autonomously than other Shell subsidiaries and maintain their own HR systems.

The total of 87,000 employees at December 31, 2020 was the same as at December 31, 2019.

There were 81,000 employees in Shell, excluding those in companies with their own HR systems, at December 31, 2018.

As part of Reshape initiative, Shell expects to reduce between 7,000 and 9,000 jobs by the end of 2022, as it seeks to reduce costs and restructures with the aim of becoming a more streamlined, more competitive organisation that is nimbler and better able to respond to customers. The job reductions will include around 1,500 people who have already decided to take voluntary redundancy in 2020, but will exclude anybody who may leave Shell because of divestments. Shell will conduct the job reductions process in accordance with our core values of honesty, integrity and respect for people. We will seek at all times to show care for anyone who loses their role. Job and cost reductions are in comparison with December 31, 2019.

The table below shows actual employee numbers by geographical area. Note 26 to the "Consolidated Financial Statements" on page 262 provides the average number of employees by business segment.

Actual number of employees by geographical area

	2020	2019	2018 [A]
Europe	27	27	24
Asia	31	31	28
Oceania	3	2	2
Africa	4	4	4
North America	20	21	21
South America	2	2	2
Total	87	87	81

[A] As revised, numbers have been changed from average number to actual numbers. These numbers exclude those in companies with their own HR systems.

In 2020, a total of 234,000 formal training days were provided for employees and joint-venture partners, compared with 373,000 in 2019. The decrease in formal training was caused by COVID-19-related travel restrictions, which significantly affected classroom and blended training plans. In response to this, we rapidly increased the number of courses that could be attended virtually, and created more digital resources to help our people learn, train and develop their skills. This allowed us to continue to invest in people and capabilities, while maintaining our focus on safety.

EMPLOYEE COMMUNICATION AND INVOLVEMENT

We strive to maintain a healthy employee and industrial relations environment. We seek to ensure that our work practices involve dialogue between management and employees – both directly and, where appropriate, through employee representative bodies. Management regularly engages with our employees through a range of formal and informal channels. These include webcasts and all-staff messages from our Chief Executive Officer (CEO) Ben van Beurden, senior leader webcasts, town halls, team meetings, virtual coffee/chai connects, interviews with Senior Management and online publications via our intranet. For further information on stakeholder engagement, see the "Governance" section on pages 138-139.

We promote safe reporting of views about our processes and practices. In addition to local channels, the Shell Global Helpline enables our people and third parties to report potential breaches of the Shell General Business Principles and Shell Code of Conduct, confidentially and anonymously, in a variety of languages. In 2020, 1,425 cases were reported via the Shell Global Helpline: 1,153 allegations and 272 inquiries. In 2019, 1,686 cases were reported via the Shell Global Helpline: 1,278 allegations and 408 inquiries. Shell Internal Audit (SIA) is the custodian of the Shell Global Helpline process, which is managed by an independent third party. SIA is accountable for ensuring that the Shell Global Helpline functions as intended and that all allegations of Code of Conduct breaches (including bribery and corruption) are investigated and followed up appropriately. The Board has formally delegated to the Audit Committee the responsibility for reviewing the functioning of the Shell Global Helpline and the reports arising from its operation. The Audit Committee is also authorised to establish and monitor the implementation of procedures for the receipt, retention, proportionate and independent investigation and follow-up action of reported matters.

Strong employee engagement is especially important in maintaining strong business delivery in times of change. The Shell People Survey is one of the principal tools used to measure employee engagement, motivation, affiliation and commitment to Shell. It provides insights into employees' views and has had a consistently high response rate. In 2020, the response rate was 86.1%, our highest ever level and an increase of 0.6 percentage points compared with 2019. The average employee engagement score was 78 points out of 100, the same as in 2019. This result gives Shell one of the leading employee engagement scores across a range of industries.

In 2020, we faced the worldwide COVID-19 pandemic. In response, we strengthened the country chair network so we could respond locally to the challenges of the pandemic as experienced by our staff, businesses, suppliers and customers. We also provided global support on health. We offered a home-working ergonomics programme, which involved more than 50,000 staff having a health-based risk assessment, receiving advice and if necessary receiving support to buy office and IT equipment. We established a Care for Self programme to encourage staff to pay attention to their physical and mental well-being, and to support them as they did so. This was considered particularly important, given the stresses placed on staff by the COVID-19 pandemic and lockdowns.

DIVERSITY AND INCLUSION

Our diversity and inclusion approach focuses on hiring, developing and retaining the best people.

Embedding the principles of diversity and inclusion in the way we do business improves our understanding of the needs of our people, partners, suppliers and customers. A diverse workforce, and an inclusive, caring environment that respects and nurtures diverse people, help us to improve our safety and business performance.

We continue to focus on recruiting, developing and promoting more women, and we are supporting initiatives that encourage girls to study science, technology, engineering and mathematics (STEM). We also do this by creating a culture of respect and inclusion. Our CEO Ben van Beurden joined the Catalyst CEO Champions for Change, a group of more than 50 CEOs who pledge to support women's advancement at all levels of leadership. Our CEO actively supports the Shell global gender gap campaign, which seeks to close the gender gap in STEM roles.

In 2020, 49% of our graduate recruits were female, compared with 48% in 2019. At the end of 2020, the proportion of women in senior leadership positions was 27.8%, an increase of 1.4 percentage points compared with the end of 2019. "Senior leadership positions" is a Shell measure based on salary group levels and is distinct from the term "senior manager" in the statutory disclosures set out below.

Gender diversity data (at December 31, 2020)

	Number	
	Men	Women
Directors of the Company	8	62% 5 38%
Senior managers [A]	632	71% 258 29%
Employees (thousand)	59	68% 28 32%

[A] Senior manager is defined in section 414C(9) of the Companies Act 2006 and, accordingly, the number disclosed comprises the Executive Committee members who were not Directors of the Company, and other directors of Shell subsidiaries.

We are creating an environment where people with disabilities can excel. We will provide support and can make adjustments for people with disabilities through the recruitment process and throughout their careers with Shell, including equal access to valuable educational resources, training programmes, and emphasis on personal and professional development.

Our workplace accessibility service currently serves 83 locations globally. The service is designed to ensure that all employees have access to reasonable physical workplace or other adjustments so that they can work effectively and productively.

To further support our employees with disabilities, we have created internal employee networks, including the enABLE networks that support and highlight the work of disabled employees in Shell. First launched in the UK in 2005, we now have 13 enABLE networks in countries including Brazil, Canada, France, India, the Netherlands, the UK and the USA. The disability and enablement focus area is sponsored by Harry Brekelmans, Executive Director for Projects & Technology and Huibert Vigeveno, Executive Director for Downstream.

Shell is a member of the disability campaign The Valuable 500, which seeks to eliminate the exclusion of disabled people worldwide and ensure disability remains a priority for global business leaders. We are also members of Business Disability Forum, a membership organisation that exists to create a disability smart world by linking businesses, disabled people, and government, and Purplespace, a networking and professional development hub for disabled employees, employee network leads and allies from all sectors and trades.

At Shell, we support and enable remarkable people from every background, and strive to be a leader in lesbian, gay, bisexual and transgender (LGBT+) inclusion in the workplace. We have pledged support for the UN LGBTI Standards of Conduct for Business. We benchmark ourselves externally, with consistent top-tier results. For example, in 2020, in the USA we earned a 100% score in the Human Rights Campaign Foundation's Corporate Equality Index, a recognition we have earned annually since 2016. In 2020, Shell has again been benchmarked as a top employer in the Workplace Pride Global Benchmark inclusive workplace survey, scoring 94.2% compared with a median score of 50-60%.

OUR PEOPLE continued

We have also created a global LGBT+ forum consisting of LGBT+ colleagues and allies and backed by members of the Executive Committee. The forum is taking action in a number of areas, for example, strengthening our approach to talent development and industry collaborations, including with non-governmental organisations.

Shell has established a global D&I Council for Race, sponsored by our CEO Ben van Beurden. The council aims to build on our actions to advance diversity in our workforce so it better reflects communities where we work and from which we draw talent. While seeking to drive change across the organisation, the council has identified the USA and the UK as the focus of much of its initial efforts to address diversity and inclusion challenges.

The local national coverage is the number of senior local nationals (both those working in their respective base country and those expatriated) as a percentage of the number of senior leadership positions in their base country. The total number of senior leadership roles has reduced which resulting in the drop of local national coverage.

Local national coverage (at December 31)

	Number of selected key business countries		
	December 31, 2020	December 31, 2019	December 31, 2018
Greater than 80%	10	12	10
Less than 80%	10	8	10
Total	20	20	20

[A] These numbers exclude those in companies with their own HR systems.

CODE OF CONDUCT

In line with the UN Global Compact Principle 10 (businesses should work against corruption in all its forms, including extortion and bribery), we maintain a global anti-bribery and corruption/anti-money laundering (ABC/AML) programme designed to prevent, detect, remediate and learn from potential violations. The programme is underpinned by our commitment to prohibit bribery, money laundering and tax evasion, and to conduct business in line with our Shell General Business Principles and Code of Conduct.

We do not tolerate the direct or indirect offer, payment, solicitation or acceptance of bribes in any form. Facilitation payments are also prohibited. The Shell Code of Conduct includes specific guidance for Shell staff, (which comprises employees and contract staff), on requirements to avoid or declare actual, potential or perceived conflicts of interest, and on offering or accepting gifts and hospitality.

Communications from our leaders emphasise the importance of these commitments and compliance with requirements. These are reinforced with both global and targeted communications to ensure that Shell staff are frequently reminded of their obligations. To support the Code of Conduct, we have mandatory risk-based procedures and controls that address a range of compliance risks and ensure that we focus resources, reporting and attention appropriately. By making a commitment to our core values of honesty, integrity and respect for people, and by following the Code of Conduct, we protect Shell's reputation.

In 2020, the COVID-19 pandemic brought additional focus on conduct risk. Our core values are undermined if decisions are taken which fall short of the expected standards of ethical behaviour and compliance. Conduct risk arises from human behaviour and is influenced by factors in the external environment. The COVID-19 pandemic has impacted individuals

and businesses globally, resulting in a human health crisis, widespread lockdowns and a severe economic recession. As a general position, our response to the pandemic has been to reiterate and emphasise that adherence to Shell's compliance rules (including the Code of Conduct) remains essential to protect our business and to help us make the right decisions for the future. While maintaining this basic position, pragmatic, risk-based mitigations have been implemented where appropriate to increase response speed and efficiency without undermining the intended purpose of our controls.

Our ethics and compliance requirements are articulated through our policies, standards and procedures. They are communicated to Shell employees and contract staff and, where necessary and appropriate, to agents and business partners. We monitor and report internally on adherence with select ethics and compliance requirements, such as mandatory training completion and due diligence screening. We pay particular attention to our due diligence procedures when dealing with third parties. We also make our requirements clear to third parties through a variety of measures such as standard contract clauses. We publish our Ethics and Compliance Manual on shell.com to demonstrate our commitment in this area.

The Shell Ethics and Compliance Office helps the businesses and functions to implement the ABC/AML and other programmes, and monitors and reports on progress. Legal counsel provides legal advice globally and supports the implementation of programmes. The Shell Ethics and Compliance Office regularly reviews and revises all ethics and compliance programmes to ensure they remain up to date with applicable laws, regulations and best practices. This includes incorporating results from relevant internal audits, reviews and investigations, and periodically commissioning external reviews and benchmarking.

A structured framework for ethical decision-making, expanding on the formulation "Is it legal, is it ethical, is it wise?", was developed and tested during the course of 2020 and subsequently reviewed by an independent third-party panel. The framework will be implemented broadly across Shell from 2021. It will support decision-making by requiring Shell staff to think through, in a structured manner, the legal, ethical and external dimensions of the various opportunities and decisions they face in their daily work.

We investigate all good-faith allegations of breaches of the Code of Conduct, however they are raised. We are committed to ensuring all such incidents are investigated by specialists in accordance with our Investigation Principles. Allegations may be raised confidentially and anonymously through several channels, including a Shell Global Helpline operated by an independent provider.

Violation of the Code of Conduct or its policies can result in disciplinary action, up to and including contract termination or dismissal. In some cases, we may report a violation to the relevant authorities, which could lead to legal action, fines or imprisonment.

Internal investigations confirmed 252 substantiated breaches of the Code of Conduct in 2020. As a result, we dismissed or terminated the contracts of a total of 54 employees and contract staff.

EMPLOYEE SHARE PLANS

We have a number of share plans designed to align employees' interests with our performance through share ownership. For information on the share-based compensation plans for Executive Directors, see the "Directors' Remuneration Report" on pages 153-156.

PERFORMANCE SHARE PLAN, LONG-TERM INCENTIVE PLAN AND EXCHANGED AWARDS UNDER THE BG LONG-TERM INCENTIVE PLAN

Under the Performance Share Plan (PSP), 50% of the award is linked to certain indicators described in "Performance indicators" on pages 43-45, averaged over the performance period. From 2017 to 2019, 12.5% of the award was linked to free cash flow (FCF) and the remaining 37.5% was linked to a comparative performance condition which involves a comparison with four of our main competitors over the performance period, based on three performance measures. For 2020 onwards, 11.25% of the award is linked to the FCF measure and 5% is linked to an energy transition measure. The remaining 33.75% is linked to the comparative performance condition. From 2021, 10% of the award is linked to the FCF measure and 10% is linked to an energy transition measure. The remaining 30% is linked to the comparative performance condition.

Under the LTIP awards made in 2017 and 2018, 25% of the award is linked to the FCF measure and the remaining 75% is linked to the comparative performance conditions mentioned above. For 2019 and 2020, 22.5% of the award is linked to the FCF measure and 10% is linked to an energy transition measure. The remaining 67.5% is linked to the comparative performance condition mentioned above. From 2021, 20% of the award is linked to the FCF measure and 20% is linked to an energy transition measure. The remaining 60% is linked to the comparative performance condition.

Separately, following the BG acquisition, certain employee share awards made in 2015 under BG's Long-term Incentive Plan were automatically exchanged for equivalent awards over shares in the Company. The outstanding awards take the form of nil-cost options.

Under all plans, all shares that vest are increased by an amount equal to the notional dividends accrued on those shares during the period from the award date to the vesting date. In certain circumstances, awards may be adjusted before delivery or subject to clawback after delivery. None of the awards result in beneficial ownership until the shares vest.

 See Note 21 to the "Consolidated Financial Statements" on page 256.

RESTRICTED SHARE PLAN

Under the Restricted Share Plan, awards are made on a highly selective basis to senior staff. Shares are awarded subject to a three-year retention period. All shares that vest are increased by an amount equal to the notional dividends accrued on those shares during the period from the award date to the vesting date. In certain circumstances, awards may be adjusted before delivery or subject to clawback after delivery.

GLOBAL EMPLOYEE SHARE PURCHASE PLAN

Eligible employees in participating countries may participate in the Global Employee Share Purchase Plan. This plan enables them to make contributions from net pay towards the purchase of the Company's shares at a 15% discount to the market price, either at the start or at the end of an annual cycle, whichever date offers the lower market price.

UK SHELL ALL EMPLOYEE SHARE OWNERSHIP PLAN

Eligible employees of participating Shell companies in the UK may participate in the Shell All Employee Share Ownership Plan, under which monthly contributions from gross pay are made towards the purchase of the Company's shares. For every six shares purchased by the employee, one matching share is provided at no cost to the employee.

UK SHARESAVE SCHEME

Eligible employees of participating Shell companies in the UK have been able to participate in the UK Sharesave Scheme. Options have been granted over the Company's shares at market value on the invitation date. These options are normally exercisable after completion of a three-year or five-year contractual savings period. From 2017 no further grants were made under this plan.

Separately, following the acquisition of BG, certain participants in the BG Sharesave Scheme chose to roll over their outstanding BG share options into options over the Company's shares. The BG option price (at a discount of 20% to market value) was converted into an equivalent Company option price at a ratio agreed with Her Majesty's Revenue and Customs. These options are normally exercisable after completion of a three-year contractual savings period.

Strategic Report signed on behalf of the Board

/s/ Linda M. Coulter

LINDA M. COULTER

Company Secretary
March 10, 2021

GOVERNANCE

Directors' Report

114	The Board of Royal Dutch Shell plc
122	Senior Management
124	Introduction from the Chair
126	Statement of compliance with the UK Corporate Governance Code
128	Governance framework
130	Board activities and evaluation
134	Understanding and engaging with our stakeholders
138	Workforce engagement
140	Nomination and Succession Committee
143	Safety, environment and sustainability committee
145	Audit Committee Report
153	Directors' Remuneration Report
157	Annual Report on Remuneration
173	Directors' Remuneration Policy
182	Other Regulatory and Statutory Information



POWERING
LIVES



THE BOARD OF ROYAL DUTCH SHELL PLC



CHARLES O. HOLLIDAY

Chair

Tenure

Chair – five years and nine months (appointed Chair May 19, 2015) On Board – 10 years and six months (appointed September 1, 2010) (Chad will be standing down from the Board following the 2021 Annual General Meeting. See page 142 for further information)

Board committee membership

Chair of the Nomination and Succession Committee

Outside interests/commitments

Presiding Director of HCA Holdings, Inc. Director of Deere & Company. Member of the Critical Resource's Senior Advisory Panel. Member of the Royal Academy of Engineering (UK).

Age

73

Nationality

US citizen

Career

Charles (Chad) Holliday was appointed Chair of the Board of Royal Dutch Shell plc with effect from May 19, 2015.

He was Chief Executive Officer of DuPont from 1998 to 2009, and Chairman from 1999 to 2009. He joined DuPont in 1970 after receiving a BS in industrial engineering from the University of Tennessee and held various manufacturing and business assignments, including a six-year Tokyo-based posting as President of DuPont Asia/Pacific.

He has previously served as Chairman of the Bank of America Corporation, The Business Council, Catalyst, the National Academy of Engineering, the Society of Chemical Industry (American Section) and the World Business Council for Sustainable Development. He is a founding member of the International Business Council.

Relevant skills and experience

Chad has a distinguished track record as an international and well-respected businessman. He was originally appointed to the Board as a Non-executive Director in September 2010 and, prior to his May 2015 appointment as Chair of the Board, served as Chair of the Safety, Environment and Sustainability Committee and Member of the Remuneration Committee.

He has a deep understanding of international strategic, commercial and environmental issues, and gained extensive experience in the areas of safety and risk management during his time with DuPont. In his role as Chair, Chad is committed to developing and maintaining a strong dialogue with investors and other key stakeholders. He ensures that their views are considered during Board discussions and decision-making. Chad has a strong interest in, and has demonstrated a strong commitment to, ensuring that the highest standards of corporate governance, safety, ethics and compliance are maintained. Chad is a particularly avid advocate of greater diversity, which is reflected in the Board's current diversity mix and enhanced diversity goals across the Shell Group.



EULEEN GOH

Deputy Chair and Senior Independent Director

Tenure

Six years and six months (appointed September 1, 2014). Euleen was appointed Deputy Chair and Senior Independent Director on May 20, 2020.

Board committee membership

Member of the Nomination and Succession Committee and member of the Remuneration Committee

Outside interests/commitments

Chairman of SATS Ltd. Trustee of the Singapore Institute of International Affairs Endowment Fund. Chairman of the Singapore Institute of Management Pte Ltd and Non-executive Director of Singapore Health Services Pte Ltd, both of which are not-for-profit organisations.

Age

65

Nationality

Singaporean

Career

Euleen is an Associate of the Institute of Chartered Accountants in England and Wales, a Fellow of the Singapore Institute of Chartered Accountants, and has professional qualifications in banking and taxation. She has held various senior management positions within Standard Chartered Bank and was Chief Executive Officer of Standard Chartered Bank, Singapore, from 2001 until 2006. She is also a Fellow of the Singapore Institute of Directors.

She has also held non-executive appointments on various boards including Aviva plc, MediaCorp Pte Ltd, Singapore Airlines Ltd, Singapore Exchange Ltd, Standard Chartered Bank Malaysia Berhad, Standard Chartered Bank Thai plc, CapitaLand Ltd, Temasek Trustees Pte Ltd, DBS Bank Ltd and DBS Group Holdings Ltd. She was previously Non-executive Chairman of the Singapore International Foundation, and Chairman of International Enterprise Singapore and the Accounting Standards Council, Singapore.

Relevant skills and experience

Euleen's current roles as chair of the board of directors of various international organisations provide significant experience in the area of strategy development and international businesses. She is highly regarded both externally and within Shell as a champion of diversity and consistently but constructively challenges the Board and management to continue to progress in this area.

Based in Singapore and having been Chair of the Risk Committee of the largest bank in South-east Asia, Euleen is close to key emerging/growth markets for our business. Euleen's risk management expertise has elevated the Board's deep deliberations around risk governance, and her voice is regularly heard on discussions regarding appropriate risk appetite. Her extensive travel around the world, through her various executive and non-executive roles, has equipped her with broad geopolitical insight and significant knowledge of operating in the Asian market.

Euleen uses her financial acumen and advocacy for diversity to pose probing and insightful questions, both in and beyond the boardroom. This contributes to well-rounded, incisive and inclusive Board discussions.



BEN VAN BEURDEN
Chief Executive Officer

Tenure

Seven years and two months (appointed January 1, 2014)

Board committee membership

N/A

Outside interests/commitments

The Board of Daimler AG has proposed to its shareholders that Ben join its Board as a Supervisory Board member (Non-Executive Director). Daimler AG shareholders are scheduled to vote on this proposal at its AGM, scheduled for March 31, 2021.

Age

62

Nationality

Dutch

Career

Ben was Downstream Director from January to September 2013. Before that, he was Executive Vice President Chemicals from 2006 to 2012. In this period, he also served on the boards of a number of leading industry associations, including the International Council of Chemicals Associations and the European Chemical Industry Council. Prior to this, he held a number of operational and commercial roles in Upstream and Downstream, including Vice President Manufacturing Excellence. He joined Shell in 1983, after graduating with a master's degree in chemical engineering from Delft University of Technology, the Netherlands.

Relevant skills and experience

Ben has more than 37 years' experience of working for Shell. He has built a deep understanding of the industry and proven management experience across the technical and commercial roles.

Ben has led Shell to build resilience and deliver strong financial results. In 2016, he steered the Company through the acquisition and integration of the BG Group, which accelerated Shell's business strategy and led to a streamlining divestment programme of \$30 billion of non-core assets.

Under his leadership, Shell has positioned itself to help tackle climate change. In April 2020, Shell set a target of becoming a net-zero emissions energy business by 2050, in step with society.

In 2020, in the unprecedented circumstances of the COVID-19 pandemic, Shell took decisive action to maintain its financial resilience. Ben also led plans for a strategic reorganisation, due to take effect in August 2021, aimed at setting up Shell to succeed in the energy transition by making the business nimbler and better able to respond to customers. In February 2021, Shell set out a detailed strategy to create value for shareholders and society and to achieve its net-zero emissions target.



JESSICA UHL
Chief Financial Officer

Tenure

Four years (appointed March 9, 2017)

Board committee membership

N/A

Outside interests/commitments

No external appointments

Age

53

Nationality

US citizen

Career

Jessica was Executive Vice President Finance (EVP) for the Integrated Gas business from January 2016 to March 2017. Previously, she was EVP Finance for Upstream Americas from 2014 to 2015, Vice President Finance for Upstream Americas Unconventionals from 2013 to 2014, VP Controller for Upstream and Projects & Technology from 2010 to 2012, VP Finance for the global Lubricants business from 2009 to 2010, and Head of External Reporting from 2007 to 2009. She joined Shell in 2004 in finance and business development, supporting the Renewables business.

Prior to joining Shell, Jessica worked for Enron in the USA and Panama from 1997 to 2003 and for Citibank in San Francisco, USA, from 1990 to 1996. She obtained a BA from UC Berkeley in 1989 and an MBA at INSEAD in 1997.

Relevant skills and experience

Jessica is a highly regarded executive with a track record of delivering key business objectives, from cost leadership in complex operations to mergers and acquisitions. Jessica's professional background combines an external perspective with more than 16 years of Shell experience: she has held finance leadership roles in Europe and the USA, in Shell's Upstream, Integrated Gas and Downstream businesses, as well as in Projects & Technology and Corporate.

Jessica was appointed CFO in the year following the BG acquisition, when Shell's debt, gearing and development costs were high and when the oil price was still recovering from the lower levels of 2016. Jessica responded to these challenging conditions with enthusiasm, clarity and discipline and has overseen Shell's delivery of industry-leading cash flow from operating activities.

In 2020, Jessica drove decisive counter-measures to protect the long-term financial health of the organisation, strengthen its balance sheet and preserve cash while ensuring the safe continuity of the business.

Jessica has also been a leading voice for transparency in the energy industry, including on taxes and climate change. Under her tenure, Shell has continued to expand and enhance disclosures related to climate change in line with the principles of the Task Force on Climate-Related Financial Disclosures. Under her guidance, from 2019, Shell began publishing an annual Tax Contribution Report. This includes country-by-country report data, a standard set by the Organisation for Economic Co-operation and Development (OECD).

THE BOARD OF ROYAL DUTCH SHELL PLC continued



DICK BOER Independent Non-executive Director

Tenure

Nine months (appointed May 20, 2020)

Board committee membership

Member of the Audit Committee

Outside interests/commitments

Non-executive Director for Nestlé and SHV Holdings; Chairman of the Advisory Board for G-Star RAW; Chairman of the Supervisory Board of Royal Concertgebouw; Chairman of Rijksmuseum Fonds.

Age

63

Nationality

Dutch

Career

Dick was President and Chief Executive Officer of Ahold Delhaize from 2016 to 2018. Prior to the merger between Ahold and Delhaize, he served as President and CEO of Royal Ahold from 2011 to 2016. From 2006 to 2011 he was a member of the Executive Board of Ahold and served as Chief Operating Officer of Ahold Europe from 2006 to 2011.

Dick joined Ahold in 1998 as CEO of Ahold Czech Republic and was appointed President and CEO of Albert Heijn in 2000. In 2003, he also became President and CEO of Ahold's Dutch businesses.

Prior to joining Ahold, Dick spent more than 17 years in various retail positions, for SHV Holdings N.V. in the Netherlands and abroad, and for Unigro N.V.

Relevant skills and experience

Dick is a highly regarded, recently retired chief executive, who has a deep understanding of brands and consumers, and extensive knowledge of the US and European markets, from his time leading one of the world's largest food retail groups. He brings a career's worth of experience at the forefront of retailing and customer service, which extended in more recent years to e-commerce and the digital arena. This experience is most timely as Shell focuses on the growth of our marketing businesses and increasing consumer choices in energy products.

Dick is a balanced leader with sound business judgement and a proven track record in strategic delivery, evidenced by the combination of Ahold and Delhaize. He also has a passion for sustainability and is well aware of the importance of the various stakeholder interests in this area.



NEIL CARSON OBE Independent Non-executive Director

Tenure

One year and nine months (appointed June 1, 2019)

Board committee membership

Chair of the Remuneration Committee and member of the Safety, Environment and Sustainability Committee

Outside interests/commitments

Non-executive Chairman of Oxford Instruments plc

Age

63

Nationality

British

Career

Neil is a former FTSE 100 chief executive. After completing an engineering degree, Neil joined Johnson Matthey in 1980 where he held several senior management positions in the UK and the USA, before being appointed Chief Executive Officer in 2004. Since retiring from Johnson Matthey in 2014, Neil has focused his time on his non-executive roles. He was Chairman of TT Electronics plc from 2015 until May 6, 2020.

Relevant skills and experience

Neil is highly experienced, has a broad industrial outlook and a highly commercial approach with a practical perspective on businesses. He brings a track record of strong operational exposure, familiarity with capital-intensive business and a first-class international perspective on driving value in complex environments. Neil was awarded an OBE for services to the chemical industry in 2016. Neil has used his current and past experience in non-executive positions and, despite being relatively new to the Shell Board, he has already made significant contributions to Board discussions. He has also provided valuable insight based on his former executive position and operational experience. Neil was appointed Chair of the Remuneration Committee on May 20, 2020.



ANN GODBEHERE
Independent Non-executive Director

Tenure

Two years and nine months (appointed May 23, 2018)

Board committee membership

Chair of the Audit Committee, member of the Safety, Environment and Sustainability Committee

Outside interests/commitments

Non-executive Director and audit committee chair of Stellantis N.V., Fellow of the Institute of Chartered Professional Accountants and a Fellow of the Certified General Accountants Association of Canada.

Age

65

Nationality

Canadian and British

Career

Ann started her career with Sun Life of Canada in 1976 in Montreal, Canada. She joined M&G Group in 1981, where she served as Senior Vice President and Controller for both life and health, and property and casualty businesses throughout North America. She joined Swiss Re in 1996, after it acquired the M&G Group, and served as Chief Financial Officer from 2003 to 2007. From 2008 to 2009, she was interim Chief Financial Officer and an Executive Director of Northern Rock bank in the initial period following its nationalisation.

Ann has also held several non-executive director positions at Prudential plc, British American Tobacco plc, UBS AG, and UBS Group AG. Ann served as a non-executive director of Rio Tinto plc and Rio Tinto Limited until May 2019, and she was also Senior Independent Director of Rio Tinto plc. In January 2021, Ann joined the Board of the newly formed Stellantis NV, and she chairs its Audit Committee.

Relevant skills and experience

Ann is a former CFO, a Fellow of the Institute of Chartered Professional Accountants, and has more than 25 years of experience in the financial services sector. She has worked her entire career in international business and has lived in or served on boards in nine countries. Ann makes significant contributions and adds exceptional value by bringing both her extensive experience and a global perspective to Board discussions.

Ann's long and varied international business career powered by her financial acumen is reflected in the insights and constructive challenges she brings to the boardroom. As Audit Committee Chair, Ann leverages her background to ensure robust discussions are consistently held as the Audit Committee delivers its remit.



CATHERINE J. HUGHES
Independent Non-executive Director

Tenure

Three years and nine months (appointed June 1, 2017)

Board committee membership

Member of the Safety, Environment and Sustainability Committee and member of the Remuneration Committee. On March 11, 2021 the Board announced that Catherine would become Chair of the Safety, Environment and Sustainability Committee, effective May 19, 2021.

Outside interests/commitments

–.

Age

58

Nationality

Canadian and French

Career

Catherine was Executive Vice President International at Nexen Inc., from January 2012 until her retirement in April 2013, where she was responsible for all oil and gas activities including exploration, production, development and project activities outside Canada. She joined Nexen in 2009 as Vice President Operational Services, Technology and Human Resources.

Prior to joining Nexen Inc., she was Vice President Oil Sands at Husky Oil from 2007 to 2009 and Vice President Exploration & Production Services, from 2005 to 2007. She started her career with Schlumberger in 1986 and held key positions in various countries, including France, Italy, Nigeria, the UK and the USA, and was President of Schlumberger Canada Ltd for five years. She was a Non-executive Director of Statoil from 2013 to 2015. Catherine was up until May 2020, a non-executive Director of SNC-Lavalin Group Inc.

Relevant skills and experience

Catherine contributes through her knowledge of industry and the ease with which she engages with other Directors and managers in the boardroom. With over 30 years of oil and gas sector experience, she brings a geopolitical outlook and deep understanding of the industry. An engineer by training, she has also spent a significant part of her career working in senior human resources roles. The Board highly regards her perspectives on our industry and our most important asset, our people.

Catherine has a strong track record of executing operational discipline with a focus on performance metrics and a continual drive for excellence. Her knowledge of the technology underpinning oil and gas operations, logistics, procurement and supply chains benefits the Board greatly as it considers various projects and investment or divestment proposals.

She also uses her industry knowledge – combined with her commitment to the highest standards of corporate governance and safety, ethics and compliance – in her membership of our Safety, Environment and Sustainability Committee, while using her human resources experience in her membership of the Remuneration Committee.

THE BOARD OF ROYAL DUTCH SHELL PLC continued



MARTINA HUND-MEJEAN
Independent Non-executive Director

Tenure

Nine months (appointed May 20, 2020)

Board committee membership

Member of the Audit Committee

Outside interests / commitments

Non-executive Director of Prudential Financial Inc, Colgate-Palmolive Company, and Truata Ltd.

Age

60

Nationality

German and US citizen

Career

Martina was Chief Financial Officer of Mastercard Inc from 2007 to 2019. From 2002 to 2007 she was Senior Vice President, Corporate Treasurer at Tyco International Ltd and from 2000 to 2002 she was Senior Vice President, Treasurer at Lucent Technologies.

Prior to this, Martina spent 12 years with General Motors, undertaking a number of senior roles within their finance operations.

Relevant skills and experience

Originally from Germany, Martina has spent 30 years in the USA and is an experienced global executive. Her financial and operational leadership of technology-focused companies is extremely relevant as Shell explores new technology-enabled business models. Martina also brings diverse sector experience to the Board, most recently from operating at a large global organisation in the highly regulated finance industry.

Martina is known for her straightforward and direct approach. She maintains the highest standards of leadership, strategic thinking and financial stewardship. She also has a strong track record as a mentor and in promoting diversity.

Martina's deep financial knowledge and unique perspective also enables her to make robust, demanding and constructive challenges to our investment considerations to help ensure that our projects are aligned with our strategic intent.



SIR ANDREW MACKENZIE
Independent Non-executive Director [A]

Tenure

Five months (appointed October 1, 2020)

Board committee membership

Member of the Nomination and Succession Committee

Outside interests / commitments

Fellow of the Royal Society (FRS)

Age

64

Nationality

British

Career

Sir Andrew joined BHP, the world's largest mining company, in 2008, becoming Group CEO from 2013 to 2019, when he systematically simplified and strengthened the business, and created options for the future. He also made BHP the first miner to pledge to tackle emissions caused when customers use its products.

From 2004 to 2007 at Rio Tinto, he was Head of Industrial Minerals, then Head of Industrial Minerals and Diamonds. Prior to this, Sir Andrew spent 22 years with BP, joining in 1982 in research and development, followed by international operations and technology roles across most business streams and functions – principally in exploration and production and petrochemicals, including as Chief Reservoir Engineer and Chief Technology Officer. Latterly he was Group Vice President for Chemicals in the Americas, then Olefins and Polymers globally.

From 2005 to 2013 Sir Andrew served as a Non-executive Director of Centrica. He has also served on many not-for-profit boards, including public policy think-tanks in the UK and Australia. He was knighted in 2020 for services to business, science, technology and UK-Australia relations.

Relevant skills and experience

Sir Andrew is a highly experienced leader who has managed major international FTSE 100 businesses, and has more than 30 years' experience in the oil and gas, petrochemicals and minerals industry. Following early academic distinction, Sir Andrew made important contributions to geochemistry, including groundbreaking methods for oil exploration and recovery. He was recognised as "one of the world's most influential earth scientists" and made a Fellow of the Royal Society in 2014.

Having lived and worked on five continents, Sir Andrew applies his deep understanding of the energy business and geopolitical outlook to create public-private partnerships and advise governments around the world. As an earth scientist, Sir Andrew has consistently pursued sustainable action on climate change in the interests of access to affordable energy and global development. Sir Andrew brings the wealth of his experience and insights to Shell, where his expertise is already contributing to help Shell navigate the energy transition. Sir Andrew is also a committed champion of gender balance, the rights of indigenous peoples, and of the power of large companies to support social change – all of which align closely with Shell's purpose, strategy and values.

[A] On March 11, 2021, the Board announced the appointment of Sir Andrew Mackenzie as Chair with effect from the conclusion of the 2021 AGM.



ABRAHAM SCHOT
Independent Non-executive Director

Tenure

Five months (appointed October 1, 2020)

Board committee membership

Member of the Safety, Environment and Sustainability Committee

Outside interests/commitments

-

Age **Nationality**

66 Dutch

Career

Bram has been a member of the group Board of Volkswagen AG, responsible for the Premium Car Group, CEO of Audi AG, Chairman of Lamborghini and Ducati, responsible for the VW group Commercial Operations and Vice-Chairman of Porsche Holding Salzburg.

From 2011 to 2016 he was a Member of the Board of Volkswagen CV, Executive Vice President responsible for Global Marketing, Sales & Services, New Business Models. In 2017 he became a member of the Board of Audi AG. From 2006 to 2011 Bram was President & CEO of Daimler/Mercedes-Benz Italia & Holding S.p.A. From 2003 to 2006 he was President & CEO of DaimlerChrysler in the Netherlands.

Prior to this, Bram held a number of Director and senior leadership roles within Mercedes-Benz in the Netherlands, having joined the business in 1987 on an executive management programme.

Relevant skills and experience

Bram has over 30 years' experience working in the automotive industry at all levels of the business.

He gained a wealth of knowledge on far-reaching cost optimisation programmes at Audi AG. These helped transform the car company into a provider of electric vehicles that could offer sustainable mobility and succeed in the energy transition. He is well placed to leverage this knowledge in the Shell boardroom as Shell navigates its own transformation and pathway through the energy transition.

Bram has strong principles and regards integrity and compliance as the basis for doing business.

His studies have encompassed innovation and organisational effectiveness, geopolitical environments, shareholder value, corporate social responsibility and risk management, in several countries, which are all highly valued management tools and are already evident in the questions he raises in the boardroom.



SIR NIGEL SHEINWALD GCMG
Independent Non-executive Director

Tenure

Eight years and eight months (appointed July 1, 2012)

On March 11, 2021 the Board announced that Sir Nigel Sheinwald would not be seeking re-election at the 2021 AGM.

Board committee membership

Chair of the Safety, Environment and Sustainability Committee and member of the Nomination and Succession Committee

Outside interests/commitments

Non-executive Director of Invesco Ltd. Senior Adviser to Tanium Inc. and the Universal Music Group. Visiting Professor of King's College, London.

Age **Nationality**

67 British

Career

Sir Nigel was a senior British diplomat who served as British Ambassador to the USA from 2007 to 2012, before retiring from the Diplomatic Service. Prior to this, he served as Foreign Policy and Defence Adviser to the Prime Minister and as British Ambassador and Permanent Representative to the European Union in Brussels. He joined the Diplomatic Service in 1976 and served in Brussels, Moscow, Washington and in a wide range of policy roles in London. Since 2012, he has taken on a number of international business roles, and has supported organisations involved in higher education and international affairs.

Relevant skills and experience

Sir Nigel's distinguished track record, which encompasses three of the most senior international roles in British public service, has given him broad geopolitical and public policy experience, and knowledge of regulatory issues, communications and stakeholder management. He has a global and strategic outlook which enables him to identify emerging issues that could present geopolitical or reputational challenges.

Sir Nigel continues to bring a unique government policy perspective to our strategic discussions, particularly on topics such as the energy transition that are strongly influenced by the views of governments and a complex range of interested parties. His many contributions to the Board on this and other strategic and operational topics often reflect the interconnections between geopolitics, business and external stakeholder engagement.

He is accustomed to operating in challenging environments and is committed to active external engagement. This, and his understanding of public policy and regulatory issues through his career in government service and membership of think-tank and university boards, has made him well suited to the role of Chair of our Safety, Environment and Sustainability Committee.

THE BOARD OF ROYAL DUTCH SHELL PLC continued



GERRIT ZALM Independent Non-executive Director

Tenure

Eight years and two months (appointed January 1, 2013)

Board committee membership

Member of the Audit Committee and member of the Remuneration Committee

Outside interests/commitments

Director of Moody's Corporation Inc. and Danske Bank A/S

Age

68

Nationality

Dutch

Career

Gerrit was an adviser to PricewaterhouseCoopers during 2007, Chairman of the Trustees of the International Accounting Standards Board from 2007 to 2010, and an adviser to Permira from 2007 to 2008. He was Chief Economist of DSB Bank from July 2007 to January 2008, Chief Financial Officer from January 2008 to December 2008, and Chairman of the Managing Board of ABN AMRO Bank N.V. from 2010 to 2016. He was Minister of Finance of the Netherlands, twice, from 1994 to 2002 and from 2003 to 2007. In between, he was Chairman of the parliamentary party of the VVD.

Prior to 1994, he was head of the Netherlands Bureau for Economic Policy Analysis, a professor at Vrije Universiteit Amsterdam, and held various positions at the Ministry of Finance and the Ministry of Economic Affairs. He studied general economics at Vrije Universiteit Amsterdam, from where he also received an honorary doctorate in economics.

Relevant skills and experience

An economist by background, Gerrit's distinguished 12-year service as the Minister of Finance of the Netherlands, and his experience gained from his time with ABN AMRO Bank, bring a deep and valuable understanding of Dutch politics and financial markets to the Board. His international financial management expertise and strategic development experience also benefit the Audit Committee.

A highly regarded and seasoned leader in both the public and private spheres, his significant experience in analysing financial commitments from a wider public stakeholder and a global business standpoint serves the Board well, particularly when considering investment proposals. Gerrit consistently and concisely articulates the logic and reasoning behind his views, which he regularly and directly provides to the benefit of the Board and management. His questions often trigger other analytical questions from fellow Directors, deepening and widening Board discussions.

Career

Linda was General Counsel of the Upstream Americas business and Head of Legal US, based in the USA, from 2014 to 2016. Previously, she was Group Chief Ethics and Compliance Officer, based in the Netherlands, from 2011 to 2014. Since joining Shell in 1995, she has also held a variety of legal positions in the Shell Oil Company in the USA, including Chemicals Legal Managing Counsel and other senior roles in employment, litigation, and commercial practice.

Relevant skills and experience

Linda is our Company Secretary and plays an important role as Shell's General Counsel Corporate, overseeing corporate legal teams in Canada, the Netherlands, the UK and the USA.

The various legal roles Linda has undertaken at our headquarters, and in supporting both the Upstream and Downstream businesses, have provided her with a strong understanding of our global operations and people. Her experience of engaging with the Board in previous roles, coupled with her broad understanding and engagement across Shell's businesses and functions, helps to ensure that the right matters come to the Board at the right time.



LINDA M. COULTER Company Secretary

Tenure

Four years and two months (appointed January 1, 2017)

Age

53

Nationality

US citizen

RETIREMENTS IN 2020

GERARD KLEISTERLEE

Retired: May 19, 2020. In line with best practice, Gerard chose not to seek re-election at the 2020 AGM following completion of his third three-year term and retired from the Board.

LINDA STUNTZ

Retired: May 19, 2020. In line with best practice, Linda chose not to seek re-election at the 2020 AGM following completion of her third three-year term and retired from the Board.

ROBERTO SETUBAL

Retired: May 19, 2020. Roberto chose not to seek re-election at the 2020 AGM due to other business commitments in his home country of Brazil and retired from the Board.

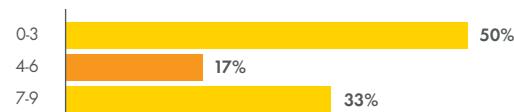
BOARD DIVERSITY

Gender diversity

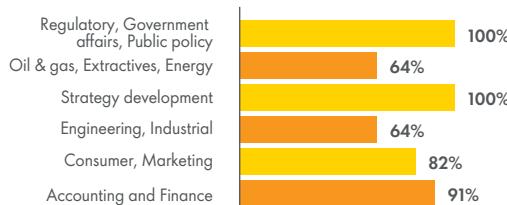


Subject nominations standing for election at the 2021 AGM being approved by shareholders, the Board will have achieved gender parity.

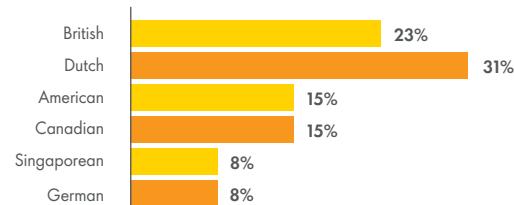
Non-executive Director tenure (years)



Non-executive Director sector experience



Director nationality



ATTENDANCE

The Board met 12 times during 2020. Two meetings were held in The Hague in the Netherlands and the remainder were held virtually in the context of COVID-19 circumstances. Attendance during 2020 for all Board meetings is given in the table opposite [A].

- [A] For attendance at Committee meetings during the year, please refer to individual Committee Reports.
- [B] Dick Boer joined the Board in May 2020.
- [C] Martina Hund-Mejean joined the Board in May 2020.
- [D] Gerard Kleisterlee retired from the Board following the AGM in May 2020.
- [E] Sir Andrew Mackenzie joined the Board in October 2020.
- [F] Bram Schot joined the Board in October 2020.
- [G] Roberto Setubal retired from the Board following the AGM in May 2020.
- [H] Linda G. Stuntz retired from the Board following the AGM in May 2020.

Board member	Meetings attended
Ben van Beurden	12/12
Dick Boer [B]	7/7
Neil Carson	12/12
Ann Godbehere	12/12
Euleen Goh	12/12
Charles O. Holliday	12/12
Catherine J. Hughes	12/12
Martina Hund-Mejean [C]	7/7
Gerard Kleisterlee [D]	5/5
Sir Andrew Mackenzie [E]	3/3
Bram Schot [F]	3/3
Roberto Setubal [G]	5/5
Sir Nigel Sheinwald	12/12
Linda G. Stuntz [H]	5/5
Jessica Uhl	12/12
Gerrit Zalm	12/12

DIRECTOR INDEPENDENCE

All the Non-executive Directors are considered by the Board to be independent in character and judgement. The Chair is not subject to the Code's independence test other than on appointment.

ETHNIC DIVERSITY

The Board is satisfied that it currently meets the recommendation from the Parker Review.

SENIOR MANAGEMENT

The Senior Management of the Company comprises the Executive Directors, Ben van Beurden and Jessica Uhl, and those listed below. All are members of the Executive Committee (see "Governance Framework" on page 129).



HARRY BREKELMANS
Projects & Technology Director

Tenure

Six years and five months (appointed October 2014)

Age

55

Nationality

Dutch

Career

Harry was previously Executive Vice President for Upstream International Operated, based in the Netherlands. He joined Shell in 1990 and has held various management positions in Exploration and Production, Internal Audit, and Group Strategy and Planning. From 2011 to 2013, he was Country Chair Russia and Executive Vice President for Russia and the Caspian region.



DONNY CHING
Legal Director

Tenure

Seven years and one month (appointed February 2014)

Age

56

Nationality

Malaysian

Career

Donny was previously General Counsel for Projects & Technology, based in the Netherlands. He joined Shell in 1988 based in Australia and then moved to Hong Kong and later to London. In 2008, he was appointed Head of Legal at Shell Singapore, having served as Associate General Counsel for Gas & Power in Asia-Pacific.



RONAN CASSIDY
Chief Human Resources and
Corporate Officer

Tenure

Five years and two months (appointed January 2016)

Age

54

Nationality

British

Career

Ronan was previously Executive Vice President Human Resources, Upstream International. He joined Shell in 1988 and has held various human resources positions in Upstream and Downstream.



WAEL SAWAN
Upstream Director

Tenure

One year and eight months (appointed July 2019)

Age

46

Nationality

Lebanese and Canadian

Career

Wael was previously the Executive Vice President of Shell's Deep Water business and was a member of the Upstream Leadership Team. He joined Shell in 1997 and worked in a variety of roles in each of Shell's core business units: Upstream, Integrated Gas and Downstream.



HUIBERT VIGEVENO
Downstream Director

Tenure

One year and two months (appointed January 2020)

Age

51

Nationality

Dutch

Career

Huibert was previously Executive Vice President Global Commercial. He joined Shell in 1995 as a business analyst and led many Downstream businesses across Shell in Europe, Africa, North and South America as well as Asia. In 2009, Huibert was appointed Vice President Supply & Distribution, Europe and Africa. In 2012 he became Executive Chairman of Shell in China, and in 2016 led the integration of BG Group.



MAARTEN WETSELAAR
Integrated Gas, Renewables
and Energy Solutions Director

Tenure

Five years and two months (appointed January 2016)

Age

52

Nationality

Dutch

Career

Maarten was previously Executive Vice President of Integrated Gas, based in Singapore. He joined Shell in 1995 and has held various financial, commercial and general management roles in Downstream, Trading and Upstream.

INTRODUCTION FROM THE CHAIR



CHAD HOLLIDAY

Chair

As mentioned earlier in this Report, I will be vacating my role as Chair of the Board after the 2021 Annual General Meeting (AGM). I very much hope that we will be able to revert back to a more normal AGM, with shareholders physically present at our meeting. We will, though, need to assess whether this is possible, alongside government guidance, closer to the time of the meeting.

It has been a great honour to serve Shell over the last 10 years, and I thank our shareholders for granting me that privilege. As I look back on my time with Shell, 2020 is by far the most memorable year, for many reasons. We came into 2020 off the back of what had already been a difficult 2019 for our industry, with tough macroeconomic conditions, lower liquefied natural gas (LNG) prices and weaker realised refining margins. In the Governance section of the 2019 Annual Report, when I looked forward to the coming year, I highlighted the continuing risk from trade conflicts with difficult-to-predict outcomes, regional geopolitical tensions and the uncertainties of Brexit. Yet we still looked forward with optimism.

In other areas of the 2019 Report we noted the early impact that we were seeing from COVID-19 and the ensuing macroeconomic uncertainty around prices and demand for oil, gas and products. The Risk factors section of the 2019 Report highlighted the potential for COVID-19 to have a material adverse effect on our operations. The months that followed put our words "potential" and "material" into perspective. Economies across the world were decimated. Life and the many freedoms we associated with it changed in ways that are likely to impact people and broader society for many years to come.

As I reflect on how our organisation navigated this environment, what stands out for me is our people. I am immensely proud of them. I was struck by how our people stepped up and continued to deliver in this challenging environment. They continued to work on platforms and refineries, away from their families for extended periods of time, to ensure Shell delivered on its commitments. They worked in retail fuel stations, face-to-face with the public. They went into our offices when they could not do their job from home. The list of what our people did for this organisation is extensive, and in some instances quite humbling. Yet what stands out the most is their care for one another, and the efforts they made to support their colleagues. It is this enduring care for one another that will be my strongest memory over the past decade I have served Shell. It is what defines the culture and heart of this Company.

The rapid changes in response to COVID-19 have prompted positive action in many areas of society. The pandemic has challenged us to look at how we live, what we value, and how we see the future. Our scenarios team has updated its thinking and issued a number of publications which can be found on the Shell website. Governments have stepped up their environmental ambitions. Growth after the virus is expected to be greener. Shell is evolving its strategy to remain aligned with a greener future and to encourage society to choose lower-carbon options. It is our target to be a net-zero emissions energy company by 2050, in step with society. We still believe, though, that society will continue to need oil and gas for many years to come. Oil and gas will continue to be the cash generators that support our investments through the energy transition. They will underpin Shell's delivery of its targets that are aligned with the goals of the Paris Agreement.

BOARD LEADERSHIP AND SHELL'S PURPOSE

The Corporate Governance Code (the "Code") provides that the Board should promote the long-term sustainable success of Shell, generating value for shareholders and contributing to wider society. The Board believes that Shell's efforts give it an effective framework to play its part in the energy transition as a growing, successful, commercial organisation. In the Board's view, this framework will allow Shell to provide the energy solutions that consumers will want and buy through this period of uncertain change. The Board also thinks that Shell will be able to reduce the carbon intensity of the energy products it supplies and deliver against its recently published targets.

The purpose of Shell is set out in the early pages of this Annual Report. We will continue with the theme of communicating purpose throughout this report, focusing on how our governance operates in practice, and why we believe this is the best approach for Shell.

The Governance report is structured around the key themes of the Code. Our narrative is articulated to provide genuine understanding of how governance supports and protects Shell and our stakeholders.

Although Shell applies the Principles and the spirit of the Code, there are instances where we adopt an approach that is slightly different from that suggested by some of the Code's provisions and we explain these on page 126. In these instances, our governance processes are considered appropriate, given the specific circumstances and a range of factors that are particular to Shell, such as its global nature, size, complexity and history. More detail on Shell's compliance with the Code can be found on pages 126 to 127.

Last year I highlighted the importance of our stakeholders and the greater level of external focus on these groups. We expressed our enthusiasm to build on our engagement with our stakeholder groups in 2020. Sadly, the face-to-face interaction we had hoped for was often made impossible by restrictions on social interaction and travel during the pandemic. Instead, greater use of technology has facilitated online, virtual engagement. The Board was able to visit some of our sites virtually, and engaged in virtual meetings with our broader stakeholders and our people. The Board's discharge of its duty in relation to key stakeholder interests, including those of our workforce, and an explanation of how it considered these when making principal decisions are set out on page 22. On page 130 we provide information about our Board activities and highlight which stakeholders we considered.

Our workforce engagement methods remain unchanged from those previously disclosed. As we implement the proposals from our Reshape reorganisation, we anticipate an enhanced level of workforce engagement, within the parameters of COVID-19 restrictions. We continue to believe that constructive relationships built on mutual respect and transparency help Shell attract and retain employees while supporting greater productivity and operational safety and efficiency. Ensuring that the employee voice is heard in the boardroom in practical ways is key to understanding the broader impact of business decisions, including with respect to organisational culture.

The Board clearly recognises the importance of culture and its link to delivering Shell's purpose and strategy. Given our culture's importance, it requires long-term commitment. The Board believes that our people and safety culture is strong, and takes pride in having such a culture.

Our culture reflects the values of the organisation – honesty, integrity and respect for people. These underpin all the work we do and are embedded in our Strategy and Purpose. The 2020 Board evaluation highlighted that although the Board uses various reports and engagements to assess our culture, a considerable part of this assessment is based on the outcome of the annual employee survey. Although this survey provides informed insight, the Board recognises that this data can have its limitations. For this reason, the Board will undertake a deeper analysis of Shell's culture in 2021.

DIVISION OF RESPONSIBILITIES

More information on how the Board and its Committees support business operations is provided on page 128. Further detail is contained within the Terms of Reference for each Committee, which are provided on our website. Each year the Board committees' Terms of Reference are reviewed and updated, as required.

Maintaining independent judgement on the Board is a fundamental governance principle and one supported by the Board. The Code provides circumstances that it considers are likely to impair, or could appear to impair, a Non-executive Director's independence. One of these is tenure. In the 2019 Annual Report we shared information on Directors that exceeded guidance outlined in the Code with regard to tenure. We also explained when these Directors' tenure was expected to end, and the assessments of their independence that the Nomination and Succession Committee made on behalf of the Board. Some of this information can be found within our Statement of Compliance with the Code, on page 126. A deeper analysis can be found on page 115 of the 2019 Annual Report.

COMPOSITION, SUCCESSION AND EVALUATION

The Director biographies in this Governance report provide insight into our Directors' careers, skills and experience. Our Board diversity reporting also extends beyond gender and nationality, and outlines the varying sector experience across the Board.

At the 2020 AGM, shareholders appointed Dick Boer, Martina Hund-Mejean and Sir Andrew Mackenzie to the Board. In September, Bram Schot was appointed by the Board. After joining the Board, each new member was appointed to one of the Board committees, refreshing the committee's composition. Each Director's biography contains information on their committee memberships. An overview of the new Directors' induction programme can be found on page 142. After the 2020 AGM, Gerard Kleisterlee, Linda Stuntz and Roberto Setubal retired from the Board. The Board is grateful for their years of service.

At the 2021 AGM, as announced on March 11, 2021, Sir Nigel Sheinwald will retire from the Board following nine years of service. He leaves behind a strong leadership track record and the Board is deeply grateful for his many years of dedicated commitment to the business.

The 2021 AGM will also be my last day with Shell. After the meeting, Sir Andrew Mackenzie will succeed me as Chair of the Board. I am delighted to welcome him as my successor. His appointment follows a rigorous search process led by the Deputy Chair and Senior Independent Director. An overview of the Chair succession process can be found on page 142. In addition, as announced on March 11, 2021, the Board intends to propose to the 2021 Annual General Meeting that Jane Lute be appointed a Non-executive Director of the Company with effect from May 19, 2021. If shareholders are supportive of her appointment, we will have achieved gender parity on the Board.

AUDIT, RISK MANAGEMENT AND INTERNAL CONTROL

The Audit Committee assists the Board in maintaining a sound system of risk management and internal control and oversight over Shell's financial reporting. A variety of standing matters and more specific topics are discussed by the Audit Committee throughout the year. As part of the year-end reporting process, the Audit Committee advises the Board on the adequacy of the system of risk management and internal control in place, the appropriateness of the viability statement and going concern basis of accounting. The Audit Committee also advises on whether this Report, taken as a whole, is fair, balanced and understandable and provides the information necessary for stakeholders to assess Shell's position and performance, business model and strategy. More information on the Audit Committee's activities, highlights and priorities can be found in its report on page 145.

Shell is at a point where it must transform itself while facing intense public scrutiny and operating in a rapidly changing, disruptive environment. It must frame and implement its strategy with courage and commitment, but also with the humility to listen, learn and adapt. Shell's Board and leadership must be steadfast, agile and sensitive to the opportunities, risks and rewards confronting the business. I remain confident that all are up to the tasks.

Finally, we hope that this document provides clear reporting and enhances our stakeholders' understanding of our governance processes. I would also like to thank again my fellow Directors, our colleagues and our workforce around the world for their continued and considerable efforts towards the success of the Company.

CHAD HOLLIDAY

Chair

March 10, 2021

STATEMENT OF COMPLIANCE WITH THE UK CORPORATE GOVERNANCE CODE

The Board confirms that, throughout the year, the Company has applied the Principles, both in spirit and in form, and complied with the provisions set out in the UK Corporate Governance Code issued by the Financial Reporting Council (FRC) in July 2018 (the "Code"), with the exception of those provisions noted below. A copy of the Code can be found on the FRC's website: www.frc.org.uk.

Shell's governance arrangements have been considered alongside the Code. The information set out in the Directors' report, including the Board committee reports on (pages 140-156) is intended to provide an explanation of how the Code's Principles were applied practically throughout the year. We have also provided clear and meaningful explanation below where we believe stakeholders may benefit from more specific information on particular Code provisions.

Chair tenure (Provision 19)

Note: The text relating to Chair tenure is provided by Euleen Goh, Senior Independent Director. Charles O. Holliday (Chad) was appointed as Chair in 2015 after four and a half years on the Board as a Non-executive Director. In September 2019, he reached a tenure of nine years. Chad will be standing down from the Board at the 2021 AGM.

The provisions of the Code address Chair tenure and set a limit of nine years from the date of first appointment to the Board. However, the Code pragmatically acknowledges that this period can be extended for a limited time to facilitate orderly, effective succession planning and the development of a diverse board. In the 2018 Annual Report and Form 20-F, we highlighted that Chad's tenure had been discussed at numerous shareholder engagements. It was disclosed that shareholders were supportive of the extension of his tenure to the 2021 AGM. This meets the Code's limited exception, particularly as the Chair was an existing Non-executive Director on appointment. The Board also takes comfort from the support for Chad's re-election at the 2019 and 2020 AGMs (96% and 95%, respectively, votes in favour) and ongoing support from shareholders.

Retaining Chad on the Board and in the position of Chair until the 2021 AGM was right for the business. Doing so has facilitated a more effective phasing of his succession, particularly given the existing slate of Director tenure at the time of the Code's issuance with three Directors nearing their ninth year of service. Earlier departure would have been disruptive and could have left a significant deficiency in the Board's corporate knowledge.

The 2019 independent Board evaluation strongly recognised Chad as an effective Chair. This was again reflected in the findings of the 2020 internal Board evaluation (see pages 132-133). Throughout 2020, Chad continued to exercise objective judgement, despite his tenure exceeding nine years. The Board found that the continuity of his Shell corporate knowledge and experience supported the induction of the new Directors, and that Chad provided continuity and sound leadership of the Board through one of the most challenging years that the business has experienced.

Chad's innate understanding and knowledge of the Shell Group, coupled with the strong Shell relationships he has established, proved invaluable in 2020. His skills enabled him to balance his challenge of management with pragmatic perspectives of the external pressures upon the business. He has done this while coaching other, particularly new, Non-executive Directors on the intricacies and nuances of the business, so they were better able to challenge management effectively and enhance overall governance.

Workforce engagement (Provision 5)

Our people are essential to the successful delivery of the Shell strategy, and the Board recognises the importance of understanding their views through engagement. However, the size and diversity of our employee base and of our wider workforce complicate the feasibility of implementing any of the three specific workforce engagement methods recommended in the Code. Given the required coverage needed for a global organisation such as ours, the Board believes that its current approach to workforce engagement continues to be pragmatic and effective.

In the 2019 Annual Report, we communicated that the Board had decided that in 2020 it would increase its direct engagements, when the Board, committees and individual Directors visit our sites across the world. We communicated that the Board would also increase its indirect engagements through enhanced stakeholder engagement information being included in relevant management reports. Due to the ongoing COVID-19 pandemic and associated travel restrictions, the direct engagements did not progress as we had hoped. That said, in line with the spirit of this ambition, a number of virtual engagements have been undertaken. Information on stakeholder engagement has also been enhanced in management reporting. The Board also intends to keep under review the effectiveness of the engagements. More information on the current approach and a description of the channels used by the Board, its committees, and the Executive Committee are outlined in "Workforce engagement" on pages 138-139.

Director independence (Provision 10)

In the 2019 Annual Report, we noted that Gerard Kleisterlee had served on the Board for more than nine years, having joined in November 2010. Gerard stepped down from the Board at the 2020 AGM. Therefore, although not currently a Board member, he was a Director for part of the year.

In the 2019 Annual Report, published in March 2020, the Board acknowledged the potential impairment of his independence owing to his length of tenure, as outlined in a Code provision. In the Board's view, there had been no notable negative change in Gerard's performance as a Director and in his various Board roles in recent years. The Board continued to regard him as an independent Non-executive Director and undertook a rigorous evaluation to reach this conclusion. Gerard did not participate in his own assessment. A detailed overview of the assessment can be found on page 119 of the 2019 Annual Report.

Appointment of independent Non-executive Director as Senior Independent Director (Provision 12)

Euleen Goh succeeded Gerard Kleisterlee as Deputy Chair and Senior Independent Director, after Gerard's retirement at the 2020 AGM in May. Information on the independence of Gerard, who was the Senior Independent Director for the first four and a half months of the year, is explained under the "Director independence" heading above.

Composition of the Remuneration Committee (Provision 32, independence)

For the period leading up to the 2020 AGM, the Remuneration Committee consisted of five Non-executive Directors, four of whom are deemed to be independent under the Code's parameters, and the fifth (Gerard Kleisterlee) was considered to be independent by the Board for the reasons provided in its explanation. As we approached the end of Gerard's tenure, Remuneration Committee members had served on this committee for periods ranging from less than a year to just over five years. As announced on January 29, 2020, Neil Carson succeeded Gerard in the role of Committee Chair after the 2020 AGM. Neil has been a member of this committee since June 1, 2019 and has previously served on a remuneration committee before joining the Shell Board. Having Gerard remain as Committee Chair beyond his nine-year tenure to the natural conclusion of his tenure at the 2020 AGM was a practical step promoting smooth succession. Further details on the composition of the Remuneration Committee are provided on page 153 of the Remuneration Committee Report.

Corporate governance requirements outside the UK

In addition to complying with applicable corporate governance requirements in the UK, the Company complies with the rules of Euronext Amsterdam as well as Dutch securities laws because of its listing on that exchange. The Company likewise adheres to US securities laws and the New York Stock Exchange (NYSE) rules and regulations because its securities are registered in the USA and listed on the NYSE.

GOVERNANCE FRAMEWORK

BOARD OF DIRECTORS

Board

- The Company has a single-tier Board of Directors headed by a Chair, with executive management led by the Chief Executive Officer. The names of the Directors that held office during the year can be found on pages 114-121. Information on the Directors that are seeking appointment or reappointment is included in the Notice of Annual General Meeting;
- There is no fixed number of times that the Board may meet in one year. In 2019, the Board convened eight times. During 2020, the Board met 12 times, and, as detailed throughout our Strategic Report including the Section 172 statement and activities undertaken throughout the year, works hard to promote the long-term sustainable success of the Company, generating value for shareholders and contributing to wider society. Further information on the Board's work and assessments in relation to strategy, culture, engagement with stakeholders and its workforce can be found as follows:
 - The Board's responsibilities are governed by a formal schedule of matters reserved to it and include:
 - Approval of overall strategy and oversight of management;
 - Changes to the corporate and capital structure;
 - Approval of financial reporting and controls (including approval of the Annual Report and Accounts, approval of the Annual Report on Form 20-F, and interim dividends);
 - Oversight of risk management and internal control;
 - Approval of significant contracts;
 - Determining succession planning and new Board appointments;
 - Remuneration for the Chair and Executive Directors; and
 - Corporate governance matters.

Board Committees

Audit Committee

- Carries out certain oversight functions on behalf of the Board; and
- Assists the Board in fulfilling its responsibilities in relation to internal control and financial reporting.

More information on the Committee's composition and its role and activities during the year is on pages 145-152.

Safety, Environment and Sustainability Committee

- Carries out certain oversight functions on behalf of the Board; and
- Advises the Board on safety, the environment including climate change, and Shell's overall sustainability performance.

More information on the Committee's composition and its role and activities during the year is on pages 143-144.

Nomination and Succession Committee

- Leads the process for appointments to the Board;
- Recommends Board appointments and re-appointments;
- Reviews and makes recommendations on succession planning; and
- Reviews and makes recommendations on corporate governance guidelines.

More information on the Committee's composition and its role and activities during the year, including its recommendations made to the Board on the application of the Code, is on pages 140-142.

Remuneration Committee

- Determines and agrees with the Board of Directors the remuneration policy for the Chair, Executive Directors and Executive Committee of the Company;
- Within the terms of such agreed policy, determines individual remuneration package for the Chair, Executive Directors and Senior Management (including the Company Secretary); and
- Monitors and makes recommendations regarding the structures and levels of remuneration and levels for other senior executives, if appropriate.

More information on the Committee's composition and its role and activities during the year is on pages 153-156.

Other ad hoc Committees

The Nigeria Special Litigation Committee is an ad hoc committee which has been formed to monitor the status of the OPL-245 litigation and investigations. Its members are Euleen Goh (Chair), Chad Holliday, Ann Godbehere, and Sir Nigel Sheinwald.

BOARD OF DIRECTORS continued

Division of responsibilities

The roles of the Chair, a non-executive role, and the CEO are separate and clearly defined. The Board has agreed their respective responsibilities and set these out in writing. These are available on request from the Company Secretary.

Chair

- Responsible for ensuring that the Board and its Committees function effectively. One way in which this is achieved is by ensuring Directors receive accurate, timely and clear information; and
- Responsible for making sure that there is an adequate induction and training programme followed by all Directors (see page 142), with assistance from the Company Secretary.

Deputy Chair/Senior Independent Director

- Sounding board for the Chair;
- Serves as an intermediary for the other Directors and shareholders; and
- Leads the annual appraisal of the Chair's performance.

Non-executive Directors

- Appointed by the Board or by shareholders at general meetings and, in accordance with the Code, seek re-election by shareholders on an annual basis;
- Letters of appointment refer to a specific term of office, the provisions of the Code and the Company's Articles of Association;
- Upon appointment, Non-executive Directors confirm they are able to allocate sufficient time to meet the expectations of the role. Appointments are subject to a minimum of three months' notice of termination, and there is no compensation provision for early termination;
- The Non-executive Directors bring a wide range and balance of skills and international business experience. Through their contribution to the Board and Board Committee meetings, they are expected to challenge and help develop proposals on strategy and bring independent judgement on issues of performance and risk; and
- Before each Board meeting, the Chair and Non-executive Directors meet without the Executive Directors being present. At these "pre-meetings", the Non-executive Directors discuss, among other matters, the performance of individual Executive Directors. A number of Non-executive Directors also meet major shareholders over the course of the year.

EXECUTIVE MANAGEMENT

Chief Executive Officer

- Has overall responsibility for the implementation, by the Executive Committee, of the overall strategy approved by the Board, the operational management of the Company and the business enterprise connected with it; and
- Supported by the Executive Committee that he chairs.

Executive Committee

- Operates under the direction of the Chief Executive Officer (CEO) in support of his responsibility for the overall management of Shell's business. The CEO has final authority in all matters of management that are not within the duties and authorities of the Board or of the shareholders' general meeting; and
- Executive Committee members are listed in the Senior Management biographies on page 122-123.

GOVERNANCE DOCUMENTS AVAILABLE ON WWW.SHELL.COM/INVESTOR

- Articles of Association
- Matters Reserved for the Board
- Board Committee Terms of Reference
- Modern Slavery Statement
- Shell General Business Principles
- Shell Code of Conduct
- Code of Ethics for Executive Directors and Senior Financial Officers

BOARD ACTIVITIES AND EVALUATION

BOARD ACTIVITIES

A rolling Board agenda is reviewed at Board meetings, enabling effective forward management of meetings and focused discussions. Forthcoming Board agenda items are categorised as: Strategy & Portfolio, Delivery & Performance, External Environment, Corporate & Miscellaneous or Standard items. Of the standard items, Board agendas regularly include reports from the Chief Executive Officer, the Chief Financial Officer, other Executive Committee members and from each Board committee. "Core values" moments also feature regularly led by a Director or Executive Committee member. In 2020, "Shell Heroes" vignettes were added to highlight extraordinary staff actions including those exemplifying care for people, society and/or the environment. Updates are also provided from the various businesses and key functions, including Investor Relations; Health and Safety, Security and Environment; Human Resources; and Legal, as well as the Company Secretary. The Board also considers and approves the quarterly, half-year and full-year financial results, shareholder distributions and the associated announcements, and, at most meetings, considers investment, divestment and/or financing proposals. To enable purposeful debates and/or focus on particular aspects of agenda topics, including the impact on key stakeholders, Directors have an opportunity to specify information they require to be provided in advance of Board meetings.

As in previous years and despite COVID-19 travel restrictions, certain Board committees and Non-executive Directors conducted site visits of various Shell operations and overseas offices – albeit virtually in 2020. These virtual visits were designed to provide Directors with first-hand insights into certain businesses, including into key projects and energy transition initiatives. Directors also held various virtual workforce engagements, as well as virtual external stakeholder engagements. More detail on these can be found in the table below and on pages 134-139.

Some of the activities and areas of Board focus over the year are summarised in the table below. The information below is not exhaustive.

Information on other topics discussed by the Board and details of the resulting decisions are covered elsewhere, primarily in the Section 172 Statement contained in the Strategic Report on page 22. In some cases, a brief outline has been provided below and reference given to where additional and more comprehensive information can be found.

June strategy days

In lieu of the traditional physical June Strategy off-site meetings or Board's Strategy Day, virtual meetings were held over the course of three days. As these meetings are usually an opportunity for the Board, and particularly new Directors, to strengthen collegial relationships among Directors and with the Executive Committee, considerable efforts were invested into making these meetings as innovative and engaging as possible. This included incorporating break-out sessions, staff engagements and an external engagement. The Board members were also asked to share light-hearted insights about themselves in advance of the meetings which were woven into informal quizzes. Virtual social events rounded out the end of each day's programme.

The Board Strategy Days included discussions on various topics including the proposed direction for Shell, with strategic alternatives. Topics covered at the sessions included:

- 2020-2022 outlook and responses;
- Project Reshape (Shell's reorganisation);
- strategic pathway and underlying strategic premises;
- energy transition strategy;
- implications of energy transition strategy;
- exploring alternative strategies;
- financial framework;
- strategic alignment next steps;
- staff engagements; and
- external engagement with a significant customer/supplier.

Topic	Discussion/activity/updates included	Examples of outcome/progress	Stakeholders considered
Board leadership and company purpose			
External business environment	<ul style="list-style-type: none"> ■ Received updates on and discussed regional geopolitical issues. ■ Discussions on spread of COVID-19, including global public health response, economic policy response, recession and recovery, oil demand, gas markets outlook. 	<ul style="list-style-type: none"> ■ Considered feedback from investor community on expected financial performance and related risks. ■ Considered how COVID-19 impacts on the business were being managed. Included: key focus on staff health, well-being/care; and identification of, and planning mitigations for, ongoing risks. 	A B C D E F G
Strategy Day	<ul style="list-style-type: none"> ■ Reviewed and discussed progress of strategy agenda including Management recommendations, work on development of alternative strategies, review of strategic options, and considered fundamental macro-environment changes caused by COVID-19. 	<ul style="list-style-type: none"> ■ Alignment on outcomes from virtual Board Strategy Days and on programme of work and preliminary engagement proposal in lead-up to Strategy Day 2021. Energy transition opportunities also discussed. ■ Proposal to use series of external communication events to deepen external understanding of refreshed strategy including financial framework and proposed shareholder distributions component once finalised. 	A B C D E F G

A investor community B employees/workforce/pensioners C regulators/governments D NGOs/civil society stakeholders/academia/think-tanks
E communities F customers G suppliers/strategic partners

Topic	Discussion/activity/updates included	Examples of outcome/progress	Stakeholders considered
Culture			
Shell People Survey (2019 results)	<ul style="list-style-type: none"> In January 2020, the Board reviewed and discussed the results of the 2019 Shell People Survey. Through analysis and questioning, the Board gained insights on survey topics including: collaboration, working conditions, views on one's job, job security, people development, reputation, total rewards and benefits, diversity and inclusion, operational excellence and internal perspectives on Shell's responsible business aspects. 	<ul style="list-style-type: none"> Although noting the high response rates and overall top quartile employee engagement ratings and high organisational and team leadership ratings, the Board questioned: gaps in certain ratings on a regional basis; workload impacts and potential knock-on implications; whether survey results could help identify correlations with other key performance indicators, including with regard to safety; how the survey could be used to strengthen organisational values and culture even more; and whether learnings were being taken from leaders who had improved their team engagement scores from bottom quartile in 2018 to top quartile in 2019. 	B
Shell People Survey (2020 results)	<ul style="list-style-type: none"> In December 2020, the Board reviewed and discussed the results of the 2020 Shell People Survey. Discussion was immediately preceded by the Board's virtual engagement with a cross-section of staff from Brazil, the USA, the UK, Nigeria and India (see entry under "staff engagements" below for more detail). Through analysis and questioning, the Board gained insights on survey topics including: collaboration; working conditions; views on one's job; job security; people development; reputation; total rewards and benefits; diversity and inclusion; operational excellence; and internal perspectives on Shell's responsible business aspects. 	<ul style="list-style-type: none"> The preceding virtual staff engagement complemented the quantitative survey results by providing a qualitative "barometer" of staff views on numerous topics including aspects of corporate culture. The Board queried management on: retention and motivation of key talent; providing reskilling and upskilling opportunities; finding ways to show staff value given the remuneration measures taken in 2020; and job security challenges and Reshape fatigue. The interactive session helped the Board to monitor Shell's culture and staff engagement in an unprecedented year. The Chair also reminded the Board to retain the context of the engagement and survey feedback as a backdrop reference on the strategic, operational and risk-related topics on the Board's agenda. 	B
Board staff engagements	<ul style="list-style-type: none"> The Board held a number of virtual staff engagements (both at the June Strategy Days and in connection with the 2020 Shell People Survey review). Engagements deliberately included a cross-section of staff (at different levels, from different countries, within different businesses and functions) and included engagements both with and without management. Topics included the working/professional and personal impact of COVID-19, the Reshape reorganisation and the future of Shell. 	<ul style="list-style-type: none"> Gained direct feedback and first-hand insight into the views of staff on COVID-19 impacts (from the perspective of working from home and from the perspective of continuing to work at assets). Positive reflections on flexibility, ergonomic support, more time spent with families (for those working from home), and pride in achieving work. Negative reflections on missing interaction with colleagues, family (for asset workers) and increased workloads due to unprecedented times. The Board also gained insights into staff perspectives on Reshape regarding communications, general views on it, views for the future including ways to unlock future potential, empowering young talent, digitalisation, and diversity. 	B
Audit, risk and internal control			
Safety and Environment	<ul style="list-style-type: none"> Received regular updates from management on safety and environment performance. Periodic updates on the progress of Reshape, impact on staff and culture from a safety and environment perspective also featured regularly in these reports, and in addition to other updates on similar topics. The Board continued to share personal anecdotes and reflections on topics of values and safety at the beginning of each Board meeting. The Safety, Environment and Sustainability Committee and other Board members attended a virtual site visit to the Shell Rheinland refinery in Germany. Directors also met with a minister of the state government of North Rhine-Westphalia. 	<ul style="list-style-type: none"> The updates and subsequent discussions provided the Board with commentary and examples of how safety has continued to permeate Shell culture, including in the context of COVID-19. The use of learnings and insight gained outside Shell added perspective and diversity of thought to Board discussions. The virtual site visit provided Directors with various insights into: the views and priorities of the local workforce; safety and environmental performance; and the planned transformation of the Rheinland site into an energy and chemicals park. 	B D E F G
Risk management and internal control	<ul style="list-style-type: none"> Reviewed Risk Reports, covering external trends, emerging risks, proposed changes to the Group's strategic, operational and conduct and culture risk profiles. 	<ul style="list-style-type: none"> The Board considered the effectiveness of the risk management and internal control system. The Board considered the effects of COVID-19 and the perceived impacts on the Group's strategic, operational and conduct and culture risk profiles. The Board considered the learnings and insights from the organisation's responses to managing the pandemic. 	A E F
COVID-19	<ul style="list-style-type: none"> Received weekly updates from the Group Co-ordination Team on the management of COVID-19 with respect to staff health and well-being/care and the financial position of the business. The Board was also informed of Shell's co-ordinated responses to the pandemic. Discussions on business environment, operational impacts and issues, financial considerations and wider escalating economic impacts, and oil price outlook. 	<ul style="list-style-type: none"> The Board gained insight and clarity about Shell's response to COVID-19 including: its approach to disaster relief and donations; how potential key risks and impacts were being managed; and a recognition of the uncertainty of ongoing developments as a result of the prolonged impact of the pandemic. The Board was provided with the communications shared with staff via different channels, for awareness, to understand frequency of communications and any concerns of the workforce. 	A B C D E F G

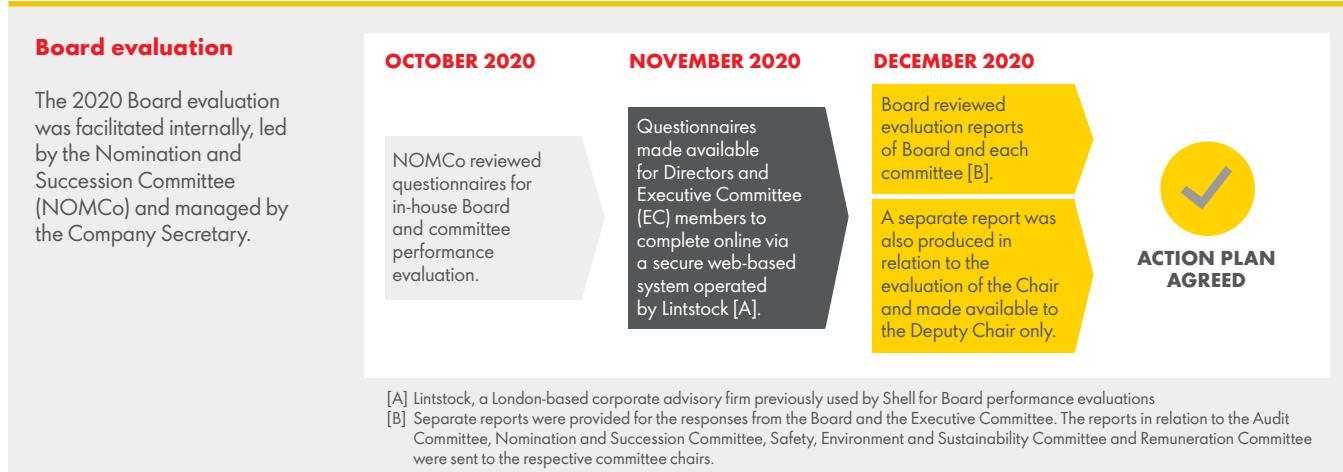
A investor community B employees/workforce/pensioners C regulators/governments D NGOs/civil society stakeholders/academia/think-tanks
E communities F customers G suppliers/strategic partners

BOARD ACTIVITIES AND EVALUATION continued

Topic	Discussion/activity/updates included	Examples of outcome/progress	Stakeholders considered
Composition, succession and evaluation			
Succession planning	▪ Received recommendations from the Nomination and Succession Committee regarding succession plans and Board composition.	▪ The Board was regularly informed about succession planning arrangements. ▪ Please refer to Nomination and Succession Committee report for further details.	A B D E
Board and committee effectiveness reviews	▪ Examined the internal evaluation reports following the assessment that was carried out to review the effectiveness of the Board and each of the committees. The evaluation of the Chair's performance was also considered. The Board also reflected on progress with priorities that had been identified from the previous year's review.	▪ The responses from Directors indicated that in spite of challenges experienced throughout the year, the Board, its committees and the Chair continued to operate effectively. ▪ Please refer to Board evaluation on page 132 for further details.	A B D E F G
Board membership, other appointments	▪ Reviewed Directors' tenure, external commitments, conflicts of interests, composition/membership of Board committees and appointments.	▪ The Board approved committee membership changes and appointments to the Board, following recommendations made by the Nomination and Succession Committee. The review of the existing Directors' renewal terms and tenure was postponed so that it would take place after the 2021 AGM, in consideration of succession planning. ▪ Please refer to Nomination and Succession Committee report for further details.	A B D E
Talent overview and senior succession review	▪ RDS Senior Succession and Resourcing Review covering Executive Director and Executive Committee (EC) succession, EC direct reports and the senior executive group.	▪ Enhanced insight into Shell talent and future leaders, assurance of robust succession and contingency plans.	B
Remuneration			
Remuneration and reward matters	▪ Review of fees of Directors, taking into consideration any Committee appointments.	▪ The Board accepted the recommendation from the Remuneration Committee for fees to remain the same until the next review scheduled in 2021.	A B
Governance matters			
Governance	▪ Provided with emerging corporate governance developments and updates relating to ethics and compliance matters. Reviewed ▪ Modern Slavery Statement and assurance and considered other regulatory and legislative requirements.	▪ The Board was provided with insight into Shell's participation in consultations and projects relating to governance and legislative requirements.	A B C D E F

A investor community
 B employees/workforce/pensioners
 C regulators/governments
 D NGOs/civil society stakeholders/academia/think-tanks
E communities
 F customers
 G suppliers/strategic partners

BOARD EVALUATION



Insight

The feedback from Board Directors was positive throughout their responses to the evaluation.

Board dynamics – the Non-executive Directors' support and challenge of management was rated very highly, with the quality of the interaction and the openness of the leadership team being commended.

Board oversight – the Board's effectiveness in adjusting its focus and priorities in response to the COVID-19 pandemic was rated very highly. Board oversight of various specific aspects of risk was also rated highly overall, with retention of focus on risk appetite continuing to be a priority. The Board's oversight of the Company's processes for managing and developing senior executive talent, including with regard to diversity, was rated very highly, and will be a continued area of focus.

Management and focus of meetings – themes included: shortening and simplifying Board papers further, and a desire for returning to physical meetings when circumstances permit. The measures implemented to facilitate virtual meetings, induction/onboarding, and ongoing training were rated highly and viewed as very effective.

Stakeholder oversight – the mechanisms by which the Board obtains the views and needs of major investors and employees were highly rated, while noting that the mechanisms for obtaining the views of customers, private/retail investors, communities and suppliers could be enhanced, as feasible and relevant. The Board's effectiveness in monitoring and assessing culture throughout the organisation was rated positively overall.

Delivery against the 2020 ambitions

The COVID-19 pandemic drove unprecedented change throughout 2020, impacting both the short- and longer-term business outlook. Through the use of additional meetings, the Board balanced its focus on short-term operational matters and long-term strategy. Principal decisions made in 2020 were bold and decisive and, where possible, discussions were initiated well in advance of final Board decisions. Acquisitions/divestments and critical strategy shifts were all key agenda items for 2020, and these aligned with the Board ambitions set at the start of the year.

The Board's ambitions on succession were tested during 2020 with the appointment and induction of four Non-executive Directors and the retirement of three Non-executive Directors – all in the context of a virtual environment. Planned improvements to the Director onboarding process were implemented despite the COVID-19 crisis. Simultaneous adaptations were made to ensure there was as much dynamism as feasible within the constraints of having to work virtually. The development of a Board travel calendar was inevitably put on hold. The intention to share details of other induction sessions and committee trips was put into effect, albeit virtually.

On our Board papers ambition, efforts were made to focus information provided to the Board (for example, through optional briefing sessions, one-on-one engagements and advance "polling" of questions/information needs) to enable decision-making on key topics.

Planned enhancements for 2021

The 2020 Board evaluation findings provided areas of focus or priorities for 2021.

Monitoring execution and strategic implementation

This is an area of undeniable importance for the years ahead. The Board will continue to monitor strategic execution with support to Management, enabled by a performance tracking approach.

Company culture and Project Reshape

The Board will continue to monitor the Reshape transformation, enabled by the performance-tracking approach referenced above. It will strengthen its emphasis on culture and workforce engagement (particularly after COVID-19).

Completion of improvement items already in progress

Ensuring smooth Chair succession, oversight of ongoing litigation and potential further optimisation of the induction processes for Non-executive Directors once travel is safely resumed. Likewise, sharing other Director induction sessions, committee trips and Chair visits will continue.

Chair

Ongoing performance evaluation – the Board was very appreciative of the Chair's strong leadership (both of the full Board and individual Directors) during an extremely difficult year. He ensured thoughtful and interactive agendas (despite the required virtual format). It was also considered that he invested purposeful time with all, particularly with new Non-executive Directors, and continued to facilitate strong Board engagement and strong relationships with management. The Directors considered the Board very fortunate to have a Chair functioning at his peak. Board members added that the careful and thorough way in which all decisions this year have been framed, debated and made owes a great deal to the Chair's experience and care, and his relationships with the CEO and Non-executive Directors.

The Chair's focus on strengthening individual Director performance through coaching and feedback continues to be rated highly. His regular contact with Directors between meetings provides continued real-time feedback and reflection. This way of working continues to be regarded as an outstanding aspect of his leadership.

The Deputy Chair communicated the feedback to the Chair, along with requests to:

- ensure knowledge transfer of the Chair's insights and learnings to his successor; and
- continue to carefully balance the airing of divergent views with the need to appropriately converge on Board decisions.

The Chair fully accepted the feedback and agreed to reflect and act upon it.

UNDERSTANDING AND ENGAGING WITH OUR STAKEHOLDERS

Co-operating with our stakeholders and taking the time to understand their different views have always been of high value and importance to the Board. Our commitment to stakeholder engagement is built upon the understanding that knowledge-sharing, widening of experiences and adopting a learner mindset will help us achieve our commercial, environmental and social objectives.

The Board and Shell take their commitment to public collaboration and stakeholder engagement very seriously. In the past this has been easily demonstrated through both virtual and physical events which have served as opportunities to hear directly about stakeholder issues and priorities. This has been harder to navigate in the context of the continuing impact of COVID-19. Our focus on supporting and caring for our colleagues, customers and the communities in which we work has not changed through these unprecedented times.

- We have put the safety and health of our people, customers and other stakeholders first, along with the safe operations of our businesses.
- We have endeavoured to continue to engage with stakeholders, seeking alternative virtually focused opportunities.
- We have endeavoured to engage in a way which is as effective and as safe as possible.

The impact of COVID-19 and subsequent restrictions on travel and public gatherings have inevitably limited the engagements we planned for 2020. Our events have been cancelled, postponed or held in a way that was vastly different from previous years. We have had to think more creatively about engagement, and all of this was done with public health and safety and the advice/law of local governments in mind. The Board was disappointed that there have been fewer possibilities to engage in person. Nonetheless, we remain grateful for the continued support of our stakeholders and look forward to future engagements in the year ahead, when it is safe and appropriate to hold them.

The Directors have continued to consider stakeholders' views in Board discussions and decision-making, as described on page 128. Here, we have categorised our key stakeholders into seven groups and where appropriate, each group is deemed to include both current and potential stakeholders. The stakeholder groups are:

- investor community;
- employees/workforce/pensioners;
- regulators/governments;
- NGOs/civil society stakeholders/academia/think-tanks;
- communities;
- customers; and
- suppliers/strategic partners.

Engagement with our stakeholders goes beyond the Board and is continual. The broader business regularly engages with stakeholders throughout the year, and in the build-up to or during many Shell projects or activities. This engagement is often governed by formulated policies, control frameworks, regulation and legislation. It may differ by region.

Site visits

Various Shell operations and overseas offices are traditionally visited by the Chair, certain Board committees and Non-executive Directors. The visits are designed to provide Directors with:

- first-hand insights into portfolio positions; and
- opportunities to engage directly with stakeholders including employees, partners, communities and NGOs.

Directors were disappointed that site visits were reduced and converted to virtual only as a result of COVID-19. In previous years, and as part of the Board evaluation process, the Directors have reflected on the use of site visits for improving the Board's oversight of risk and concluded that the best way to determine if risks are being properly managed is to visit sites and talk to local management. Similarly, some Directors have used site visits as a way to monitor and assess culture first-hand and have commented on the difficulty of doing that this year. Further observations referenced how visits to key sites played an important part of the induction process for new Board members and provided good opportunities for Board members to get to know each other better.

As noted, alternative arrangements were made where feasible and details of these are described below. Resuming site visits as soon as practically possible was identified as a priority in the 2020 Board evaluation. Further details are provided on page 133.

Shareholders

The Board recognises the importance of two-way communication with the Company's shareholders. The Chair, the Deputy Chair and Senior Independent Director, the Chief Executive Officer, the Chief Financial Officer and the Executive Vice President Investor Relations each meet regularly with major shareholders and report the views of such shareholders to the Board. Committee chairs also seek engagement with shareholders on significant matters related to their areas of responsibility. Over the year, the Chair met with 51 major shareholders, including at roadshows. The Deputy Chair and Senior Independent Director and the Remuneration Committee Chair met with 52 shareholders over the course of the year. A variety of topics were discussed.

Shareholders can also contact Shell directly via the recently updated "Contact us" section of the Shell website. The recent enhancements replace the shareholder email address and allow investors' questions to be properly directed to the Shell team that can assist.

We have also introduced an automated question response tool to assist with the most common questions that we receive. We have reviewed and updated the "Frequently asked questions" section of the Shell website to help investors access information in a time-efficient manner.

Furthermore, other contact details are also provided in the same area by our registrar, Equiniti, for shareholder queries, our media team, requests for copies of the Annual Report or for general customer enquiries.

The Company's registrar operates an internet access facility for registered shareholders, providing details of their shareholdings. Facilities are also provided for shareholders to lodge proxy appointments electronically. The Corporate Nominee service, facilitated by Equiniti, provides a facility for investors to hold their shares in the Company in paperless form.

Shareholder advisory vote

As announced in February 2021, an advisory shareholder vote will be sought every three years from the 2021 AGM onwards on Shell's energy transition strategy. The Board believes this provides shareholders with an opportunity to exercise a governance role related to climate change.

Board governance event

In the past, the Board has held a biennial governance event, Board Engagement Day, that is attended by Directors including the Chair, Senior Independent Director, Audit Committee Chair and Safety, Environment and Sustainability Committee Chair. It is seen as an opportunity to provide investors with an overview of the Board's roles, activities and its key focus areas including stakeholder engagement.

The last event was held in December 2018, and, as reported in the 2019 Annual Report and 20-F, it was intended that the next event would be held in the latter part of 2020. This was not possible because of the COVID-19 pandemic. The Board understands the value of stakeholder engagements, including this event, to Shell and its stakeholders. The risk of missing important perspectives and insight has been mitigated as much as practically possible over the course of the year by alternative arrangements which are described below. Topics such as stakeholder engagement expectations, Chair tenure, Board succession planning, diversity and inclusion and the Senior Management pipeline have been covered at other events during 2020. The Board is proposing to hold the next event in October 2021 if circumstances permit.

Engagements in 2020

A summary of the main ways in which the Board sought to obtain feedback and understand the views of key stakeholders during 2020 is shown below. Information on engagement with other stakeholders including the workforce is provided on page 138. The way in which stakeholder interests were considered in principal decision-making by the Board in 2020 (Section 172 statement) can be found on pages 22-27. Further insight into our engagement with stakeholders can be found within our Sustainability Report and our report on payments to governments, scheduled for publication in April 2021.

Engagement before event	Event/activity	Director attendance	Subsequent engagement/ feedback
Responsible Investment Annual Briefing			
Investors were engaged and a press release was issued ahead of the event, as in previous years. Investors were informed that the agenda would differ from past occasions and that there were new disclosures which would be shared at the meeting.	<p>In the past, this event has served as an occasion to hear from investors and other stakeholders on environmental, social and governance (ESG) issues that are gaining prominence among the stakeholder community. In 2020, this session was instead used by Shell to share details of its response to the threat of climate change. Stakeholders were also informed about Shell's new target to be a net-zero emissions energy business by 2050, in step with society, and to become an integral part of the future net-zero world. The following were highlighted as ways to achieve this:</p> <ul style="list-style-type: none"> ■ change business plans in line with expectations of society and customers; and ■ shift towards serving the businesses and sectors that are aiming to be net zero by 2050 by establishing pathways to help the energy users we work with to make progress towards net zero. 	CEO Chair	<p>Feedback received following the event included reflections on how the Board had demonstrated thought leadership regarding Shell's targets and science-based methodologies.</p> <p>After the event, there were a number of additional engagements including follow-up meetings and presentations with stakeholders.</p> <p>Public support was received from large groups of investors such as Climate action 100+ regarding the targets announced at the Responsible Investment Annual Briefing.</p>
Shareholder engagement webcast 2020			
The Board sought feedback from the investor community and other stakeholder groups about how it could best and most practically support the needs of stakeholder engagement as it became evident that it would be impossible to hold the AGM in the same way as in previous years.	<p>An additional engagement opportunity was hosted by the Board in advance of the 2020 AGM to provide investors with an opportunity to hear from the Directors and submit questions to them. This was in response to the evolving COVID-19 pandemic, and the UK and Dutch government restrictions. These had resulted in Shell's AGM being held virtually and focusing solely on the business of the meeting, with no live voting or question and answer session.</p> <p>Issues raised by shareholders during the webcast included:</p> <ul style="list-style-type: none"> ■ shareholder returns: whether alternatives to reducing the dividend had or would be considered, and concerns around the impact on share price volatility; ■ the energy transition: clarity on how net-zero target and impact would be monitored/measured as pivoting and other changes occur; and ■ remuneration: whether this would be reviewed in light of dividend cut and whether climate change components of remuneration would be reviewed in light of new NCF targets. 	Board	<p>The webcast facilitated enhanced engagement with institutional investors and allowed more of them to participate compared with previous years. As the webcast was held a week before the AGM, this allowed people to ask questions ahead of voting rather than afterwards. The pre-submission of questions enabled conversations to be grouped into themes and provided structure to the meeting.</p>
2020 AGM			
The Board sought feedback from the investor community and other stakeholder groups prior to the AGM as detailed above. Questions were submitted in advance and answered on the webcast prior to the AGM.	<p>After extensive discussions and meetings, the Board concluded that physical attendance at the AGM was not a responsible course of action as there was a risk that gatherings could expose people to COVID-19. The decision was not taken lightly and was aimed at protecting the health and safety of shareholders, employees, AGM staff and the public, while also respecting the decisions of the Dutch and UK governments to severely restrict/ban public gatherings.</p> <p>The AGM was solely focused on the business of the meeting with minimal physical attendance, live voting or question and answer session. A transcript of the meeting was posted online.</p>	Chair CEO Remuneration Committee Chair/ Deputy Chair/ Senior Independent Director (SID)	<p>The shareholder resolution on climate issues received a small increase in support compared with previous years.</p> <p>Following continued engagement with investors, Shell announced in February 2021 that it would put Shell's energy transition strategy to a shareholder vote every three years. In addition, a progress report will be voted on every year.</p>
Chair roadshow			
A number of meetings were held prior to the roadshow to provide the Chair with insight on particular topics of interest to the investor community.	The Chair provided key investors with an update on the governance of Shell. The main topics included governance, remuneration, energy transition and business outlook. Investors had opportunities to ask the Chair questions about these topics.	Chair	<p>In addition to direct engagement with the Chair, investors also had subsequent dialogue with Shell's Investor Relations team where feedback was provided. Some feedback commended the access to and the availability of the Board members. Their open and transparent approach in engagement with shareholders was also commented on.</p>

UNDERSTANDING AND ENGAGING WITH OUR STAKEHOLDERS

continued

Engagement before event	Event/activity	Director attendance	Subsequent engagement/ feedback
Remuneration roadshows			
Engagement was undertaken prior to the meetings so that the Directors were provided with understanding and insight on particular topics of interest.	In the spring of 2020, the then Chair of the Remuneration Committee, Gerard Kleisterlee, (also Senior Independent Director/Deputy Chair), discussed the approach to remuneration and alignment to strategy, the 2019 pay outcomes and proposed 2020 remuneration policy ahead of voting at the 2020 AGM. Calls were held with investors and a video was published on the Shell website. In the latter part of 2020, Neil Carson, who became Chair of the Remuneration Committee in May 2020, held his first roadshow for Shell. It covered the Remuneration Committee's early decision that there would be no 2020 annual bonus and no 2021 merit increase for Senior Management, and also provided an update on Shell's climate targets and 2020 priorities of care, continuity and cash. Neil also sought shareholders' views on managing potential windfall gains that might arise from the 2021 share awards. This helped to inform the Remuneration Committee's approach. Further details are set out in the Remuneration Report.	Remuneration Committee Chair/ Deputy Chair/SID Future Remuneration Committee Chair	Consultation with major shareholders was undertaken prior to the engagements on remuneration-related matters. The conclusion reached during the Remuneration Policy review process was that the policies in place prior to 2020 were closely aligned with strategy and had proven effective at delivering pay-for-performance over a long period. The Remuneration Committee proposed a number of changes to simplify policies and provide greater transparency and to keep pace with developing governance standards. The 2020 Directors' Remuneration Policy received positive support from shareholders at the 2020 AGM.
SID calls			
Following requests from investors, and in line with best practice, engagement with key institutional investors was undertaken as part of the appointment of the Senior Independent Director. Engagement was undertaken and key topics of interest were communicated to the Senior Independent Director, prior to the calls.	Euleen Goh, who assumed the role of SID in May 2020, held several calls with key institutional investors to discuss and outline the process of selecting a new Chair of the Board as part of succession planning. She highlighted the responsibility of the Nomination and Succession Committee in this process and the capabilities that Shell was looking for in a new Chair.	Deputy Chair/SID	Positive feedback for holding the sessions was received. Key reflections from the institutional investors included: the need for the new Chair to support the new strategy; the need for the new Chair to have change management experience over a long period of time since this would be important in the energy transition, as well as a strong understanding and respected stance on climate-related matters; and the usefulness of the new Chair having had CEO experience in a global company within a complex and cyclical industry.
The Institutional Investors Group on Climate Change (IIGCC) meetings			
We have a continuing dialogue with this group throughout the year.	Twice a year, meetings with the IIGCC are held with the CEO, and another with a member of the Executive Committee as part of our engagement and collaboration with the IIGCC and Climate Action 100+. In 2020, the Executive Committee member was Harry Brekelmans. The topics discussed were the energy transition, Shell's new energy ambition, the sectoral approach, and Shell's industry association climate lobbying. In addition to Board engagement, Shell's Chief Climate Change Adviser participated in a presentation as part of a corporate outreach programme. This meeting aimed to help expand investors' understanding of the risks and opportunities that climate change mitigation and adaptation present to companies and how they are responding to the challenges.	CEO	We continue to value and appreciate the collaboration with Climate Action 100+ and their large institutional investor base.
Board visit (virtual)			
Clear briefing materials were provided to each Director ahead of the event.	The Board was provided with an opportunity to engage virtually with staff members at the Shell Pennsylvania Chemicals complex in the USA. During this session, the Board was provided with an overview of Shell's Chemicals strategy, industry outlook, plans to achieve goals and to support the customer experience. The Board also engaged in discussions of a health, safety, security and environment nature,	Board	The Board gained an insight into the development and culture of the operations and maintenance teams. The use and impact of digitalisation tools were highlighted, and the future environmental capabilities of the site were discussed.
Chair visits (face-to-face)			
Engagement prior to the visits helped to formulate the agenda and refine the areas of focus for the respective visits.	Face-to-face visits of various Shell sites by the Chair included Sonnen, the Shell Pernis site and 'Springland site'. The Chair was provided with a view on business context, integrated cash generation and key priorities for the sites and an opportunity to informally connect with staff members about the energy transition, current opportunities and challenges in the business or site where they work.	Chair	The visits provided further opportunity to engage with the workforce and gain a deeper understanding of the business areas and their operations.

Engagement before event	Event/activity	Director attendance	Subsequent engagement/ feedback
Audit Committee Chair visit to Houston (face-to-face)			
Engagement prior to the visits helped to formulate the agenda and refine the areas of focus for the respective visits.	The Audit Committee Chair visited the Country Co-ordination Team, the Shell Technology Centre Houston and other business areas.	Audit Committee Chair	The Audit Committee Chair gained an overview of the US energy transition, and insights into strategy, HSSE, regulatory topics and Shell's deep-water operations. The visit also provided an opportunity to engage with some of Shell's emerging leaders in Houston.
Audit Committee visits (virtual)			
Discussions were held with the relevant country chairs as well as the Audit Committee members ahead of the visits. The purpose of this was to refine the topics for discussion, ensure that key areas of interest were covered and were suitably organised for a virtual environment.	As reported in the 2019 Annual Report, the Audit Committee had planned to visit three sites – Singapore, Kuala Lumpur and Krakow – in 2020. These visits were conducted virtually because of the impact of COVID-19, including travel restrictions. Further information, see "Focus areas for 2020" on page 146 of the Audit Committee Report.	Audit Committee and other Board members	Singapore: The Committee members gained an understanding of the operations of the Shell businesses relating to business controls, ethics and compliance. They obtained insight into the risks, controls and mitigations associated with operating in a COVID-19 environment. Krakow: The Committee was further educated about the energy transition in Shell Poland and gained a deeper understanding of our businesses in Poland including Shell Business Operations (SBO). Kuala Lumpur: The Committee gained an understanding of the operations of the Shell businesses in Malaysia, including the SBO, and more first-hand information about the energy transition in Shell Malaysia.
Safety, Environment and Sustainability Committee visit (virtual)			
Discussions were held with the Safety, Environment and Sustainability Committee members ahead of the visit to formulate the agenda and ensure that key areas of interest were covered.	The Safety, Environment and Sustainability Committee held a series of engaging virtual sessions in lieu of a physical visit to the Shell Rheinland refinery in Germany.	Safety, Environment and Sustainability Committee and other Board members	This visit provided the Committee with many insights, including into the local German context, the views and priorities of the workforce, and the safety and environmental performance of the Rheinland site. Committee members also gained an understanding of energy transition projects under way and the planned transformation of the Rheinland site to an energy and chemicals park. Committee members also met with a government minister of the state government of North Rhine-Westphalia.
Director visits (face-to-face and virtual)			
Discussions were held with the respective Directors ahead of the visit to formulate the agenda and ensure that a natural, open dialogue was encouraged in the various group sessions.	In February and March, a series of staff engagements were held with Directors including staff lunches and an International Women's Day panel discussion. In June, virtual engagement sessions were held with staff members from a range of business areas in order to get a broad spectrum of staff views. (Staff members who attended included people in Trading/projects, staff in Asia who had returned to work, frontline staff in markets, people in Shell business operations and staff directly supporting assets). This engagement was planned as an alternative to the usual face-to-face staff engagements which happen around Executive Committee or Board meetings. Staff members were put into six groups for casual conversations with a few Board members so natural dialogue could flow and Board members could receive a candid view of how staff had been coping during extraordinary times. Discussions were wide-ranging and included discussion of effects of COVID-19 such as: <ul style="list-style-type: none">■ how situations had changed for staff and family members;■ team dynamics and culture at work;■ whether there were any new ways of working that would be good to keep; and■ thoughts and reflections on the future.	Board	The virtual visits provided Directors with opportunities to engage with the workforce as best as possible in the circumstances. They provided an insightful and uplifting part of the traditional off-site meeting. The Directors gained insight and were able to discuss with staff the challenges they had been facing as a result of COVID-19 and the economic downturn.

WORKFORCE ENGAGEMENT

The Board recognises merit in the Code's three mechanisms for engaging with the workforce. As with all the Code's provisions, boards must consider the size and structure of their business, including its international scope, and select an approach that most practically delivers the underlying spirit and ambition of the Code, even if the chosen approach differs from what the Code outlines. The Code does note that alternative methods for workforce engagement are supported where an explanation is provided.

The Code states that its use of the term "workforce" is not meant to align with legal definitions of workforce, employee, worker or similar terms. But for a global organisation bound by the laws of more than 70 countries, blurring the clearly prescribed legal definitions that affect complex issues (such as local HSSE requirements, work contract terms, legal accountability, employment rights) or merging two definitions of the same term could have a notable impact on the business, its operations and its stakeholder relationships (including with suppliers). Therefore, Shell considers its workforce to be employees of companies in the Shell Group. The Board also engages with others outside this group (for example, on site visits), and some of this engagement is shared on page 134.

Although our reporting and formal engagement focuses predominantly on our employees, all individuals working on Shell sites (including Shell offices) are required to undertake certain Shell training (for example, HSSE and Code of Conduct-related training). Adhering to the Life Saving Rules (HSSE) and the Code of Conduct compliance obligations is included within our contracts with suppliers, and the Shell Global Helpline is available for all workers to report matters of concern.

For many years Shell has recognised the importance of engaging with its workforce. Engagement is especially important in maintaining strong business delivery in volatile times of change. We therefore strive to maintain a dialogue between management and our workforce – both directly and where appropriate, through representative bodies. Management regularly engages with the workforce through a range of formal and informal channels, including via webcasts and emails from the Chief Executive Officer and other senior executives, webcasts, townhalls, team meetings, face-to-face gatherings (pre-COVID-19), interviews with Senior Management and online publications via our intranet.

The Board considers effective engagement a key element of its understanding of the Company's ability to create value as it recognises that our people are our greatest asset. Workforce views can help inform the Board on matters such as operational effectiveness, Shell culture, risk identification and strategy development and delivery.

Throughout 2020 the ongoing COVID-19 pandemic impacted how the Board engages with the workforce and it was impossible to implement the enhancements to physical engagement discussed and planned at the start of the year. The Board did undertake a number of virtual engagements, often around the time of scheduled Board discussion. Feedback from these video calls was shared with and discussed by the wider Board. Management also continued to engage extensively throughout the year, implementing a number of focused events to better understand how people were coping with the working environment caused by the COVID-19 pandemic, their mental well-being and what the business could do to better support them. Information from these discussions was provided to the Board via bi-weekly updates.

The Board considers the current workforce engagement approach effective. The information provided in the following table gives examples of various methods of Board engagement.

Board's direct engagements with the workforce

(Because of COVID-19 restrictions in various countries, the engagement activities have mostly been held virtually)

Informal engagement

Chair lunches, prior to the COVID-19 restrictions, were held from time to time with a select cross-section of employees in various regions. Virtual staff engagements have been held by the Board with a select cross-section of employees (diverse by gender, nationality, business or function, profession and level) in various regions and countries. Nomination and Succession Committee members meet with various senior leaders and high-potential individuals throughout the year.

The Chair commented: "I never cease to be impressed by the quality of talent, professionalism, humility and authenticity evident in the individuals with whom our Committee engages. Their diverse backgrounds, capabilities and experience enrich our pipeline in ways that transcend paper credentials. The Nomination and Succession Committee takes its duty of identifying leaders with the "full" package required to deliver our Company's purpose very personally, and we derive confidence from the equivalent personal drive and commitment we see reflected in the talent we meet." In addition, the Nomination and Succession Committee received a detailed briefing alongside that given to the full Board on the results of the annual Shell People Survey, which was completed by more than 86% of employees.

Virtual informal engagement – Board

The Board participated in a number of virtual employee engagements this year in which they had the opportunity to speak to staff in smaller groups, with between two and three Board members in each group. One such event involved staff from various geographical locations at various levels in Shell.

The purpose was for the Board to discuss with staff the challenges they have been facing in the COVID-19 pandemic. Staff were asked to describe: how things have changed for them and their families since the onset of COVID-19; how the current situation has changed the dynamics or culture of their team; and how they felt about the future and what was most on their minds.

Another engagement was towards the end of the year, after the company-wide communications on Reshape's impact on jobs. It focused on people's personal experiences working for Shell, including ways of working, views on the future direction of Shell and perceptions around Reshape. The session was arranged geographically to ensure an international scope and included mid-level employees from Brazil, the USA, the UK, Nigeria and India.

During these engagements Shell people were asked to validate whether the communication, care and support offered by the business was sufficient, and if more was needed. The outcomes of these Board engagements have been discussed in Board meetings and have been incorporated in future communication and support to our people.

Off-site visits

Because of COVID-19 restrictions, site visits were limited to the beginning of the year. Although in some instances we were able to organise virtual visits and meetings, priority was given to running the business operations.

People engagements during Board and/or meetings off-sites.

Meeting talent/leadership teams

Company Chair engaging with various individuals.

The Board attended a virtual site visit to the Pennsylvania Chemicals plant in the USA. This gave Board members an opportunity to speak with another group of Shell's people in the context of a specific, large-scale project which has had to manage multiple staff safety issues, particularly in relation to COVID-19. The Pennsylvania Chemicals site has also required significant management of HSSE and community stakeholder matters. The engagement included an overview of COVID-19 management with a focus on recent preparations for a third wave and a specific discussion of engagement with external stakeholders and management of non-COVID-related risks.

The Board raised numerous questions and challenges in the context of key business decisions which will affect employees, such as refinery closures, the impact on employees and the possibility of retraining and redeployment. They also shared their own experiences of dealing with stakeholders and staff representatives.

Through these more formal engagements, the Chair and other Non-executive Directors (either individually or with their committees) are able to deepen their understanding of how the Company's purpose, strategy and values are embedded in particular businesses, sites and countries. This gives insight into progress made, risks and opportunities. The benefits are mutual. The Board obtains direct insight into local business operations and projects, and local strengths and challenges while our people have an opportunity to better understand the Board and to provide direct feedback on topics of importance to them, their business or function and/or their location.

Employee network and related sessions

Conducted by Directors with, for example, Directors engaging with Shell women's networks activities.

In 2020, panel discussions took place on International Women's Day. Various members of the Board joined these discussions.

Directors involved in these engagements note the opportunity to enrich their understanding of the female perspective within Shell, getting better insights on gender balance and the employee experience in this area.

Formal reports and information updates to the Board

Shell People Survey (anonymous survey facilitated externally)

Annual Board discussion to keep it fully aware of employee engagement levels and quality of leadership across Shell's workforce, and informed on a broad range of subjects including collaboration, working conditions, the job, people development, reputation, benefits and rewards, diversity and inclusion, operational excellence, and responsible business.

The Board considers the Shell People Survey to be one of its principal tools for measuring employee engagement, motivation, affiliation and commitment to Shell. It provides insights into employee views and has a consistently high response rate. In 2020 the response rate was 86%, which was the highest ever. The average employee engagement score was maintained at 78 points out of 100, despite the challenging year and remained top quartile compared with external benchmarks.

The Board also considers this engagement to understand, for example, how Shell is using the survey outcomes in: i) data analytics, for example, to identify potential correlative relationships between employee engagement and safety or ethics and compliance incidents; and ii) strengthening Company culture and values.

Senior Succession and Resourcing Review

The annual Senior Succession and Resourcing Review focused on the strength of senior leadership and plans for its development and succession, while highlighting the breadth, depth and diversity of its pipeline, the developing profile of the leadership cadre, and recruitment and attrition levels.

The Nomination and Succession Committee noted the effectiveness of succession planning, the impact of its associated execution, and the professional, data-driven, integrated approach to leadership and leadership development. It welcomed the continued focus on performance management, proactive management of Shell's talent pipeline, and the focus on advancing Shell's diversity agenda with increased attention on race. Overall this year's insights provided a deeper understanding of the interplay between culture, identity, leadership talent and employee engagement across Shell.

Assessment of key trends and material incidents

Presented by Chief Ethics & Compliance Officer. This is based on the established channels for staff and others to file complaints or report on suspected breaches in relation to the Shell General Business Principles (SGBP), the Code of Conduct or any breaches of law or regulations, including accounting control and auditing concerns.

The update covers Shell employees and our wider stakeholder base. The Board (also via the Audit Committee and SESCo) obtains insight into incidents and reporting levels and remediation which provide indicators of conduct risks and, together with the related Board reports noted below, of the strength of embedding and awareness of the Code of Conduct and SGBP obligations and employees' comfort levels in raising incidents.

Risks

The Board reviews reports on strategic and conduct and culture risks annually, and considers reports on operational risks twice a year. These reports assess current business activities against risk appetite.

Organisational culture

As part of the Reshape restructuring, the Board has been discussing the people strategy, new leadership framework, and safety refresh. Discussions on diversity and inclusion issues such as race also took place to further improve the organisational culture.

The Board also reviewed the Conduct and Culture Risk Report, which included a refreshed dashboard of risk appetite measures aligned with Shell's core values – honesty, integrity and respect for people. Elements measured by the dashboard include: the number of terminations as a result of formally investigated Code of Conduct violations; the number of overdues on mandatory Ethics and Compliance training; anonymous reporting rates on our global helpline; and a selection of Shell People Survey scores. Qualitative assessments of insider threats and our approach to caring for our people were also covered.

Chief Ethics and Compliance Officer Report

Data and insights include information from the Global Helpline, Shell Ethics and Compliance organisation and the Shell People Survey. SESCo continues to strongly support the work of the Chief Ethics and Compliance Officer, including the efforts to ensure a safe working environment where staff feel confident to raise any concerns in good faith.

The Audit Committee is kept updated when matters highlighted through the Global Helpline are investigated, and on the associated remediation. For more information see page 148 of the Audit Committee report.

Assurance activities

Assurance activities, including items raised by businesses and functions (through the Group Assurance Letters process) and independent assurance (from Internal Audit, HSSE, Ethics and Compliance, Reserves Assurance and Reporting), provide additional evident to the Board of the commitment to high standards of risk management and internal control. The assurance activities ensure that work can be done safely, within regulatory frameworks.

The information provided within these reports further supports the Board's annual review of the effectiveness of the Group's system of risk management and internal control and feeds into the Group scorecard, against which staff bonuses are calculated.

The Shell Control Framework

Significant HSSE, Ethics and Compliance, and more broadly, business control incidents are brought to the attention of Senior Management and the Board through regular reporting.

The Board discussed how the organisation could learn more from incidents and how the business could drive safety performance. The Board shared and discussed examples based on personal experience of how to promote a strong safety culture.

NOMINATION AND SUCCESSION COMMITTEE



CHAD HOLLIDAY

Chair of the Nomination and Succession Committee

Focus areas for 2020

- Appointment and onboarding of four new Non-executive Directors
- Continued discussions about Non-executive Director and Executive Committee succession
- Continued talent engagements with key staff and succession candidates
- Deep dives into the Royal Dutch Shell People Strategy, including culture and identity and end-to-end talent management

Priorities for 2021

- Continued discussions about Non-executive Director and Executive Committee succession
- Continued talent engagements with key staff and succession candidates.
- Continued deep dives into the Royal Dutch Shell People Strategy and culture, with an increased focus on diversity and inclusion and end-to-end talent management

COMMITTEE ATTENDANCE FOR 2020

Committee Member	Member since	Maximum possible meetings	Number of meetings attended	% of meetings attended
Chad Holliday (Chair of the Committee)	May 19, 2015	7	7	100%
Euleen Goh	July 1, 2019	7	7	100%
Gerard Kleisterlee [A]	May 23, 2018	3	2	66.6%
Sir Andrew Mackenzie	Oct 1, 2020	2	2	100%
Sir Nigel Sheinwald	May 20, 2020	4	4	100%
Linda Stuntz [A]	June 1, 2016	3	3	100%

[A] Both Gerard Kleisterlee and Linda Stuntz retired from the Board after the 2020 Annual General Meeting, held on May 19, 2020.

PURPOSE

The Nomination and Succession Committee (the "Committee") leads the process for appointments to the Board and Senior Management [A] positions, ensures plans are in place for orderly, well-planned succession, and oversees the development of a diverse succession pipeline of candidates. Further, it reviews the Company's policy and strategy on diversity and inclusion, and monitors the effectiveness of diversity initiatives. It makes recommendations to the Board on corporate governance guidelines, as referred to in the Chair's statement.

[A] "Senior Management" refers to the Executive Committee and the Company Secretary.

TALENT MANAGEMENT AND SUCCESSION

The Committee is fully engaged with the end-to-end talent management and senior succession planning approach that is deployed within Shell. It plays a key role in senior succession and resourcing and retaining in-depth knowledge of the individuals within the talent pipeline is a Committee priority. In fact, the Committee makes time to personally meet and engage with numerous individuals within the pipeline. The Committee's oversight and input extend from recruitment to leadership identification and from leadership development to leadership appointment, all of which are underpinned by clearly articulated talent priorities and a commitment to advancing diversity and inclusion across Shell.

The Committee manages Board and Senior Management succession under a structured, proactive methodology. The processes have clear and agreed selection principles for short-, medium- and long-term succession and are aligned with Shell's strategic priorities.

For Non-executive Director succession, the Committee also follows its Principles for the Strategic Composition of the Board. These principles function much like a policy and include both quantitative and qualitative principles, considering: (i) the overall aspired Board composition and diversity of gender, race and ethnicity, nationality, background, experience and desired skillsets that align with the Company's strategy and purpose; and (ii) the values, attitudes, and behaviours expected of Directors.

For Senior Management succession, the selection principles include process-specific elements, such as a clear and proactive approach to identifying and developing succession candidates. The principles also outline the long-term structured nature of the succession planning process. There is also great focus on ensuring that the principles reflect the leadership qualities required for future business success and that they advance the progress of diversity in all its forms.

Senior Management principles feature in the Committee's review of the succession plans which occurs in every Committee meeting. Utilising the principles, the Committee executes changes through a well-defined and diligent process with overall Board engagement. The Committee agrees candidate profiles and meets prospective candidates well ahead of any selection decision being necessary. It also engages the Board early in the process to ensure all Directors have an opportunity to meet and assess prospective candidates. Consequently, some of the leaders whom the Committee and Board have engaged with extensively in the past are now members of the Board or the Executive Committee.

In 2020, the Committee undertook its annual in-depth look at the succession plans for Senior Management across Shell and reviewed the talent pipeline in line with the business outlook. The engagement focused on the depth and breadth of the leadership pipeline, the skills and behaviours required for future success and progress against diversity aspirations and policies. Following the Committee's review, the findings were reported to the Board.

DIVERSITY OF LEADERSHIP

The Committee recognises that continuing to improve all types of diversity at each level of the Shell Group is crucial. Shell aims to be an inclusive workplace where everyone feels valued and respected and has a strong sense of belonging. The Committee's review of diversity objectives and strategies for the Shell Group as a whole also monitors the impact of diversity and inclusion initiatives.

In February 2021 Shell published its diversity aspirations as part of its strategic update. Gender and nationality diversity is increasing, and focus is broadening and deepening in other areas such as race and ethnicity, enablement and LGBT+. When looking at our progress against our ambitions, female representation has steadily improved in recent years. Among experienced recruitment in 2020, Shell companies recruited 31% females, and among graduates 49%. Female representation in the top 1,400 roles ("Senior Leadership" positions) has strengthened by 1.4 percentage points during 2020 to 27.8%, and further improvement is actively pursued. Nationality diversity, such as Asian and American talent, continues to advance in a manner reflective of the business outlook and we have a strong focus on progressing race and ethnic minority representation. The representation of people of colour among Shell's senior leaders in the USA has been actively tracked for many years. It stood at 26.4% at the end 2020, compared with 17.3% in 2016. In the UK, BAME representation among senior leaders was 10.6%, an advance from 7% in 2018.

Senior Leadership is a Shell measure and different from that which we are required to report under the Code, being female representation in Senior Management and their direct reports, where the percentage is 29.5%.

Although the Committee monitors Shell's organisational diversity and inclusion strategies and initiatives, it also holds itself accountable for the Board's own diversity and inclusion. By the end of 2020, the Board's diverse composition clearly met both the Hampton Alexander and Parker Reviews' objectives by reflecting 38.46% female representation with one person meeting BAME criteria. Gender representation was down slightly from May 2020 (when the Board's composition included 42% female representation) as a result of the departure of three Non-executive Directors (one female, two males) and the appointment later in the year of four new Non-executive Directors (one female, three males). But following the 2021 AGM, subject to shareholder approval and for the first time in Shell's history, the Board is expected to reach gender parity with 50% female representation (after the departure of two males and the expected appointment of one female).

 [More information on diversity in Shell is provided in the Our people section on page 108.](#)

The People Strategy and culture and identity

In 2020, the Committee conducted an in-depth examination of the Royal Dutch Shell People Strategy, with a particular emphasis on our aspirated culture and identity. Leaders are key to delivering the Company's strategic ambitions and animating our aspirated identity and culture. Given the critical importance of this issue for the Company's transformation under our Powering Progress strategy, the Committee will conduct further engagements in 2021 to maintain proactive oversight over the issue of leadership and aspirated identity and culture.

Committee Activity

In addition to its considerations regarding succession, the Committee made recommendations on corporate governance guidelines, monitored compliance with corporate governance requirements and made recommendations on corporate governance-related disclosures. The Committee continues to monitor and review this area, considering whether and how current Company governance matters should be strengthened. Further insight on some of the Committee's areas of consideration in 2020 is provided below.

Succession [A]	Topic of discussion/Example of Board activity
Recommendation	<ul style="list-style-type: none"> ■ Appointment of Dick Boer, Martina Hund-Mejean, Sir Andrew Mackenzie and Abraham (Bram) Schot to the Board. ■ Changes to the composition of the Board committees.
Review and oversight	<ul style="list-style-type: none"> ■ Royal Dutch Shell Senior Succession and Resourcing Review.
Oversight	<ul style="list-style-type: none"> ■ Royal Dutch Shell People Strategy including culture and identity. ■ End-to-end talent management in Royal Dutch Shell.
Engagement	<ul style="list-style-type: none"> ■ Talent engagements
Governance	
Governing the Board and its committees	<ul style="list-style-type: none"> ■ Reviewed its Principles for the Strategic Composition of the Board. ■ Reviewed its Terms of Reference, and the terms of Reference for other Board committees and the matters reserved to the Board.
Regulation, legislation and other governance-related guidance	<ul style="list-style-type: none"> ■ Key governance matters affecting the Company's external reporting. ■ Other governance and regulatory changes agreed or proposed and their impact or potential impact on the Company, its processes and its reporting.
RDS matters	<ul style="list-style-type: none"> ■ Considered any potential conflicts of interest and the independence of the Non-executive Directors. ■ Review of additional external appointments requested by Directors, with specific focus on the time allocated to all commitments. For Executive Directors, the benefit/relevance to the business of the Director undertaking the additional role is also a key consideration. ■ Determined the process for the 2020 internal Board Evaluation.
Board membership and other appointments	
Directors' tenure, external commitments, conflicts of interests and succession planning	<ul style="list-style-type: none"> ■ Non-executive Director appointments and changes to Committee membership.
Talent overview and senior succession review	
RDS Senior Succession and Resourcing Review covering Executive Director and Executive Committee (EC) succession, EC direct reports, the senior executive group and the overall talent pipeline	<ul style="list-style-type: none"> ■ Enhanced insight of Shell talent and future leaders. ■ Assurance of robust succession and contingency plans.

[A] The Committee was assisted during the year by Russell Reynolds Associates ("Russell Reynolds"), an external global search company whose main role was to propose suitable candidates. Russell Reynolds does not have any connection with the Company other than that of search consultants. The Chair does not participate in discussions regarding his own succession. Russell Reynolds is a signatory to The Voluntary Code of Conduct for Executive Search Firms, which aims to improve board diversity.

NOMINATION AND SUCCESSION COMMITTEE continued

Director Induction and Training

After being appointed to the Board, Directors receive a comprehensive induction tailored to their individual needs. This normally includes site visits and meetings with Senior Management to enable them to build up a detailed understanding of Shell's business and strategy, and the key risks and issues that Shell faces. Existing Directors are also able to join these visits to keep abreast of business developments and progress. With the abnormal COVID-19 circumstances in 2020, the induction programme was quickly adapted to a completely virtual induction.

Although the programme had received praise from new Non-executive Directors over the past several years, enhancements were nonetheless implemented in 2020 despite the required fully virtual implementation.

The enhancements ensured that all onboarding was phased and prioritised based on forthcoming Board agenda items to help ensure the new Non-executive Director "hit the ground running". The enhancements included digital onboarding books for each new Non-executive Director. These onboarding books complemented the existing digital Directors' Handbook and featured:

- overviews of scheduled briefing meetings customised to the Non-executive Director's needs;
- hyperlinks to key Shell publications (external and internal);
- lists of common Shell acronyms;
- key current materials on:
 - Shell's safety and core values;
 - Board governance;
 - Group strategy and portfolio; and
 - key businesses and functions.
- biographies of key executives
- Other enhancements of the onboarding programme for Non-executive Directors included:
 - arranging briefing meetings with key executives (both business and functional) customised to Non-executive Directors' needs;
 - where feasible, pairing up new Non-executive Directors in onboarding briefings to optimise learning while also providing opportunities for collegial relationship-building and increasing efficiencies for the executives; and
 - where possible, arranging virtual site visits (either specifically for onboarding or by inviting the new Directors to committees' virtual site visits).

CHAIR SUCCESSION

Message from Euleen Goh

In early 2018, the process of selecting the next Chair of the Board of Royal Dutch Shell plc began in response to the proposed limit on Chair tenure, outlined in the draft version of the Code. The Nomination and Succession Committee (NOMCo) created a subcommittee, drew up a potential succession timeline, and initiated an internal and external search process. Hans Wijers, the Senior Independent Director at the time, led the subcommittee and the search process. Chad Holliday, the current Chair, was not a member of the subcommittee.

My predecessor Gerard Kleisterlee took over from Hans in May 2018 and refined the selection criteria and succession timeline. The subcommittee agreed what qualities the successful candidate should have, and determined the functional focus elements of the new Chair's role. Accordingly, the subcommittee considered and interviewed multiple candidates.

I assumed leadership of the subcommittee after Gerard retired from the Board at the 2020 AGM. The NOMCo subcommittee further reviewed the required qualities and functional focus elements of the role in the context of the current environment. The subcommittee also examined the main trends and factors affecting the long-term success and future viability of Shell, and the organisation's strategic priorities, consulting on these with the wider Board. One-on-one discussions were held with each Board member. The review and the discussions helped us to refine our search process with a clear and updated understanding of the qualities, skills and attributes that the future Chair should possess.

We engaged with some of our larger investors, as appropriate, seeking input on the skills, attributes and sector knowledge that they considered important for the Chair candidate profile. These discussions were very valuable. They helped inform our search and selection of the most appropriate individual for the role.

After this thorough and robust search process, the Board agreed unanimously at its March 2021 meeting that Sir Andrew Mackenzie should be appointed Chair of the Board with effect from the conclusion of Shell's 2021 Annual General Meeting, scheduled for May 18, 2021.

When reviewing candidates, our preferred qualities and functional focus elements included a strong requirement for a candidate who has experience in leading large, complex, international organisations. The candidate would have had significant experience in capital discipline. He/she should have an ability to balance the transformational changes that Shell needs to make against the timing of these changes as it navigates the energy transition. The successful candidate should have demonstrated sustainable actions with respect to the climate change agenda. An understanding of the energy market was essential, without it being necessary for the candidate to have spent their entire career working in the oil and gas sector.

In Andrew we believe that we have found the required qualities and more. Andrew is a lifelong learner with a collaborative, agile mindset and he is a champion of good governance. His strategic vision has helped operations and companies under his leadership to transform. His leadership performance in the areas of environmental, social and governance (ESG) and climate action are outstanding. He was recently knighted by the Queen of the United Kingdom for his services to business, science and technology. Andrew firmly believes that business can be a force for good, for shareholders and society alike.

Andrew joined the Board in October 2020 and has dedicated significant time to familiarising himself with the business, the people, and the Powering Progress strategy which he and the Board fully support and are committed to delivering together with management.

His broad experience, strategic vision, scientific curiosity and commercial acumen make him the ideal candidate to lead the Board of Royal Dutch Shell plc.

SAFETY, ENVIRONMENT AND SUSTAINABILITY COMMITTEE



SIR NIGEL SHEINWALD GCMG

Chair of the Safety, Environment and Sustainability Committee

FOCUS AREAS FOR 2020

- Safety performance
- Shell's climate targets
- Sustainability metrics for scorecard
- Energy transition metrics for remuneration

PRIORITIES FOR 2021

- Process safety and personal safety
- Progress against climate targets
- Broader sustainability performance
- Assurance programme

COMMITTEE ATTENDANCE FOR 2020

Committee Member	Member since	Maximum possible meetings	Number of meetings attended	% of meetings attended
Sir Nigel Sheinwald (Chair of the Committee)	July 1, 2012	5	5	100%
Neil Carson	June 1, 2019	5	5	100%
Ann Godbehere	May 20, 2020	3	3	100%
Catherine J. Hughes	November 1, 2017	5	5	100%
Bram Schot	October 1, 2020	1	1	100%
Linda Stuntz [A]	May 23, 2018	2	2	100%

[A] Linda Stuntz retired from the Board following the 2020 Annual General Meeting, held on May 19, 2020.

"2020 was an important year for SESCo. We monitored closely and welcomed Shell's much improved safety performance, and contributed actively to the energy transition pathway and new carbon targets developed."

SIR NIGEL SHEINWALD GCMG

PURPOSE

The Safety, Environment and Sustainability Committee (SESCo) assists the Board in reviewing the practices and performance of Shell, primarily with respect to safety, environment including climate change, and broader sustainability.

OVERVIEW

The Committee meets regularly to review and discuss a wide range of important topics. These include the safe and responsible operation of Shell's facilities, environmental protection and greenhouse gas emissions, significant incidents that impact safety and environmental performance, progress towards Shell's climate targets, and energy transition. The Committee also endorses the Shell annual HSSE & SP assurance plan, reviewing the execution of the plan and audit outcomes.

The Committee assesses Shell's overall sustainability performance and provides input to Shell's annual reporting and disclosures on sustainability. It also advises the Remuneration Committee on metrics relating to sustainable development and energy transition that apply to the Executive Committee annual scorecard and long-term incentive plan.

The Committee reviews and considers external stakeholder perspectives in relation to Shell's business, as well as how Shell addresses issues of public concern that could affect its reputation and licence to operate. Examples include plastic waste, methane emissions, human rights, the UN Sustainable Development Goals, and access to energy in low- and middle-income countries.

In line with the strategic importance of the Committee's agenda, the Chair and the Chief Executive Officer regularly attend the Committee meetings for discussions on specific topics.

Royal Dutch Shell plc's Chief Executive Officer and the Executive Committee hold overall accountability for sustainability within Shell, supported by the Executive Vice President for Safety & Environment and other senior managers.

ACTIVITIES

During 2020, the Committee focused on the areas of greatest strategic importance to Shell, in line with its updated Terms of Reference. This allowed the Committee to oversee effectively and thoroughly the practices and performance of the Company with respect to safety, environment including climate change, and broader sustainability.

The Committee was pleased that there were no fatalities in 2020 at Shell-operated ventures, the first year this has been achieved and a testament to Shell's relentless focus on safety. The Committee welcomed Shell's refreshed approach to safety announced in 2020, with its emphasis on the human dimension of safety performance.

The topics discussed in particular depth by the Committee included personal and process safety, Shell's climate targets and the energy transition, and remuneration metrics and targets. The Committee also reviewed Shell companies' operations and the challenges faced in Nigeria and Brazil.

Together with the Audit Committee and Chief Ethics and Compliance Officer, the Committee reviewed the controls and procedures for managing changes to Shell's portfolio. The Committee Chair also held several meetings with senior leaders to discuss specific topics including new fuels, carbon emissions reduction and decommissioning.

SAFETY, ENVIRONMENT AND SUSTAINABILITY COMMITTEE continued

The Committee supported and contributed to Shell's announcement in 2020 that it aims to become a net-zero emissions energy business by 2050, in step with society. The Committee believe this again demonstrates Shell's determination to play its full role in the energy transition. The Committee has had in-depth discussions with management about how Shell's climate ambitions are being put into operation through portfolio changes, the use of nature-based solutions, the development of carbon capture utilisation and storage, and carbon abatement programmes at operated facilities.

Following the Committee's review of remuneration with management, new safety and environment metrics will be introduced for 2021 along with increased weighting for these metrics and energy transition metrics, which should drive further performance improvements.

The Committee closely monitored and strongly supported Shell's response to the COVID-19 pandemic in terms of care for staff and the safe management of operations. The Committee appreciated Shell's rapid deployment of virtual working technology from the start of the pandemic to enable business continuity and support continued HSSE & SP assurance activities across Shell.

The Committee continued to address wider questions of public concern such as plastic waste, methane emissions and human rights. It looks forward to resuming direct engagement with stakeholders once the COVID-19 restrictions come to an end.

For further details on SESCo and how Shell manages sustainability see www.shell.com

SITE VISITS

The Committee postponed its site visits of the Rheinland refinery in Germany and LNG Canada project in British Columbia due to the COVID-19 pandemic. The committee instead conducted a virtual site visit of Rheinland via videoconference. The visit focused on safety and environmental performance and the planned transformation of the Rheinland site into an energy and chemicals park. It also included a meeting with a minister of the state government of North Rhine-Westphalia.

Activities performed	Frequency
Review Shell's practices and performance relating to Safety, including in particular the safe condition and responsible operation of Shell's assets	E
Review Shell's practices and performance relating to environment, including in particular environmental protection and greenhouse gas emissions	E
Review any major incidents that impact Shell's safety and environmental performance	N
Review progress towards meeting Shell's climate targets	M
Endorse Shell's annual Health, Security, Safety, Environment and Social Performance (HSSE & SP) assurance plan	A
Review execution of Shell's HSSE & SP assurance plan and audit outcomes, and review relevant findings from Shell's broader internal audit programme	M
Assess Shell's overall sustainability performance and provide input to Shell's annual reporting and disclosures regarding sustainability	A
Review how Shell addresses other major issues of public concern that could affect Shell's reputation and licence to operate	M
Review and consider external stakeholder perspectives in relation to Shell's business	P
Advise the Remuneration Committee on metrics relating to Sustainable Development and Energy Transition.	A

Committee Activity Key: A Annually P Periodically M Most meetings E Every meeting N As necessary

AUDIT COMMITTEE REPORT



ANN GODBEHERE
Chair of the Audit Committee

Focus areas for 2020

- Impacts of the COVID-19 pandemic and macroeconomic conditions
- Decommissioning and restoration
- Integrated risk management
- Trading and Supply
- Treasury operations

Priorities for 2021

- New business models and ventures
- Pensions
- Contracting and procurement
- Reshape management framework
- Oil and gas pricing methodology

“The primary role of the AC is to assist the Board in fulfilling its oversight responsibilities in areas such as the integrity of financial reporting, the effectiveness of the risk management framework and system of internal controls as well as consideration of ethics and compliance matters.”

Dear Shareholders,

I am pleased to present our Audit Committee Report for 2020 covering our work over the course of the year including some areas of particular focus.

I begin this report by thanking Roberto Setubal for his contributions as a member of the Audit Committee (AC) since October 2017. Gerrit and I were delighted to be joined by new committee members Martina Hund-Mejean and Dick Boer. Their respective expertise and insights are a valuable addition to the AC.

The primary role of the AC is to assist the Board in fulfilling its oversight responsibilities in areas such as the integrity of financial reporting, the effectiveness of the risk management framework and system of internal controls as well as consideration of ethics and compliance matters. We are also responsible for assessing the quality of the audit performed by, and the independence and objectivity of, the external auditor. The AC also makes a recommendation to the Board on the appointment or reappointment of the external auditor. In addition, we oversee the work and quality of the internal audit function.

Over the course of a year, the AC has a rolling agenda covering a variety of standing matters such as the control framework for the reporting of Shell's oil and gas reserves; information risk management; tax matters; briefings from the Chief Internal Auditor on the effectiveness of Shell's risk management and internal control system and on the outcomes of significant audits and notable control matters, and briefings from the Chief Ethics and Compliance Officer. Specific attention is given to topics that we consider particularly significant, including key areas of judgement relating to Shell's Consolidated Financial Statements, as discussed in more detail later in this report. In 2020, in addition to standing matters, the AC addressed a variety of special focus areas including: the impacts of the COVID-19 pandemic on the controls and assurance environment; the impacts of the macroeconomic conditions on the outlook for commodity prices and refining margin assumptions; the effectiveness of decommissioning and restoration activities; a review of the integrated risk management landscape across Shell; an in-depth look at Shell's treasury operations; and a review of Trading and Supply's risk management strategy and platform, data and systems update. The AC carried out virtual site visits to Shell's operations in Singapore, Krakow, and Kuala Lumpur. In addition, in March prior to a travel ban prompted by COVID-19, I spent three days in Houston visiting all of Shell's operations. These site visits contribute to the AC's understanding of the risks and opportunities arising in key markets and where important functions are carried out. The visits also provide the opportunity for the AC to engage with a diverse range of Shell staff in each location and to hear directly from them.

As climate change and energy transition gained further prominence and to help the AC keep abreast of the Company's efforts and strategies to manage potential impacts on Shell's assets, I became a member of the Safety, Environment and Sustainability Committee in 2020. In addition, the AC requested Ernst and Young LLP (EY), our external auditor, and the Chief Internal Auditor to specify in their respective quarterly reports to the AC what specific steps they have taken to incorporate climate change considerations into all facets of their work.

On a final note, the AC congratulates Shell's Annual Report team on winning the FD Henri Sijthoff Prize for the best 2019 annual report in the “listed companies” category in the Netherlands. The award recognises Shell's pursuit of continual transparency improvements in its communications with external stakeholders.

ANN GODBEHERE
Chair of the Audit Committee
March 10, 2021

AUDIT COMMITTEE REPORT continued

COMMITTEE MEMBERSHIP AND ATTENDANCE FOR 2020

During 2020, the members and meeting attendance of the AC were as follows:

Committee Member	Member since	Maximum possible meetings	Number of meetings attended	% of meetings attended
Ann Godbehere (Chair)	May 23, 2018	6	6	100%
Dick Boer [A]	May 20, 2020	3	3	100%
Martina Hund-Mejean [B]	May 20, 2020	3	3	100%
Roberto Setubal [C]	October 1, 2017	3	3	100%
Gerrit Zalm	March 8 2017	6	6	100%

[A] Dick Boer was appointed to the Board and AC with effect from May 20, 2020.
 [B] Martina Hund-Mejean was appointed to the Board and AC with effect from May 20, 2020.
 [C] Roberto Setubal stepped down from the Board with effect from May 19, 2020.

All members of the AC are financially literate, independent Non-executive Directors. In respect of the year ended December 31, 2020, for the purposes of the UK Corporate Governance Code, Ann Godbehere and Martina Hund-Mejean with effect from her appointment to the Board and AC on May 20, 2020, both qualify as: a person with "recent and relevant financial experience" and competence in accounting, and, for the purposes of US securities laws, an "audit committee financial expert".

The experience of the AC members outlined on pages 114-121 demonstrates that the AC as a whole has competence relevant to the sector in which Shell operates, and the necessary commercial, regulatory, financial and audit expertise required to fulfil its responsibilities. The AC members have gained further knowledge and experience of the sector as a result of their Board membership and through various in-person and virtual site visits since their respective appointments.

The AC invites the Chief Financial Officer, the Legal Director, the Chief Internal Auditor, the Executive Vice President Taxation and Controller, the Vice President Group Reporting and the external auditor to attend each meeting. The Chief Executive Officer attends each meeting where the quarterly, half-yearly and year-end results are discussed. The Chair of the Board also regularly attends AC meetings. Other members of management attend when requested on specific topics or to provide input on more detailed technical matters that may arise. The AC regularly holds private sessions separately with the Chief Internal Auditor and the external auditor without members of management, except for the Legal Director, being present. Outside of the formal AC meetings the AC Chair meets regularly with each of the Chief Financial Officer, Executive Vice President (EVP) Taxation and Controller, the Chief Internal Auditor, the external auditor, and the Chief Information Officer.

AC REMIT

The roles and responsibilities of the AC, as set out in its Terms of Reference are reviewed annually, taking into account relevant regulatory changes and recommended best practice. The key responsibilities of the AC include, but are not limited to:

- evaluating the effectiveness of the system of risk management and internal control;
- reviewing the integrity of the financial statements, including annual reports, half-year reports, and quarterly financial statements;
- reviewing and discussing with management the appropriateness of judgements involving the application of accounting principles and disclosure rules;
- advising the Board whether, in the AC's view, the Annual Report taken as a whole is fair, balanced and understandable and provides the information necessary for shareholders to assess Shell's position and performance, business model and strategy;
- reviewing the functioning of the Shell Global Helpline and reports arising from its operation;

- overseeing compliance with applicable legal and regulatory requirements, including monitoring ethics and compliance risks;
- monitoring the qualifications, expertise, resources and independence of the internal audit function and the external auditor;
- assessing the internal and external auditors' performance and effectiveness each year and approving related remuneration for the external auditor; and
- recommending to the Board for it to put to the Company's Shareholders for approval at the Annual General Meeting (AGM) to appoint, reappoint, or remove the external auditor.

These responsibilities form the basis of the AC's annual work plan which is adjusted throughout the year as necessary. The AC is authorised to seek any information it requires from management and external parties and to investigate issues or concerns as it deems appropriate. The AC may also obtain independent professional advice at the Company's expense. No such independent advice was required in 2020.

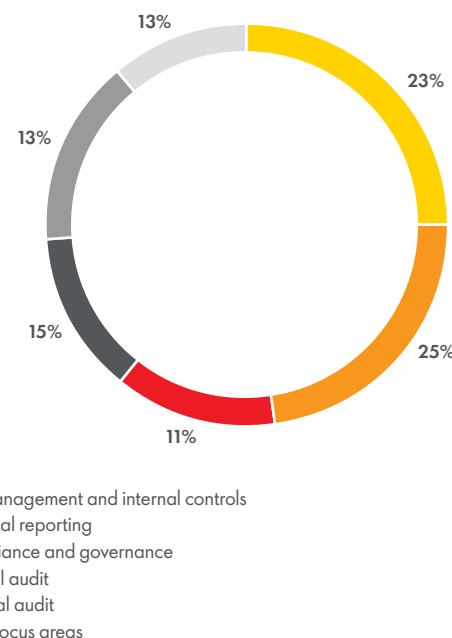
The AC keeps the Board informed of its activities and recommendations, and the Chair of the AC provides an update to the Board after every AC meeting. The AC discusses with the Board if it is not satisfied with or believes that action or improvement is required concerning any aspect of financial reporting, risk management and internal control, compliance or audit-related activities.

A copy of the AC's Terms of Reference, which was updated in 2020 to reflect references affected by the separation of the Annual Report and Form 20-F, can be found at www.shell.com.

AC TOPIC COVERAGE IN 2020

The pie chart below shows the percentage of time the AC spent on various activities during 2020.

2020 AC topic coverage



FOCUS AREAS FOR 2020

The AC was briefed by senior leaders from various business and function areas on the adequacy, design and operating effectiveness of risk management and controls related to the critical activities carried out by their respective business or function. The briefings included information on any enhancements to strengthen controls and how areas identified

for improvement had been addressed. These discussions also covered monitoring activities around risks, and steps being taken to address identified gaps and emerging risk areas. In addition to the significant accounting and reporting areas discussed on page 150, the business and function areas reviewed by the AC in 2020 included the following:

- **Decommissioning and commissioning and restoration (D&R)**
 - The AC was briefed on the different aspects of the D&R management process in Shell and the key risks and opportunities in D&R. The AC discussed the approach to D&R provisions and the controls in place to enable effective governance of D&R.
- **Integrated risk management** – To provide the AC with further insights into Shell's integrated risk management framework across the organisation, the AC received an overview of the approach to risks, controls and assurance in two business areas: information risk management and Shell aircraft. The AC noted the improvement measures and best practices management has embedded within these two areas.
- **Treasury operations** – Senior Treasury leaders provided the AC with an overview of Shell's centralised treasury operations, which include central debt and capital market activities, liquidity and foreign exchange, cash management and treasury functions. The AC reviewed the overall governance, controls and assurance activities. The AC gained a deeper understanding of how risks, including regulatory and fiscal compliance, are managed. As part of this review, the AC discussed future challenges and opportunities in this area.
- **Trading and Supply's control framework** – Reflecting the growth in this area in recent years and increasing regulatory demands, the AC continued to focus on key control and compliance matters in Trading and Supply. Management updated the AC on the improvements being made within Trading and Supply to strengthen controls and modernise processes, data and systems and on the new hires in the areas of compliance and risk management.

In 2020, the AC carried out three site visits that were conducted virtually because of the travel restrictions in place during the COVID-19 pandemic. The AC visited: Singapore in October 2020; Kuala Lumpur in Malaysia in November and December 2020; and Poland in November 2020 and January 2021. These visits provided the opportunity for the AC to gain a deeper understanding of the various businesses and functions at each location, the local external environment within which those activities take place and how they contribute to Shell achieving its strategic ambitions. In addition to in-depth examinations of specific business areas, topics discussed during the site visits included: an overview of ethics and compliance matters, the challenges of operating during the COVID-19 pandemic for both people and operations, the impact of the energy transition at a local level and results from the Shell People Survey.

RISK MANAGEMENT AND INTERNAL CONTROL

The AC assists the Board in fulfilling its responsibilities in relation to risk management and internal controls by reviewing reports on risks, controls and assurance, including the annual assessment of the system of risk management and internal control, in order to monitor the effectiveness of the procedures for internal control over financial reporting, compliance and operational matters. This annual assessment includes the AC's review of outcomes from the Group Assurance Letter process (a structured internal assessment of compliance with legal and ethical requirements and the Shell Control Framework carried out by each Executive Director) and the Company's evaluation of the internal control over financial reporting as required under Section 404 of the Sarbanes-Oxley Act (SOX 404). The AC updated the Board on compliance with internal controls across the Shell Group and on any major matters for which action or improvement was needed.

Throughout the year, the AC discussed with management the Company's overall approach to risk management and internal control, including compliance, tax and information risk management matters and the adequacy of disclosure controls and procedures. The AC received quarterly reports from the Executive Vice President Taxation and Controller on the

status of actions to address control weaknesses identified during assurance reviews, as well as trend information regarding business incidents and other metrics used to monitor the robustness of the risk management framework and internal control systems. As part of considering the risk management framework, the AC was informed of developments in the legal, regulatory and financial reporting landscape that could affect the Company. The AC was also briefed on litigation matters (see "Governance" on page 187 and Note 25 to the "Consolidated Financial Statements" on pages 260-262).

The AC reviewed on a quarterly basis the status of management's SOX 404 testing of controls and remediation actions to address any identified weaknesses. For 2020, these quarterly reviews also included consideration of how the COVID-19 pandemic affected the controls and assurance landscape, including the financial reporting process. The AC and management discussed the steps taken to maintain an effective control environment to demonstrate "management in control" during the pandemic and to address any new or emerging risks due to the working from home setting during most of 2020.

In particular, the AC dedicated time to the following standing items during 2020:

- **Tax risks** – In addition to the regular review of Shell's tax position, the AC discussed with management new and potential tax legislation developments in various countries and how their potential impact on Shell is being managed. The AC also discussed with management Shell's updated Approach to Tax and proposed responses to the continued demand for greater transparency of tax information, noting for example, Shell's publication of its second Tax Contribution Report in 2020.
- **Information risk management** – The Chief Information Officer briefed the AC on the diverse and expanding risk landscape, including changes in cyber-attacks due to the COVID-19 environment, and regulatory developments. The AC was briefed on activities undertaken in 2020 to address and manage new and evolving risks as well as improvements planned for 2021.
- **Oil and gas reserves control framework** – The AC reviewed the framework in place to support internal reporting and external disclosures. The AC discussed the processes and controls for preventing and/or mitigating the risks of non-compliance with regulatory reporting requirements, and ensuring accurate reserves information is reported in an efficient manner.

In addition to the above discussions with management, on a quarterly basis, the AC and the Chief Internal Auditor discussed the Company's risk management and internal control system, any significant matters arising from the internal audit assurance programme and management's response to significant audit findings and notable control weaknesses including potential improvements and agreed actions. The AC held similar discussions with EY on a quarterly basis.

FINANCIAL REPORTING

In 2020, the AC received comprehensive reports from management and the external auditor on quarterly financial reporting, accounting policies and judgements and reporting matters.

Shell's annual report and accounts for the year ended December 31, 2019 was selected by the Financial Reporting Council (FRC) for their thematic review of a sample of companies' reporting on the impact of climate change and the first full year of adoption of IFRS 16, Leases. The FRC carried out a limited scope review of Shell's disclosures relating to these matters and did not conduct a full review of Shell's 2019 Annual Report and accounts. Following correspondence, the review was closed on February 10, 2021 and certain disclosure improvements have been made to the Consolidated Financial Statements for the year ended December 31, 2020. The AC reviewed Shell's correspondence with the FRC and discussed with management the disclosures incorporated in the Consolidated Financial Statements in response to the FRC review.

AUDIT COMMITTEE REPORT continued

The AC reviewed the Company's 2020 quarterly unaudited interim financial statements, half-yearly report and Annual Report with management and the external auditor. Following the decision to produce a separate Annual Report and Form 20-F beginning with financial year 2019, the AC reviewed the control framework put in place to ensure the disclosures in both reports comply with relevant requirements.

Fair, balanced and understandable assessment

The AC advised the Board that in its view the 2020 Annual Report including the financial statements for the year ended December 31, 2020, taken as a whole, is fair, balanced and understandable and provides the information necessary for shareholders to assess Shell's position and performance, business model and strategy. (See "Governance" on page 189). To arrive at this conclusion, the AC critically assessed drafts of the 2020 Annual Report including the financial statements and discussed with management the process undertaken to ensure that these requirements were met. This process included: verifying that the contents of the 2020 Annual Report are consistent with the information shared with the Board during the year to support their assessment of Shell's position and performance; ensuring that consistent materiality thresholds are applied for favourable and unfavourable items; considering comments from the external auditor; and receiving assurance from the Executive Committee (EC).

Going concern and viability statement

The AC reviewed and considered the Directors' half-year and full-year statements with respect to the going concern basis of accounting. As noted in the viability statement, the Board also reviews the strategic plan which takes account of longer-term forecasts and a wide range of outlooks. Factors considered included: the impact of commodity prices; exchange rates; future carbon costs; agreements like liquid natural gas contract renewals; production levels and product demand; schedules of growth programmes; the financial framework; Shell's business portfolio developments including consideration of the impacts of climate change and Shell's commitment to the Paris Agreement goals; the project funnel to support future growth; and using severe but possible scenarios to run models of the financial impact if certain of Shell's principal risks materialised. The AC considered the mitigating measures and sensitivities that management had applied to the modelling of such scenarios when evaluating the viability statement. The AC also considered the merits of extending the viability statement beyond a period of three years and concluded that the three-year period selected by the Board for the review of Shell's prospects, in line with the operating plan, remained appropriate. The AC supported the going concern basis of accounting and the inclusion of Shell's viability statement in "Governance" on page 183-184 and considered such statement to be in line with best practice guidance issued by the FRC.

Other matters

The AC reviewed: the year-end reported proved oil and gas reserves, including management judgements and adjustments made to reflect changes in geological, technical, contractual and economic information, the Brent crude oil and Henry Hub natural gas long-term price assumptions; estimated refining margins; discount rates used for financial reporting, particularly with respect to impairment testing and decommissioning and other provisions (see Note 2 to the "Consolidated Financial Statements" on pages 221-229 for further information); and the effectiveness of financial controls.

COMPLIANCE AND GOVERNANCE

Ethics and compliance

The AC discussed with the Chief Ethics and Compliance Officer the potential impact of COVID-19 on conduct risk at Shell. The Chief Ethics and Compliance Officer summarised the macro factors affecting conduct risk during the pandemic and the related economic downturn. The AC was updated on management's risk-based approach and mitigation actions taken by Shell in response to these issues, including reinforcing adherence to Shell's compliance rules and Code of Conduct.

In October 2020, the AC and the Safety, Environment and Sustainability Committee held a joint session with the Chief Ethics and Compliance Officer which facilitated an effective discussion of the controls, procedures and governance for managing high risk transactions in Shell, with a particular focus on proposed portfolio activities including new business development opportunities, acquisitions, divestments and joint ventures.

As part of the annual assessment of the system of risk management and internal control, the AC discussed with the Chief Ethics and Compliance Officer his annual report on compliance matters. The report included an overview of the effectiveness of the Shell ethics and compliance programme in managing ethics and compliance risk in Shell's business activities, regulatory developments and compliance risks. The AC also discussed investigations of cases involving ethics and compliance concerns. The AC discussed management's findings in such cases to satisfy itself that a rigorous process had been followed, and, where necessary, appropriate disciplinary actions had been taken and management had embedded learnings into Shell's systems and controls.

Whistleblowing investigations

The AC is responsible for establishing and monitoring the implementation of procedures for the receipt, retention, investigation and follow-up actions of complaints received, including those from the Shell Global Helpline. The AC reviewed whistleblowing reports and internal audit reports and considered management's responses to the findings in these reports.

Regulatory developments

The AC was briefed on regulatory developments in areas including: sustainable finance (in particular management's work on the EU Sustainable Finance Taxonomy); non-financial reporting (in particular management's assessment of the EU Non-Financial Reporting Directive Revision); accounting and reporting; environmental liabilities and treasury activities.

AC annual evaluation

The AC undertakes an annual evaluation of its performance and effectiveness. Consistent with the Board's annual performance evaluation for 2020, the AC's performance evaluation was facilitated by Lintstock Limited, a London-based corporate advisory firm. Each AC member responded to a confidential questionnaire about the AC's performance covering questions on: the management of the AC in areas such as the annual cycle of work, agenda for meetings and time and input in meetings; the quality of the information provided to the AC; the value of the virtual site visits and the AC briefings on specific topics; the effectiveness of the AC's oversight in areas such as financial reporting, risk management and internal control, compliance and governance and the work of internal and external audit; rating the AC's performance in reviewing and assessing significant accounting and reporting judgements; and how to improve the AC's performance. When assessing progress against 2019, the AC concluded it had achieved all the 2020 priorities identified in the 2019 evaluation discussion (including visits to Shell's operations in Singapore, Krakow, and Kuala Lumpur, including the finance operation centres in Krakow and Kuala Lumpur, and reviews related to Trading and Supply, regulatory developments, decommissioning and integrated risk management). The AC discussed the outcome of this review as part of its annual evaluation. The AC concluded that its performance in 2020 had been effective and that it had fulfilled its role in accordance with its Terms of Reference.

In preparing its workplan for 2021, the AC has agreed the following focus areas in addition to the standing items: New business models and ventures; Pensions; Contracting and Procurement; Reshape management framework and oil and gas pricing methodology. As part of its review of new business models and ventures, the AC plans to visit one of Shell's new ventures in 2021.

AUDIT COMMITTEE ACTIVITIES DURING 2020

Activities performed	Frequency
Risk Management and Internal Control	
Reviewed the policies and practices and monitored the effectiveness relating to Shell's risk management and internal control system.	(P)
Received briefings on regulatory developments.	(P)
Reviewed management's SOX 404 assessment.	(A)
Discussed significant matters arising from completed internal audits with the Chief Internal Auditor, management and the external auditors.	(Q)
Assessed management's response to significant audit findings, recommendations and notable control weaknesses, including potential improvements and agreed actions.	(P)
Reviewed significant legal matters with Shell's Legal Director.	(Q)
Considered the oil and gas reserves control framework.	(A)
Reviewed Shell's information risk management.	(P)
Reviewed Shell's tax function, key tax risks and Shell's approach to the evolving area of tax transparency.	(P)
Financial Reporting	
Reviewed Shell's accounting policies and practices, including compliance with accounting and reporting standards.	(Q)
Assessed the appropriateness of key judgements and the interpretation and application of accounting principles.	(Q)
Considered the integrity of the year-end financial statements and recommended to the Board whether the audited financial statements should be included in the Annual and statutory reports.	(A)
Considered the integrity of the half-yearly report and quarterly financial statements.	(Q)
Reviewed management's assessment of going concern and longer-term viability.	(Q)
Reviewed Shell's policies with respect to earnings releases; financial performance information and earnings guidance; and significant financial reporting matters.	(Q)
Reviewed Shell's policies with respect to oil and gas reserves accounting and reporting including the outcome of the oil and gas reserves booking/debooking process.	(A)
Reviewed the internal controls for financial reporting.	(P)
Advised the Board of the AC's view on whether, taken as a whole, the Annual Report is fair, balanced and understandable and provides the information necessary for shareholders to assess Shell's position and performance, business model and strategy.	(A)
Compliance and Governance	
Monitored the receipt, retention, investigation and follow-up actions of complaints received, including those from the Shell Global Helpline.	(P)
Reviewed with the Chief Ethics and Compliance Officer the implementation and effectiveness of the ethics and compliance programme and function.	(A)
Discussed compliance with applicable external legal and regulatory requirements.	(P)
Performed an evaluation of the AC's performance and effectiveness and reported the results to the Board.	(A)
Reviewed and updated the AC's Terms of Reference.	(A)
Reviewed the Chief Financial Officer's significant business and investment transactions for potential conflicts or related party transactions.	(A)
Assessed the Chief Financial Officer's performance.	(A)
Internal Audit	
Evaluated the quality, efficiency and effectiveness of the internal audit function including the competence, qualifications, expertise, compensation and budget.	(A)
Reviewed and approved the internal audit function's remit, charter and audit plan.	(A)
Assessed the performance of the Chief Internal Auditor.	(A)
External Audit	
Reviewed and approved the engagement letter for EY's annual audit of the Company's consolidated and parent company financial statements.	(A)
Approved the remuneration for audit and non-audit services, including pre-approval of permissible non-audit services.	(Q)
Considered the annual external audit plan and monitored the execution and results of the audit.	(P)
Monitored the qualifications, expertise, resources and independence of EY.	(A)
Reviewed the Company's representation letter prior to signing by management.	(A)
Assessed the performance, objectivity and effectiveness of EY, the audit process, the quality of the audit, EY's handling of key judgements, and EY's response to questions from the AC.	(P)
Recommended to the Board that the reappointment of EY be put to the Company's shareholders for approval at the AGM.	(A)

Committee Activity Key: (A) Annually (Q) Quarterly (P) Periodically

AUDIT COMMITTEE REPORT

continued

SIGNIFICANT ACCOUNTING AND REPORTING CONSIDERATIONS

The AC assessed the following significant accounting and reporting areas, including those related to Shell's 2020 Consolidated Financial Statements. The AC was satisfied with how each of the areas below was addressed. As part of this assessment, the AC received reports, requested and received clarifications from management, and sought assurance and received input from the internal and external auditors.

Significant accounting and reporting areas

Subject	Issue	How the AC addressed the issue
IMPAIRMENTS AND IMPAIRMENT REVERSALS See Notes 2, 7, 9 and 8 to the "Consolidated Financial Statements" on pages 221-229 and 233-238	The carrying amount of an asset should be tested for impairment or impairment reversal whenever events or changes in circumstances indicate that the carrying amount for that asset may have changed, such as a change in the outlook for commodity prices and refining margin assumptions and revisions to future activity plans and developments. On classification as held for sale, the carrying amounts of property, plant and equipment (PP&E) and intangible assets are also reviewed.	The AC reviewed the impairment assessments that were performed each quarter. In doing so, the AC considered the updated oil and gas price and refining margin outlooks against market developments and benchmarks. The potential impact of price sensitivities was reviewed and asset-specific risks were considered together with the relevant discount rates applied. The AC also reviewed other significant inputs to impairment assessments, including the held-for-sale classification and the potential impacts of climate change and energy transition. The AC review of impairments covered a significant proportion of the balance sheet.
TAXATION See Notes 2 and 16 to the "Consolidated Financial Statements" on pages 221-229 and 244-246	The determination of tax assets and liabilities requires the application of judgement as to the ultimate outcome, which can change over time. In particular, tax exposures and the recognition of deferred tax assets require management to make assumptions regarding future profitability and are therefore inherently uncertain.	The AC considered the uncertain tax positions and discussed management's assumptions of future taxable profits, and evaluated the appropriateness of the recognition of deferred tax assets and tax liabilities. While recognising that assumptions regarding future taxable profits are inherently uncertain, particularly in light of COVID-19 and the pace of economic recovery in different countries as well as the potential impacts of climate change and energy transition (for example see "Future Refinery Portfolio" below), the AC deemed the resulting assessments of uncertain tax exposures and the recognition of deferred tax assets and tax liabilities to be reasonable.
DISCOUNT RATE FOR PROVISIONS See Notes 2 and 18 to the "Consolidated Financial Statements" on pages 221-229 and 250	A review was carried out to consider the discount rate applied for provisions due to a lower rate for 30-year US Treasury bonds. Due to the significant drop in the rate, management lowered the discount rate for provisions from 3% to 1.75% in Q2 2020.	The AC reviewed the impact of this change on provisions and in particular considered the impact on decommissioning and restoration provisions and corresponding assets.
COVID-19 AND MACRO-ENVIRONMENT See Notes 2, 7, 8, 9, 12, 17 and 18 to the "Consolidated Financial Statements" on pages 221-229; 233-238; 240; and 246-250	As a result of COVID-19 and the macro-environment uncertainty and volatility, a number of accounting implications were discussed with the AC throughout 2020, including: <ul style="list-style-type: none">■ impairments and discount rate for provisions (see above);■ expected credit loss – in particular, the credit risk exposures in Oil Products, Chemicals and Trading;■ pension remeasurement – defined benefit pension plan obligations and assets are remeasured quarterly, with significant movements in 2020 due to volatility in discount rates, inflation rates and financial markets; and■ inventory write-down – due to the significant decline in prices in March and April 2020, there was a write-down of some of the Shell Group's inventory to net realisable value.	The AC discussed and challenged the accounting implications associated with the macro-environment conditions as they evolved throughout 2020.
FUTURE REFINERY PORTFOLIO See Notes 2 and 18 to the "Consolidated Financial Statements" on pages 221-229 and 250	Following Shell's announcement in Q3 2020, the Company intends to transform its refining portfolio during the energy transition from 14 sites into six high-value energy and chemicals parks integrated with Chemicals. Evaluations and decisions are expected to follow on assets that could result in the recognition of significant provisions and charges to earnings.	The AC discussed the accounting implications of these decisions and the recognition of: (i) decommissioning and restoration provisions; (ii) restructuring provisions; (iii) onerous contract provisions; and (iv) impairment considerations.
RESHAPE RESTRUCTURING PROVISIONS See Notes 2 and 18 to the "Consolidated Financial Statements" on pages 221-229 and 250	During 2020 a comprehensive portfolio and organisational review called Reshape was announced which is expected to result in between 7,000-9,000 redundancies and related redundancy provisions and charges are expected to be recognised in 2021.	The AC considered the accounting implications and whether the criteria to recognise a restructuring provision as per IAS 37.72 were fulfilled in 2020. The AC agreed with management that the criteria had not been met by December 31, 2020 and that it was appropriate that the majority of the restructuring provision be recognised in 2021.
SEGMENT REPORTING See Note 4 to the "Consolidated Financial Statements" on pages 230-232	Reflecting a change in the way Shell's CEO reviews and assesses performance, and makes decisions in allocating resources, management reassessed Shell's segment reporting. From January 1, 2020, Shell's reportable segments consist of: Upstream, Integrated Gas, Oil Products, Chemicals, and Corporate.	The AC assessed the appropriateness of the revised reporting segments for 2020 and the restatement of prior periods to the new segments.

INTERNAL AUDIT

Internal audit remit

The internal audit function is an independent assurance function which supports Shell in improving its overall control framework. The internal audit function contributes to the maintenance of a systematic and disciplined approach to evaluate and improve the design and effectiveness of Shell's risk management, control and governance processes. The primary role of the internal audit function, through its assurance and investigation activities, is to safeguard value by protecting Shell's assets, reputation and sustainability in relation to the organisation's defined goals and objectives.

The AC defines the responsibility and scope of the internal audit function and approves its annual plan. The Chief Internal Auditor reports functionally to the Chair of the AC and administratively to the Chief Financial Officer. The Chair of the AC approves, in consultation with the Chief Financial Officer, all decisions regarding the performance evaluation, appointment or removal of the Chief Internal Auditor.

Annual internal audit plan and assessment of internal audit's effectiveness

In 2020, the AC considered and approved the internal audit function's annual audit plan, including focus areas for 2020 consisting of: (i) talent and capability (professional audit development and technical capabilities); (ii) quality (developing first-line staff competence and clarity on self-verification and supervisory controls); (iii) alignment (improved integration of risk management and alignment of assurance processes across Shell); and (iv) engagement (mainly in the area of keeping staff and Shell stakeholders engaged and informed on effective risk management and internal control). The AC assessed the performance of the internal audit function as effective. The AC also assessed the performance of the Chief Internal Auditor.

The Chief Internal Auditor periodically assesses whether the purpose, authority and responsibilities of the internal audit function continue to enable it to accomplish its objectives. The results of this periodic assessment are communicated to the EC and AC. The Chief Internal Auditor maintains an internal quality assurance and improvement programme covering all aspects of internal audit's activities, and evaluates the conformance of these activities with the Chartered Institute of Internal Auditors' standards. The Chief Internal Auditor also assesses the efficiency and effectiveness of internal audit's activities and identifies opportunities for improvement. The results of this annual assessment are discussed with the EC and AC and include a reconfirmation to the AC of the continued validity of the charter of the internal audit function, or proposals for an update. At least every five years, the effectiveness and quality of the internal audit function are assessed externally and the report is reviewed with the AC. An independent assessment of internal audit was conducted in 2018. The next such external assessment is planned to take place in 2023.

EXTERNAL AUDITOR

Annual external audit plan and assessment of external audit's effectiveness

EY reviewed with the AC its audit strategy, scope and plan for the 2020 audit, highlighting any areas which would receive special consideration. The AC considered the annual audit plan, which included assessing whether the planned materiality levels and proposed resources to execute the audit plan were consistent with the audit scope.

EY regularly updated the AC on the status of their procedures and preliminary findings, providing an opportunity for the AC to monitor the execution and results of the audit. The AC and EY discussed how risks to audit quality were addressed, key accounting and audit judgements, material communications between EY and management and any issues arising from them. Quarterly, the AC met privately with EY representatives without management being present in order to encourage open and transparent feedback from both parties. In addition, the AC Chair meets separately with the external auditor on a regular basis.

As part of its oversight of the external auditor, the AC annually assesses the performance and effectiveness of the external auditor and the audit process, including an assessment of the quality of the audit, the handling of key judgements by the auditor, and the auditor's response to questions from the AC. The AC evaluated the objectivity and independence of EY and the quality and effectiveness of the external audit process. As part of its evaluation, the AC considered and discussed: (i) the results of Shell management's internal survey relating to EY's performance over the financial year 2020, which reflected a broadly comparable performance to 2019; (ii) views and recommendations from management and the Chief Internal Auditor; (iii) EY's audit quality priorities and actions by EY as part of its sustainable audit quality programme; (iv) the forthcoming partner rotation and measures EY has taken for an orderly transition; and (v) the AC's own experiences, including interactions with the external auditor, throughout the year. Key criteria of the evaluation included: professionalism in areas including competence, integrity and objectivity; constructive challenge of management and key judgements; efficiency, covering aspects such as service level and innovation in the audit process; thought leadership and value added; and compliance with relevant legislative, regulatory and professional requirements.

The Committee also considered EY's quality assurance procedures, internal quality control procedures, competence and most recent Transparency Report and opportunities for improvement. Taking into account the above, the AC is satisfied that EY has continued to provide a high-quality and effective audit in its fifth year as auditor and has maintained its independence and objectivity.

As required under UK and US auditing standards, the AC received a letter from EY confirming its independence. As required by applicable regulations, EY also informed the AC in writing and discussed with the AC any significant relationships and matters that may reasonably be thought to have an impact on its objectivity and independence.

During 2020, there was no review of EY's audits of Shell's Consolidated Financial Statements by the Audit Quality Review (AQR) team of the FRC. EY reviewed Shell's correspondence with the FRC relating to the FRC's thematic review of a sample of companies' reporting on the impact of climate change and the first full year of adoption of IFRS 16, *Leases*.

Reappointment

The AC is responsible for considering whether, in order to ensure continuing auditor quality and/or independence, there should be a rotation of the independent registered public accounting firm, including consideration of the advisability and potential impact of conducting a tender process for the appointment of a different independent public accounting firm. The AC is also responsible for making a recommendation to the Board for it to put to the Company's shareholders for approval at the AGM, to appoint, reappoint or remove the external auditor.

AUDIT COMMITTEE REPORT continued

At the AGM in May 2020, the shareholders approved a resolution to reappoint EY as external auditor until the conclusion of the next AGM. EY was first appointed at the AGM in May 2016 following the conclusion of a competitive tender process. The Company has complied with The Statutory Audit Services for Large Companies Market Investigation (Mandatory Use of Competitive Tender Processes and Audit Committee Responsibilities) Order 2014 for the 2020 financial year. The AC acknowledges the UK and Dutch legal requirements relating to mandatory audit rotation and audit tendering under which the Company will be required to tender for the audit no later than the 2026 financial year. The AC regularly reviews auditor performance and may elect to carry out the tender earlier than the 2026 financial year if it determined it would be in the interests of the Company's shareholders to do so.

As 2020 represents the conclusion of EY's first five-year term, the AC reflected upon whether conducting an audit tender at this time would be appropriate. The AC's consideration took into account: the AC remains satisfied with the quality and independence of the audit conducted by EY; given Shell's size and complexity, any new external auditor would need a transition period to develop sufficient understanding of the business; frequent changes of external auditor would be inefficient and could lead to increased risk and the loss of cumulative knowledge; a change in auditor would be expected to have a significant impact on Shell, including on the Finance function; and any change in auditor should be scheduled to limit operational disruption. The AC also considered that the current external audit partner, Mr Allister Wilson, who has held this position since EY's initial appointment in 2016, is rotating off the Shell audit after the 2020 audit. Mr Gary Donald will serve as the audit partner beginning with the 2021 audit engagement.

After due consideration the AC determined that it would not be appropriate to re-tender for the external audit at this time and has recommended to the Board to propose at the 2021 AGM that EY be reappointed as the external auditor of the Company for the year ending December 31, 2021. The recommendation is free from influence by a third party and there are no contractual obligations that restrict the AC's ability to make such a recommendation.

NON-AUDIT SERVICES

The AC maintains an auditor independence policy (AIP) in respect of the provision of services by the external auditor. The AC regularly reviews this policy for necessary changes in response to changes in related standards and regulatory requirements. This policy was updated in January 2020 (and became effective in March 2020) to incorporate the Revised Ethical Standards issued by the FRC in December 2019.

This policy, designed to safeguard auditor objectivity and independence, includes rules relating to the provision of audit services, audit-related services and other non-audit services, and stipulates which services require specific prior approval by the AC.

The policy also defines prohibited services that are not to be provided by the auditor because they represent a risk to the external auditor's independence. Prohibited services are any that relate to management decision-taking or any other service that could compromise auditor independence or the perception thereof. These prohibited services include all services listed as prohibited in the UK and US auditor independence rules.

For certain services that are not prohibited, because of the knowledge and experience of the external auditor and/or for reasons of confidentiality, it can be more efficient or prudent to engage the external auditor rather than another party. This is particularly the case with audit-related assurance services that are closely connected to the audit function where the external auditor has the benefit of knowledge gained from work already performed as part of the audit.

Under the AIP, the AC will only approve services to be carried out by the external auditor or its affiliates where such services do not present a conflict of interest risk in fact or in appearance. The AC reviews quarterly reports from management on the audit and non-audit services reported in accordance with the policy or for which specific prior approval from the AC is being sought. To the extent that the fee value of an additional audit service contract does not individually exceed \$500,000, no prior approval of the AC is required. All non-audit services where the fee for an individual contract exceeds \$100,000 (from January 1 to March 15, 2020, \$50,000), including audit-related services, require individual prior approval by the AC. In each case where the audit or non-audit service contract does not exceed the relevant threshold, the matter is approved by management by delegated authority from the AC and is subsequently presented for approval by the AC at the next quarterly AC meeting. The AC is mindful of the overall proportion of fees for audit and non-audit services in determining whether to approve such services.

The scope of the non-audit services contracted with the external auditor in 2020 consisted mainly of interim reviews and other audit-related assurance services. The associated compensation for these audit-related services and other non-audit services amounted to 5.4% and 3.6%, respectively, of the external auditor's audit and audit-related remuneration.

FEES

After due consideration, the AC approved the auditor's remuneration, satisfying itself that the level of fees payable in respect of the audit and non-audit services provided was appropriate and that an effective, high-quality audit could be conducted for such fees.

 [Note 28 to the "Consolidated Financial Statements" on page 263 provides details of the auditor's remuneration.](#)

DIRECTORS' REMUNERATION REPORT



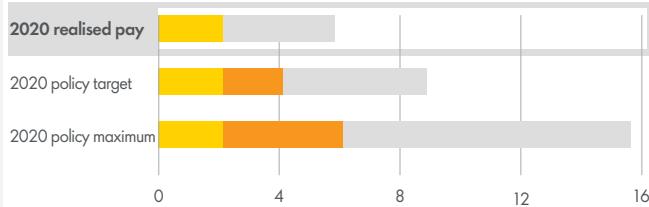
NEIL CARSON

Chair of the Remuneration Committee

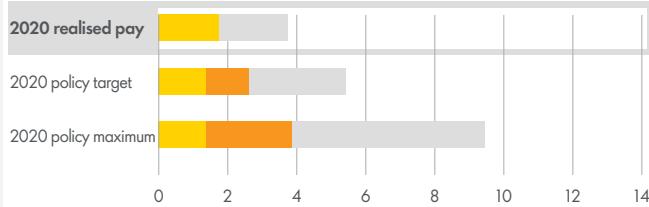
"This year we have recognised the challenges of 2020 faced by all stakeholders, the resilience of the business, and supported achievement of our strategic ambitions in the longer term."

2020 pay compared to policy [A]

CEO (€m)



CFO (€m)



- Fixed pay
- Bonus
- LTIP

[A] Policy target and maximum based on the scenarios as published on page 178

Pay outcomes for Executive Directors

Annual bonus: nil.

LTIP: below-target vesting based on three-year performance.

Single-figure outcome: realised pay below target and a single-figure reduction of 41% for the CEO and 38% for the CFO.

Salary: no increases for 2021.

LTIP: one-off reduction of 2021 award to mitigate risk of windfall gains.

Shareholding requirement: Executive Directors' high personal shareholdings ensured strong alignment with shareholders.

Aligning pay with strategy

LTIP:

■ Increased weighting of energy transition condition in the LTIP to 20%.

Annual bonus:

- Refreshed annual bonus scorecard to give greater alignment with updated strategy, with a focus on financial delivery, operational excellence, progress in the energy transition and safety.
- Metrics linked to production and LNG liquefaction volumes removed.
- New Serious Injury and Fatality Frequency (SIF-F) safety metric replaces Total Recordable Case Frequency (TRCF).
- Weighting of safety performance measures increased to 15%.
- Weighting of progress in the energy transition performance measures of 15%.

THIS REPORT

This Directors' Remuneration Report for 2020 has been prepared in accordance with relevant UK corporate governance and legal requirements, in particular Schedule 8 of The Large and Medium-sized Companies and Groups (Accounts and Reports) Regulations 2008 (as amended). The Board has approved this report. This report consists of two further sections:

- the Annual Report on Remuneration (describing 2020 remuneration and the planned implementation of the Directors' Remuneration Policy in 2021); and
- the Directors' Remuneration Policy which was approved by shareholders at the 2020 AGM.

Dear Shareholders,

The Remuneration Committee (REMCO) has worked hard in recent years to engage with shareholders on decision-making and to improve the quality of our disclosures. At the Annual General Meeting in May 2020, when my predecessor, Gerald Kleisterlee, stepped down, there was strong support of the 2019 Annual Report on Remuneration (95.44% in favour) and the 2020 Directors' Remuneration Policy (92.91% in favour). I have since had the opportunity to meet a considerable number of shareholders and I value the openness of these discussions. In such challenging times, these engagements have helped to shape and inform the REMCO's decisions.

COVID-19

The COVID-19 pandemic and its consequences have had an enormous impact in 2020, affecting people around the world and creating extremely challenging conditions for Shell, the energy sector and wider industry. Throughout this period, in addition to the steps to reinforce the financial strength and resilience of its business, Shell's priorities have been the well-being and safety of employees, taking care of customers, and supporting the communities where Shell operates.

DIRECTORS' REMUNERATION REPORT continued

For Shell employees, the pandemic and the changes to the way in which we live and work undoubtedly caused increased anxiety and stress. Shell has sought to provide support in a variety of ways to help our people manage their mental health and bolster resilience during these difficult times. For example; additional leave policies were introduced and flexible working patterns have been encouraged to support families juggling home schooling and caring for dependent parents. Cash allowances for ergonomic office equipment have been provided to those working from home offices, dining tables and bedrooms around the world.

Given the scale of the challenge facing Shell and the uncertainty about the speed of recovery, measures to ensure Shell's financial resilience have also impacted our people. Where required, Shell has sought to manage these sensitively, giving employees certainty and choice wherever possible. For example, towards the start of the pandemic, Shell made the commitment that there would be no new redundancies for three months. It then offered voluntary severance programmes giving those with a preference to leave employment the chance to do so. On pay, base salaries have been protected, with no cuts or temporary reductions made to salary.

The deteriorating global economic situation and significant uncertainties about mid- to longer-term economic conditions meant management and the Board had to take decisive measures to ensure the financial resilience of the Company. These included the decision by the Board to not proceed with the next tranche of the share buyback programme and to rebase the dividend. We have subsequently announced an intent to increase the dividend annually, subject to Board approval. These measures have had a significant effect on our shareholders, and accordingly have influenced the REMCO's decision-making in 2020.

Shell has also taken steps to support customers and communities. These have included providing free food and drinks to health-care professionals and delivery workers at more than 15,000 retail sites across more than 30 countries. We also delivered care packs to frontline workers and essential service drivers in six countries. We have donated fuel vouchers, groceries, hygiene kits and ingredients for sanitising products. In December 2020, Shell made a \$10 million donation to the GAVI vaccine alliance to help fund the COVAX initiative for equitable global access to COVID-19 vaccines. Further information on Shell's contribution to COVID-19 relief efforts will be published in the Shell Sustainability Report in April 2021.

During 2020, many governments introduced packages to support business and stimulate economies as the pandemic negatively affected businesses and jobs. Shell recognises that much of this support was intended to help smaller businesses. Shell has made very limited use of these support measures, and only where it was considered appropriate in the local context.

The REMCO has sought to balance two factors in its deliberations. The first was the response to the headwinds of 2020 and how this has affected our shareholders, our employees and our relationships with customers and governments. Against this, the REMCO has had to weigh the need to achieve Shell's longer-term strategic ambitions as it accelerates its transformation into a provider of net-zero emissions energy products and services.

2020 PERFORMANCE AND REMUNERATION DECISIONS

In 2020, the REMCO was pleased to see improved safety performance, with a reduction in the number of personal and process safety incidents. There were no safety-related fatalities in 2020 in Shell-operated ventures, but there were two COVID-19-related occupational illnesses resulting in death.

Shell has demonstrated resilience despite facing significant headwinds in 2020. Cash flow from operations (CFFO) has been strong, with the Shell Group clearly outperforming our competitors. This reflects the work done over recent years to high-grade the portfolio, the value created from Shell's integrated business model, and the disciplined approach to managing operating expenditure over the year.

For the avoidance of doubt, the Remuneration Committee made no changes to targets under the in-flight annual bonus or LTIP awards.

The share price performance has, of course, been disappointing. The mechanisms in the Remuneration Policy mean there is strong alignment of interests between management and shareholders. The high shareholding targets of 700% of base salary for the CEO and 500% for the CFO, and the three-year post-delivery holding requirements attached to the Long-term Incentive Plan (LTIP) and the 50% portion of the bonus delivered in shares. This mean that Executive Directors have a large investment in Shell, so the share price performance over 2020 has had significant personal impact.

2021 base salary

The REMCO decided in April 2020 that in light of the financial challenges and the need for disciplined management of operating expenses, there would be no salary increases for Executive Directors and Senior Management for 2021. There will also be no salary increase for the majority of Shell employees globally.

Annual bonus

The REMCO had approved a 2020 annual bonus scorecard at its meeting on January 28, 2020, based on Shell's operating plan, but this scorecard was not communicated to participants as within a few weeks it became clear that the operating plan had been overtaken by events and was no longer appropriate. It was decided that targets would not be reset, but that operating priorities would be recast to Care in terms of health, safety and well-being for our people, Continuity for our business to support customers and communities and to Cash management to ensure the financial resilience of Shell. The approved scorecard was set aside and Care, Continuity and Cash quickly became the new framework to reflect on performance.

It had also become clear that there would be difficult financial outcomes ahead. Shell announced a change to the financial framework in March 2020. This included stating that we would not proceed with the next tranche of the share buyback programme and would be rebasing the dividend. In light of this, the REMCO decided that there should be no 2020 annual bonuses for Executive Directors and Senior Management. As no Group scorecard was being published and there would be no measurement of performance against the obsolete 2020 scorecard targets other employees were informed that the Group scorecard outcome for 2020 would be set to zero. This was communicated in April 2020 to allow employees to make financial plans.

After the depths of the crisis, there has been some recovery in commodity prices and the business has been resilient in 2020, delivering strong cash generation relative to our peers and performing strongly on safety. But taking into account all relevant factors such as business performance, impairments, dividend changes and the limited use of government support, the REMCO confirmed that its decision that there should be no 2020 annual bonuses for Executive Directors and Senior Management remained appropriate.

Vesting of 2018 LTIP awards

The financial resilience of Shell and work in recent years to high-grade the portfolio are evident in the vesting outcome of the LTIP, which was 90% out of a maximum of 200% based on relative total shareholder return (TSR), CFFO growth, return on average capital employed (ROACE), and absolute free cash flow (FCF).

- CFFO is measured on a relative basis and Shell ranked first, leading to a vesting outcome of 50%. Total CFFO was \$34 billion in 2020, with more than \$129 billion generated over the three-year vesting period. In absolute terms, this is more than double the CFFO generated in 2020 by our next closest competitor.
- On TSR, Shell ranked third in the peer group. Returning \$55 billion to shareholders over three year performance period in the form of dividends and share buybacks and leading to a vesting outcome of 20%.
- The ROACE performance metric is assessed on a relative basis and Shell ranked third, leading to a vesting outcome of 20%.

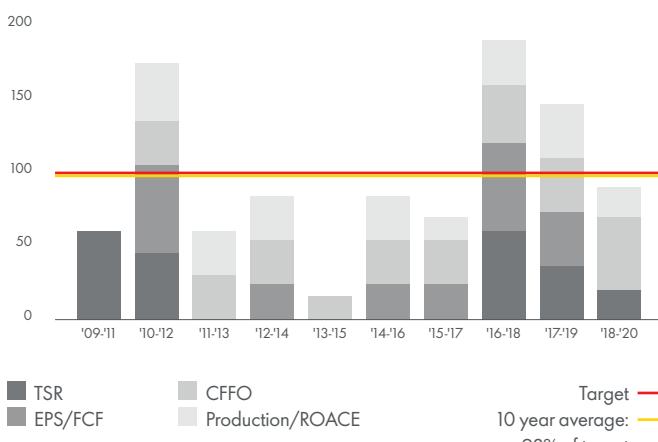
The challenges of 2020 are clearly evident in the outcome on the FCF, which is measured on an absolute basis, based on the sum of the annual operating plan targets over the three year performance period. The outcome, \$87 billion, was below the vesting threshold of \$93 billion (target \$102 billion).

In making the final vesting decision, the REMCO considered the overall performance of Shell during the three-year vesting performance period. In its deliberations, the REMCO paid particular attention to:

- the shareholder experience;
- guidance issued by the investor community and feedback from shareholders regarding the appropriate pay outcomes for 2020 in light of the COVID-19 pandemic;
- the impact of the pandemic on financial outcomes;
- the effectiveness of management over the performance period in developing a high-quality portfolio capable of delivering resilient cash flows;
- the conclusion that there should be no 2020 annual bonuses, which took into account business performance, impairments, dividend changes and the limited use of government support;
- the Committee assured itself that the limited use of government support had not impacted the vesting outcomes; and
- the impact of the high shareholding requirement, which has helped align the interests of Executive Directors and shareholders.

The REMCO also noted it would mean a 10-year average vesting outcome of the LTIP of 98%, demonstrating the effectiveness of the current LTIP structure in delivering alignment with target pay and balancing cyclical performance. Taking all these factors into account, the REMCO determined to vest the 2018 LTIP awards at 90% without using discretion. A formulaic outcome was also applied to the Performance Share Plan (PSP) made to around 16,500 employees annually.

LTIP vesting



2020 single figure of remuneration

The overall single figure of remuneration for 2020 is €5.8 million for the CEO and €3.7 million for the CFO. This is one of the lowest CEO single figure outcomes in ten years.

In finalising these amounts, the REMCO noted the decline in pay outcomes from the previous year. These, as noted above, were a decline of 41% for the CEO and 38% for the CFO. The REMCO considered that the decision that there should be no 2020 annual bonuses appropriately reflected Shell's 2020 performance outcomes, including the business performance, financial impairments taken in the year and dividend changes. It also considered the strong alignment between Executive Director and shareholder interests through the shareholding requirements. The REMCO also took account of the pay outcomes for employees, the majority of whom received no 2020 bonus and will not receive a 2021 salary increase. The REMCO was satisfied that the remuneration policies had operated as intended and that realised pay in 2020 was appropriate in the context of wider Company performance and the target pay opportunity as illustrated on pages 174-175.

Ten year CEO single figure outcomes



2021 LTIP grants

In considering the response to the challenges of 2020, the REMCO believes it is important to maintain the strong focus on variable pay. The LTIP is an important element of the pay framework. It has been proven to provide a robust link between pay and performance over a sustained period of time. The usual awards are 300% of base salary for the CEO and 270% for the CFO. When determining award sizes, the REMCO has been mindful of the risk of windfall gains, given how the decline in the Shell share price during 2020 affected the number of shares awarded. The REMCO has sought to consider how shareholders will view this issue, in light of their disappointment with returns and the rebasing of the dividend. At the same time, the REMCO has sought to continue paying competitively in line with the approved remuneration policy.

Taking this into account, the REMCO has decided to make a reduction to the award level for 2021 as a one-off acknowledgement of the unique circumstances. Shell's share price has declined approximately 24% for RDS A shares and 16% for RDS.A ADS since the 2020 share awards. The REMCO has decided to reduce the 2021 awards by 50% of the fall in the share price and has therefore reduced the usual LTIP awards for the CEO and CFO. On this basis, the REMCO approved an award of 231,679 RDS A shares for the CEO and 69,972 RDS.A ADS for the CFO on March 5, 2021. The number of shares awarded to the wider employee population also increased to maintain a competitive pay opportunity.

DIRECTORS' REMUNERATION REPORT continued

Regardless of the number of shares awarded, the REMCO will closely scrutinise performance over the vesting period to ensure the highest variable pay outcomes are only achieved for the highest quality of performance across all significant areas of activity. If required, discretion will be used to address windfall gains on vesting. This will take into account the effect of any recovery in demand and energy sector outlook on Shell's share price as well as shareholder experience and management's success in delivering Shell's financial performance and strategic ambitions.

The REMCO will use discretion to override formulaic reward outcomes if they fail to reflect the wider financial or non-financial performance of Shell, or if management has benefited from a general economic or sectoral improvement outside their control. The REMCO has a strong track record of exercising discretion, having used it to adjust the outcome of the annual bonus in five of the past ten years.

EVOLVING REMUNERATION IN LINE WITH STRATEGY

Turning now to the future, I would like to provide further detail on how we intend to link pay to Shell's evolving strategic ambitions.

Powering Progress sets out a strategy to accelerate the transition of our business to net-zero emissions. Reflecting our evolving priorities, in future we will place greater focus on measures connected to succeeding in the energy transition, balanced with the fundamental requirements to deliver financial success, while operating our assets safely, effectively and to plan.

Safety

Safety remains Shell's number one priority, and as part of a refresh of Shell's safety framework, a new Serious Injury and Fatality Frequency (SIF-F) metric will replace Total Recordable Case Frequency (TRCF) as the personal safety metric on the annual bonus scorecard from 2021.

This adjustment is intended to increase attention on the most serious outcomes, to ensure the focus is on identifying and preventing incidents with the potential to cause life-altering injuries. The number of Tier 1 and 2 process safety incidents will be retained as the measure of process safety, with weighting for safety increasing from 10% to 15% (equally split between personal and process safety).

Energy transition

Shell has been at the forefront of linking executive pay to progress towards a lower-carbon future. We set a Net Carbon Footprint (NCF) target that covers emissions from our customers' use of our products as well as our own operational emissions, and have directly linked employee and management pay to three-year targets aligned with the NCF target. The LTIP energy transition performance metric includes the short-term targets relating to the NCF target and a number of other strategic business transformation targets that measure Shell's progress towards achieving our longer-term ambitions.

These measures extend the link between pay and the energy transition well beyond the linkage provided by short-term sustainability metrics that focus on operations. When we introduced these measures, Shell was the only major energy company to link long-term incentive pay in this way. We believe we are still among the front-runners in terms of the breadth and detail of our energy transition pay metrics.

Our original targets were calibrated to keep Shell in step with a society working to meet the goals of the 2015 Paris Agreement and to restrict the rise in global average temperature this century to well below two degrees Celsius above pre-industrial levels. But societal views have evolved rapidly and large parts of society have now set their sights on the most ambitious goal in the Paris Agreement: to limit the global temperature rise to 1.5 degrees Celsius. Shell recognised this, and in 2020 announced an updated target to be a net-zero emissions energy business by 2050, in step with society.

The connection to remuneration will strengthen with the updated strategy. We intend to reflect them in the following ways:

- As an energy user. Shell has a target to achieve net-zero operational emissions (Scope 1 and 2) by 2050, in step with society. In the annual bonus, progress will be linked to performance assessment based on the greenhouse gas (GHG) intensity of our main business lines and, from 2021, a new GHG-abatement target.
- As an energy provider. We have significantly raised our net carbon intensity target in step with achieving a 1.5 degrees Celsius future. We will measure this using our NCF metric. Meaningful carbon intensity reductions will require significant business transformations with longer timescales and are therefore best reflected in the LTIP. We are increasing the weighting of the energy transition condition to account for 20% of the LTIP (up from 10%), putting it on the same level as the financial measures (TSR, CFFO, FCF and ROACE), which will each account for 20% of the LTIP.
- As an energy partner. In our role as an energy supplier, we will work with sectors which use energy to help them identify and implement ways to decarbonise and make progress towards a net-zero emissions future. New performance measures will need to be developed in this area before it can be linked to remuneration. The REMCO will assess such performance measures, as is appropriate, in the future.

The connections between remuneration and progress in the energy transition received good support from shareholders during our engagements. These measures will continue to mature as we implement the updated strategy. I also know that many of you are keen to know how we are progressing on the existing energy transition condition and further information is provided on pages 164-165.

Other changes to 2021 remuneration

To ensure that Shell's remuneration structures evolve in line with the recent strategy developments, the following changes will also take place for the 2021 annual bonus scorecard:

- The weighting of the CFFO metric will increase from 30% to 35%, reflecting our commitment to the updated financial framework.
- The strength of Shell is as an integrated energy business and our updated strategy and portfolio choices emphasise operational excellence and the delivery of value rather than volume. To reflect this, we will retire the existing production and LNG liquefaction volume measures. We will introduce a new asset management excellence measure, based on Upstream controllable availability, midstream availability and downstream availability. This is designed to encourage an ongoing focus on running our assets effectively and to schedule. Operational excellence will always be fundamental to our success, but its weighting will decrease from 50% of the scorecard to 35% to allow for increased weightings on CFFO, progress in the energy transition and safety.
- We will further emphasise the importance of achieving progress in the energy transition by making this a separate section of our scorecard. Performance will be based on GHG-emissions-intensity targets and assessments of the delivery of GHG-abatement projects that support our net-zero operational emissions target. These targets will account for 15% of the scorecard.

LOOKING AHEAD

The year ahead promises to be another busy one as we look to continue to enhance our alignment of pay with the updated strategy. I look forward to continuing to engage with shareholders in the coming months and I thank you for your continued support.

NEIL CARSON

Chair of the Remuneration Committee
March 10, 2021

ANNUAL REPORT ON REMUNERATION

The Annual Report on Remuneration sets out:

- the REMCO's responsibilities and activities, page 157;
- remuneration at a glance, page 158;
- Directors' remuneration for 2020, page 159; and
- the statement of the planned implementation of policy in 2021, page 170.

The base currency in this Annual Report on Remuneration is the euro, as this is the currency of the base salary of the Executive Directors. Where amounts are shown in other currencies, an average exchange rate for the relevant year is used, unless a specific date is stated, in which case the average exchange rate for the specific date is used.

REMUNERATION COMMITTEE

Biographies are given on pages 114-120; and the REMCO meeting attendance is set out below:

Committee Member	Member since	Maximum possible meetings	Number of meetings attended	% of meetings attended
Neil Carson (Chair)	June 1, 2019	5	5	100%
Gerard Kleisterlee [A]	May 21, 2014	2	2	100%
Euleen Goh [B]	May 20, 2020	3	3	100%
Catherine Hughes	July 26, 2017	5	5	100%
Sir Nigel Sheinwald [C]	May 24, 2017	2	2	100%
Gerrit Zalm [D]	May 21, 2014	5	4	80%

[A] Gerard Kleisterlee retired from Shell after the 2020 Annual General Meeting, held on May 19, 2020.

[B] Euleen Goh was appointed to the REMCO with effect from May 20, 2020.

[C] Sir Nigel Sheinwald stood down as a member of the REMCO with effect from May 20, 2020.

[D] Gerrit Zalm was unable to attend the December 2020 meeting due to an agenda clash arising from a late rescheduling of the meeting.

The REMCO's key responsibilities include determining:

	Senior Management		
	Executive Directors	Executive Committee	Company Secretary
Performance framework	✓	✗	✗
Remuneration policy	✓	✓	✗
Actual remuneration and benefits	✓	✓	✓
Annual bonus and long-term incentive measures and targets	✓	✓	✓

The REMCO is also responsible for determining the Chair of the Board's remuneration. The REMCO monitors the level and structure of remuneration for senior executives below Senior Management, and makes recommendations if appropriate to ensure consistency and alignment with Shell's remuneration objectives. When setting the policy for Executive Director remuneration, the REMCO reviews and considers workforce remuneration and related policies, and how incentives and rewards align with culture.

In exercising its responsibilities, the REMCO takes into account a variety of stakeholder considerations.

The REMCO operates within its Terms of Reference, which are reviewed annually. They were last updated on March 13, 2019 and are available at www.shell.com.

Advice from within Shell was provided by:

- Ben van Beurden, Chief Executive Officer;
- Ronan Cassidy, Chief Human Resources and Corporate Officer and Secretary to the REMCO; and
- Stephanie Boyde, Executive Vice President Performance and Reward.

The Chair of the Board was consulted on remuneration proposals affecting the CEO, and the CEO was consulted on proposals relating to the CFO and Senior Management.

During 2020, the REMCO met five times and its activities included:

- carefully deliberating on pay quantum for the CEO;
- determining vesting of the 2017 LTIP award for Senior Management;
- deciding on 2019 annual bonus outcome, 2020 base salaries, 2020 target bonuses and 2020 LTIP awards for Senior Management;
- developing the Directors' Remuneration Policy in preparation for the 2020 AGM vote, in consultation with shareholders;
- approving the 2019 Directors' Remuneration Report;
- setting 2020 annual bonus and LTIP performance measures and targets and subsequently making the decision that there should be no annual bonus in 2020;
- considering matters related to business performance, the implications of the COVID-19 pandemic and its impact on employees, and determining that no salary increases would apply for 2021 for Executive Directors and Senior Management;
- considering matters relating to the updated strategy and accelerated transition of our business to net-zero emissions and the potential implications for 2021 annual bonus and LTIP performance measures and targets; and
- monitoring external developments and assessing the impact on the Directors' Remuneration Policy.

In 2020, the REMCO reviewed benchmarking data and analysis on executive pay market developments that were prepared by Shell's internal HR function. The REMCO has not incurred external remuneration adviser fees.

PRINCIPLES

The principles that underpin the REMCO's approach to executive remuneration are set out on page 173.

The REMCO considered the provisions of the UK Corporate Governance code, and in deciding 2020 pay outcomes it has sought to reflect the principles of clarity, simplicity, risk management, predictability, proportionality and alignment with culture.

Shell has a consistent global reward and performance philosophy that sets clear expectations of employees. Through the annual bonus scorecard and the LTIP, remuneration is clearly aligned with Shell's operating plan and strategic ambitions. The same measures apply to Executive Directors and Senior Management and to a significantly broader employee base. This provides alignment throughout the organisation with Shell's culture and strategy. The annual operating plan translates into targets on the annual bonus scorecard, and a quarterly update on performance against scorecard targets is provided to employees. (Exceptionally in 2020, updates on the annual bonus scorecard were not published, this is discussed further on page 154.) Similarly the LTIP is largely based on outperforming the competition, and regular updates on Shell's performance against competitors is provided to employees. In reviewing the Directors' Remuneration Policy, approved at the 2020 AGM, the REMCO sought to make changes that help to simplify remuneration structures (for example, removing the individual performance factor for Executive Directors) and giving more transparent outcomes (for example, removing the bonus asymmetry from the CEO's remuneration structure). To assist in the mitigation of reputational risk and to ensure proportionality, the powers of the REMCO to apply malus and clawback and make discretionary adjustments to variable pay outcomes were expanded, with the intention that the REMCO will use discretion to ensure the highest pay outcomes are delivered only for outstanding performance.

ANNUAL REPORT ON REMUNERATION continued

REMUNERATION AT A GLANCE

2020

FIXED PAY AND SHAREHOLDING

Base salary

€1,588,000 **€1,035,000**
Ben van Beurden (CEO) Jessica Uhl (CFO)

Pension

Executive Directors participate in the same home-country pension arrangements as other employees

Benefits

Typically include car allowance, transport between home and office, and medical insurance

Shareholding

Target levels, % of base salary at December 31, 2020

700% **500%**
CEO CFO (from 400%)

Actual levels, % of base salary at December 31, 2020

637% **333%**
CEO CFO

ANNUAL BONUS

2020 annual bonus

The REMCO determined that there should be no 2020 annual bonuses.

LONG-TERM INCENTIVE PLAN

2018 – 2020 LTIP vesting outcome

€3,697,574 **\$2,377,494**
CEO (49% reduction from prior year) CFO (45% reduction from prior year)

Vesting outcome

Measures	Outcome	Vesting
TSR	1 2 3 4 5	20%
CFFO	1 2 3 4 5	50%
ROACE growth	1 2 3 4 5	20%
FCF	1 2 3 4 5	0%
		90% (out of a 200% maximum)

Shares are subject to a three-year holding period which extends beyond an Executive Director's tenure

2021

FIXED PAY AND SHAREHOLDING

Base salary

€1,588,000 **€1,035,000**
CEO CFO
No change from 2020

Pension

No change from 2020

Benefits

No change from 2020

Shareholding

Target levels, % of base salary 2021

700% **500%**
CEO CFO

Actual levels, % of base salary March 5, 2021

919% **526%**
CEO CFO

ANNUAL BONUS

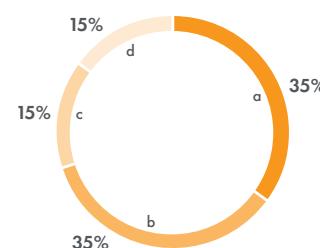
Target % of base salary

Target
125% **120%**
CEO CFO

Maximum

250% **240%**
CEO CFO

Scorecard architecture



- a █ Cash flow from operations (weighted 35%)
- b █ Operational excellence (Asset management excellence 25%, Project delivery excellence 10%)
- c █ Progress in the energy transition (GHG abatement 5%, GHG management 10%)
- d █ Safety (SIF-F 7.5%, Tier 1 & 2 Process Safety 7.5%)

LONG-TERM INCENTIVE PLAN

Target awards % of base salary

Target – policy
300% **270%**
CEO CFO

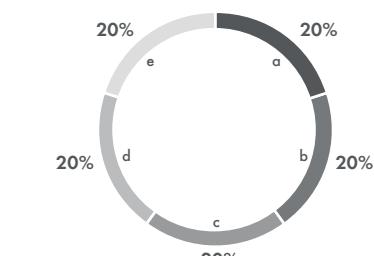
2021 adjusted awards

264.5% **248.5%**
CEO CFO

Maximum

529% **497%**
CEO CFO

Performance conditions



- a █ TSR
- b █ FCF
- c █ ROACE
- d █ CFFO
- e █ Energy transition

DIRECTORS' REMUNERATION FOR 2020

Single total figure of remuneration for Non-executive Directors (audited)

	Fees		Taxable benefits [A]		€ thousand	
	2020	2019	2020	2019	2020	2019
Dick Boer [B]	98	–	–	–	98	–
Neil Carson [C]	184	99	–	–	184	99
Ann Godbehere	206	178	–	–	206	178
Euleen Goh	201	201	–	–	201	201
Charles O. Holliday [D]	850	850	69	71	919	921
Catherine J. Hughes	180	200	–	–	180	200
Martina Hund-Mejean [E]	98	–	–	–	98	–
Gerard Kleisterlee [F]	93	242	–	–	93	242
Sir Andrew Mackenzie [G]	37	–	–	–	37	–
Abraham Schot [H]	38	–	–	–	38	–
Roberto Setubal [I]	72	190	1	2	73	192
Sir Nigel Sheinwald	184	187	–	–	184	187
Linda G. Stuntz [J]	73	189	1	8	74	197
Gerrit Zalm	177	177	–	–	177	177

[A] UK regulations require the inclusion of benefits where these would be taxable in the UK, on the assumption that Directors are tax residents in the UK. On this premise, the taxable benefits include the cost of Non-executive Director's occasional business-required partner travel. Shell also pays for travel between home and the head office in The Hague, where Board and committee meetings are typically held, as well as related hotel and subsistence costs. For consistency, these business expenses are not reported as taxable benefits because for most Non-executive Directors this is international travel and hence would not be taxable in the UK.

[B] Appointed as a Director with effect from May 20, 2020.

[C] Appointed as a Director with effect from June 1, 2019.

[D] Including the use of a Shell-provided apartment while in the Hague (2020: €68,942, 2019: €70,624)

[E] Appointed as a Director with effect from May 20, 2020.

[F] Stepped down as a Director with effect from May 20, 2020.

[G] Appointed as a Director with effect from October 1, 2020.

[H] Appointed as a Director with effect from October 1, 2020.

[I] Stepped down as a Director with effect from May 20, 2020.

[J] Stepped down as a Director with effect from May 20, 2020.

Single total figure of remuneration for Executive Directors (audited)

	Ben van Beurden		Jessica Uhl		€ thousand	
	2020	2019	2020	2019	2020	2019
Salaries [A]	1,588	1,557	1,035	1,015		
Taxable benefits [B]	16	20	418	326		
Pension [C]	540	395	288	261		
Total fixed remuneration	2,144	1,972	1,741	1,602		
Annual bonus [D]	–	800	–	500		
LTIP [E]	3,698	7,191	1,993	3,903		
Total variable remuneration	3,698	7,991	1,993	4,403		
Total remuneration	5,841	9,963	3,734	6,005		
in dollars	6,671	11,155	4,264	6,724		
in sterling	5,197	8,746	3,322	5,271		

[A] As disclosed in the 2019 Directors' Remuneration Report, the REMCO set Ben van Beurden's base salary for 2020 at €1,588,000 (+2.0% compared with 2019) effective from January 1, 2020, and Jessica Uhl's base salary at €1,035,000 (+2.0% compared with 2019) effective from January 1, 2020.

[B] For Ben van Beurden these include motoring allowance (€14,400) and transport between home and the office (€1,150). Jessica Uhl's benefits include tax equalisation (€392,250), medical insurance (€14,921), transport between home and the office (€10,369) and tax return services (€430). Jessica Uhl's benefits includes tax equalisation of pension contributions to foreign pension plan(s), when they are taxable above a certain pensionable salary threshold or once a double tax treaty exemption ceases, under Dutch law. Tax equalisation is applied for the loss of pension relief for members of a foreign pension plan(s) in their host country. Jessica Uhl's benefits also include tax equalisation of employer contributions to benefits and certain US social taxes that are taxable in the Netherlands. For 2020, the presentation of the single total figure of remuneration has changed to include tax equalisation costs within taxable benefits. The 2019 taxable benefits has been adjusted on this basis and therefore differs from the value presented in the 2019 Annual Report.

[C] For Ben van Beurden, the amount reported for pension consists of a net pay defined contribution amount of €402,825. The amount to be reported for his defined benefit pension accrual is €137,479 calculated in accordance with UK reporting requirements. For Jessica Uhl, the amount reported for pension consists of a defined contribution amount of €103,486 and a defined benefit pension accrual €184,452.

[D] The full value of the bonus, comprising both the 50% delivered in cash and 50% bonus delivered in shares. For 2019, the market price of A shares on February 21, 2020 (€22.735), was used to determine the number of shares delivered, resulting in 9,521 A shares for Ben van Beurden and 5,951 A shares for Jessica Uhl.

[E] Remuneration for performance periods of more than one year, comprising the value of released LTIP awards. The amounts reported for 2020 relate to the 2018 LTIP award, which vested on March 5, 2021, at the market price of €17.85 and \$43.72 for A shares and A ADSs respectively. The value in respect of the LTIP is calculated as the product of: the number of shares of the original award multiplied by the vesting percentage; plus accrued dividend shares; and the market price of A shares or A ADSs at the vesting date. The market price of A ADSs is converted into euros using the exchange rate on the respective date. Share price depreciation accounted for -€1,620,234 on the LTIP for Ben van Beurden and -\$1,058,065 on the LTIP for Jessica Uhl.

ANNUAL REPORT ON REMUNERATION

continued

Notes to the single total figure of remuneration for Executive Directors table (audited)

Annual bonus

As disclosed on pages 174-175, the annual bonus is intended to reward delivery of short-term operational targets as derived from Shell's operating plan.

Determination of the 2020 annual bonus

The REMCO had approved a 2020 annual bonus scorecard at its meeting on January 28, 2020, based on Shell's operating plan, which ultimately was not communicated or shared with participants. In March, as the implications of the pandemic became increasingly apparent, it became clear that the operating plan and 2020 scorecard had been overtaken by events and were no longer appropriate. It was decided that targets would not be reset but operating priorities would be recast to Care in terms of health, safety and well-being for our people, Continuity for our business to support customers and communities, and Cash management to ensure the financial resilience of Shell. The approved scorecard was set aside and there was no review of the targets or performance against it (or any other targets for the purposes of calculating bonus entitlements). Care, Continuity and Cash quickly became the new framework to reflect on performance.

It had also become clear that there would be difficult financial outcomes ahead. In March 2020, Shell announced a change to the financial framework. This included stating that we would not be proceeding with the next tranche of the share buyback programme and would be rebasing the dividend. In light of this, the REMCO decided there would be no 2020 annual bonuses for Executive Directors and Senior Management. As no Group scorecard was being published, employees were informed that the Group scorecard outcome for 2020 would be set to zero. This was communicated in April 2020 to allow employees to make financial plans.

After the depths of the crisis, there has been some recovery in commodity prices and the business has been resilient in 2020, delivering strong cash generation relative to our peers and performing strongly on safety. But we are far from the financial success in 2020 that would allow an annual bonus. Taking into account all the relevant factors such as business performance, impairments, dividend changes, and the limited use of government support, the REMCO confirmed that its decision that there should be no 2020 annual bonuses remained appropriate.

For reference, the redundant 2020 annual bonus framework is set out below. Full information of Shell's performance against our Key Performance Indicators can be found on pages 43-45.

2020 annual bonus framework (not used for performance assessment)

Measures [A]	Weight (% of scorecard)
Cash flow from operating activities (\$ billion)	30%
Operational excellence	50%
Production (kboe/d)	12.5%
LNG liquefaction volumes (mtpa)	12.5%
Refinery and chemical plant availability (%)	12.5%
Project delivery on schedule (%)	6.25%
Project delivery on budget (%)	6.25%
Sustainable development	20%
Total recordable case frequency (injuries/million hours)	5%
Operational Tier 1 and 2 process safety events (number)	5%
Upstream and Integrated Gas GHG intensity (tonnes of CO ₂ equivalent/tonne of hydrocarbon production available for sale)	4%
Refining GHG intensity (tonnes CO ₂ equivalent per Solomon's Utilized Equivalent Distillation Capacity (UEDC™))	4%
Chemicals GHG intensity (tonnes CO ₂ equivalent/tonne of petrochemicals production)	2%

[A] These metrics measure the effectiveness with which we operate our assets and portfolio base, assessed against our operational business plan. Shell's longer-term strategic ambitions are measured in the LTIP metrics.

LTIP Vesting

In 2018, Ben van Beurden was granted a conditional LTIP award of 340% (maximum 680%) of base salary and Jessica Uhl an award of 270% (maximum 540%), excluding share price movement and dividends.

In making the vesting decision, the REMCO considered Shell's performance over the three-year vesting period.

There was strong performance on free cash flow (FCF) in 2018, but Shell failed to meet plan targets in 2019 and 2020, and the overall performance outcome over three years fell below threshold.

The REMCO was encouraged by the resilience that Shell displayed over the course of 2020, including its ability to deliver positive cash flows despite very challenging headwinds. Shell ranked first among our competitors in relative CFFO growth. Total CFFO was \$34 billion in 2020, with more than \$129 billion generated over the three-year vesting period. In absolute terms, this is more than double the CFFO generated in 2020 by our next closest competitor. On TSR, Shell ranked third in the comparator group, with \$55 billion distributed to shareholders in the form of dividends and share buybacks. The work done in recent years to focus on capital discipline and get the portfolio to the right size was also reflected in the outcome for return on average capital employed (ROACE), where Shell ranked third among the comparators.

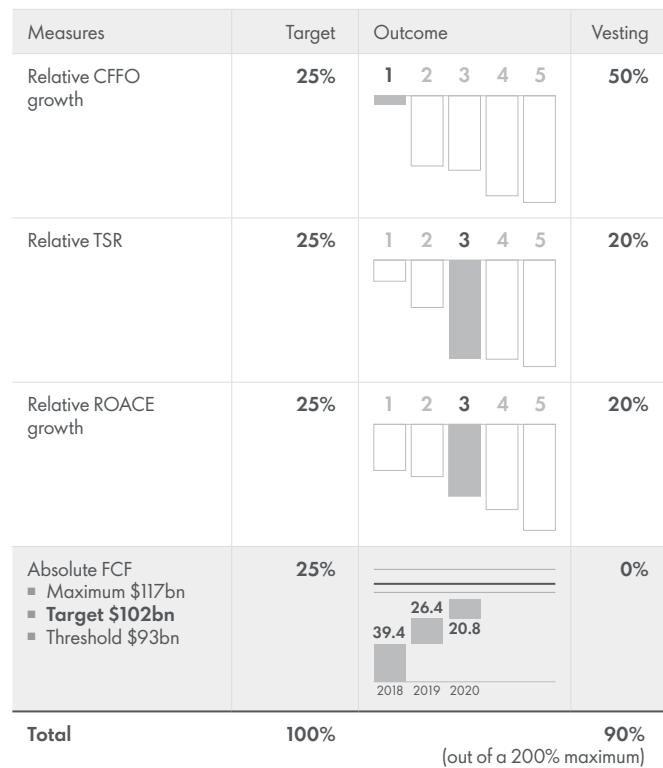
The REMCO also considered the change in share price between award and vesting, and the impact this had on the outcome. The REMCO also reflected on the overall single outcome for the CEO and decided that no adjustment to the vesting outcomes was required.

Accordingly, the REMCO determined that the LTIP should vest at 90% without the use of discretion. This is illustrated opposite.

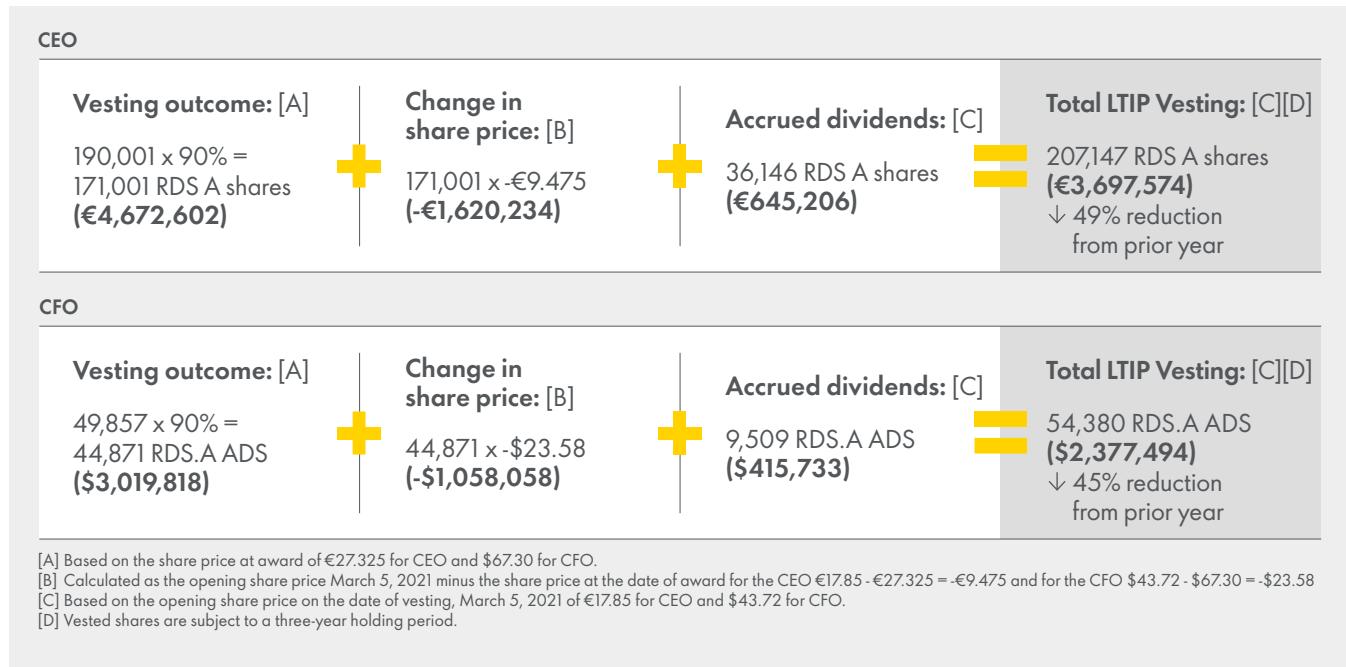
The CEO's and CFO's vested awards are subject to a further three-year holding period which extends beyond Executive Director tenure.

2018 LTIP vesting outcome – performance metrics

Shell Comparator oil majors



2018 LTIP vesting outcome



ANNUAL REPORT ON REMUNERATION

continued

In determining the final pay outcomes, the REMCO also considered the personal performance of the Executive Directors.

Personal performance 2018 – 2020

Key Goals	Ben van Beurden	Jessica Uhl
Deliver a world-class investment case	<p>Difficult times have demanded strong leadership, which the CEO has provided.</p> <p>In the face of unprecedented headwinds, Shell has shown impressive resilience. This reflects the value of the integrated portfolio and disciplined execution during 2020. The global economic conditions have required decisive action, including the suspension of the share buyback programme and rebasing of the dividend. Shareholder returns are fundamental to the investment case at Shell and the REMCO pays close attention to this when considering performance. These were not easy decisions to make, but the Board believes they were necessary to create resilience, and in combination with other cost preservation measures have contributed to making Shell stronger operationally and financially. The REMCO recognises the central role of the CEO in providing the direction and clarity of purpose that has guided the Company and underpinned this resilience during a challenging 12 months.</p>	<p>The challenges of 2020 have required strong strategic management of Shell's financial framework, and the CFO has played a critical role in ensuring the resilience of Shell during a highly volatile and unpredictable period.</p> <p>Key deliverables included the strong focus on cost discipline and the development of a renewed cash allocation framework which prioritises: capex and progressive dividend growth; net debt reduction (targeting AA credit metrics in the near term); additional shareholder distributions; and growth capex.</p> <p>In terms of broader Company performance, the REMCO recognised the strategic insight that the CFO has provided in terms of effective capital allocation, and portfolio and investment decisions that improve Shell's world-class investment case.</p>
Thrive in the energy transition	<p>The CEO has continued to lead Shell's NCF ambition by driving internal plans and targets, and by integrating business and investment decisions with Shell's longer-term ambitions.</p> <p>In 2020, Shell announced an updated strategic ambition to be a net-zero emissions energy business by 2050, in step with society. It concluded a comprehensive strategy update on how Shell intends to decarbonise energy customers while running legacy businesses for value rather than volume. The design of the new organisation (Project Reshape) necessary to support this strategy update was completed. These activities culminated in the updated strategy announced in February 2021. The REMCO acknowledges the fundamental importance of the CEO using these activities to position Shell for long-term success in the energy transition.</p> <p>Externally, the CEO has played a leading role in the energy transition debate through such initiatives as the first joint statement with institutional shareholders, encouraging other companies to adopt the NCF methodology. He has been instrumental in galvanising coalitions to start action on sectoral decarbonisation. His personal role, for example in the Aviation Clean Skies Initiative, is recognised by both customers and external stakeholders. His interventions have helped in shifting the climate agenda towards the practical measures that will be needed for creating sustained demand for lower-carbon products.</p>	<p>Over the performance period, the CFO has further matured the internal management systems relating to carbon dioxide (CO₂) in decisions about portfolio, planning and resource allocation. The CFO led the publication of the Shell Energy Transition Report, which is aligned with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). The report sets out how Shell plans to be resilient to expected changes in the energy system and how its strategy helps it to thrive as the world transitions to lower-carbon energy.</p>
Strengthen societal licence to operate	<p>During 2020, Shell's priority has been the health and safety of our staff and customers. The REMCO recognises the leadership that the CEO has displayed in setting a tone of care and well-being across the organisation in 2020.</p> <p>In terms of HSSE leadership, there was a notable improvement in both personal and process safety in 2020. The number of fatalities under Shell operational control was zero.</p> <p>In 2019, Shell published the Industry Associations Climate Review, which assesses alignment with 19 industry associations on climate-related policy.</p>	<p>The CFO maintained a strong financial disclosure, reporting and control framework.</p> <p>In 2020, Shell published its second Tax Contribution Report, continuing to provide greater transparency around Shell's approach to paying taxes to governments. Over the performance period, the CFO also played a key role in Shell's endorsement of the responsible tax principles set out by the non-profit organisation, The B Team.</p>

The REMCO considered the single-figure outcomes for the CEO and CFO. It noted that the overall remuneration outcomes were 41% (CEO) and 38% (CFO) lower than in 2019. The REMCO was satisfied that these single-figure outcomes represented a fair level of remuneration. In deciding this, the REMCO took account of the challenging global economic conditions in 2020, and the steps necessary to reinforce the financial strength and resilience of Shell. It also considered the strong and positive leadership shown in setting out a clear strategic direction for Shell and ensuring it was supported by the necessary organisational design.

In finalising its remuneration decisions for 2020, the REMCO considered a range of factors, including:

- Shell's performance in 2020 and over the LTIP performance period 2018-2020;
- potential risk adjustment considerations, including safety, ethics and compliance and feedback from the Audit Committee and the Safety, Environment and Sustainability Committee;
- the actions taken to protect value, strengthen the balance sheet and preserve cash;
- the final LTIP vesting outcome;
- the internal relativity of remuneration compared with the variable pay outcomes for the general workforce;

- government support received in 2020. Most of this support was automatic, such as around SGD 55 million under the Singaporean Job Support Scheme and £20 million of business rate relief in the UK. Relief which Shell has applied for is very limited, with the most notable being CAD 34 million received under the Canadian Emergency Wage Subsidy scheme. Careful consideration was given prior to making an application as to whether it was appropriate to take this support. We are comfortable that doing so was appropriate from a Canadian perspective and consistent with doing all that we could to protect jobs and care for employees in the worst phase of the crisis, many of whom work in small communities. The REMCO reviewed and was satisfied that this support had no impact on the mathematical vesting outcome of the LTIP;
- the alignment of the Executive Directors with the shareholder experience through their high shareholding requirements;
- the decision that there should be no 2020 annual bonuses, which took into account business performance, impairments, dividend changes and the use of limited government support;
- feedback from shareholders regarding the appropriate pay outcomes in light of the COVID-19 pandemic; and
- the personal performance of the Executive Directors.

After reflecting on the above factors, the REMCO was satisfied that the remuneration policies had operated as intended.

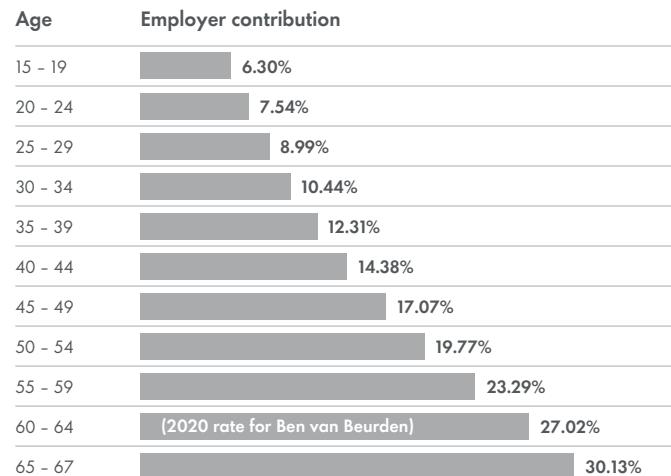
Pension

Ben van Beurden's pension arrangements comprise a defined benefit plan with a maximum pensionable salary of €98,993; and a net pay defined contribution pension plan with a 2020 employer contribution of 27% of salary in excess of €98,993. He has the option to take cash as an alternative to pension contributions (in either case subject to income tax) and elected to take his benefit in the form of contributions throughout 2020.

The employer contribution levels are in line with those applicable to other Netherlands-based employees. Under the Dutch pension regulations applicable to the pension arrangement in which he participates, the contribution rate increases with age and is shown opposite.

At December 31, 2020, the average employer contribution rate for Netherlands employees who participate in the net pay defined contribution pension arrangement on the same terms as Ben van Beurden was 20%. For reference, in the UK, the average employer contribution rate to the Shell UK defined contribution plan is 20%.

Shell Netherlands Pension Stichting net pay defined contribution ladder



Jessica Uhl is a member of the Shell US retirement benefit arrangements, which include the Shell Pension Plan (a defined benefit plan), and a defined contribution plan where she receives an employer contribution of 10% of salary. This is the same as the average employer contribution rate for US employees, which was 10%. As for all other pre-2013 members of the Shell Pension Plan, she has an annual choice of two accrual formulas with different forms of benefits, one in the form of a lifetime annuity and the other allowing for a lump-sum payment. She elected to accrue benefits for 2020 under the former. Around 10,000 out of 17,000 Shell US employees have the option of choosing between the two formulas. These arrangements are the same for all employees who joined Shell US at the same time as Jessica Uhl. The difference in pension provision for Jessica Uhl, compared with employees who joined pre-2013, is that her bonus is not pensionable as an Executive Director while for other relevant US employees the bonus is pensionable. She also has a deferred Dutch defined benefit pension plan, as a result of a prior Shell assignment on local Dutch terms and conditions.

The REMCO believes these arrangements are aligned with corporate governance developments in the UK which emphasise the desirability of Executive Directors' pension arrangements being the same as those for the general employee population.

Scheme interests awarded in 2020

Scheme interests awarded to Executive Directors in 2020 (audited)

Scheme interest type	Type of interest awarded	End of performance period	Target award [A]	Potential amount vesting	
				Minimum performance (% of shares awarded) [B]	Maximum performance (% of shares of the target award) [A]
LTIP	Performance shares	December 31, 2022	Ben van Beurden: 200,589 A shares, equivalent to 3.0 x base salary or €4,764,000. Jessica Uhl: 59,062 A ADS shares, equivalent to 2.7 x base salary or €2,794,500	0%	Maximum number of shares vesting is 200% of the shares awarded, before dividends.

[A] The award for Ben van Beurden was based on the closing market price on the date of grant, January 31, 2020, for A shares of €23.75. The award for Jessica Uhl was based on the closing market price on the date of grant, January 31, 2020, for A ADSs of \$52.15.

[B] Minimum performance relates to the lowest level of achievement, for which no reward is given.

ANNUAL REPORT ON REMUNERATION

continued

The measures and weightings applying to LTIP awards made in 2020 were: energy transition (10%), FCF (22.5%), TSR (22.5%), ROACE growth (22.5%) and growth in cash flow from operating activities (22.5%).

Absolute measures

Energy transition

The energy transition condition supports delivery of Shell's Net Carbon Footprint (NCF) target.

The condition consists of a mix of leading and lagging measures that set the foundations to contribute to Shell's strategic ambitions in the longer term. They are as follows:

Lagging measure – a measure of our progress in meeting our ambition:

- Net Carbon Footprint: a target for reducing the NCF of the energy products Shell sells (a carbon intensity measure that takes into account their full life-cycle emissions, including customers' emissions associated with using them).

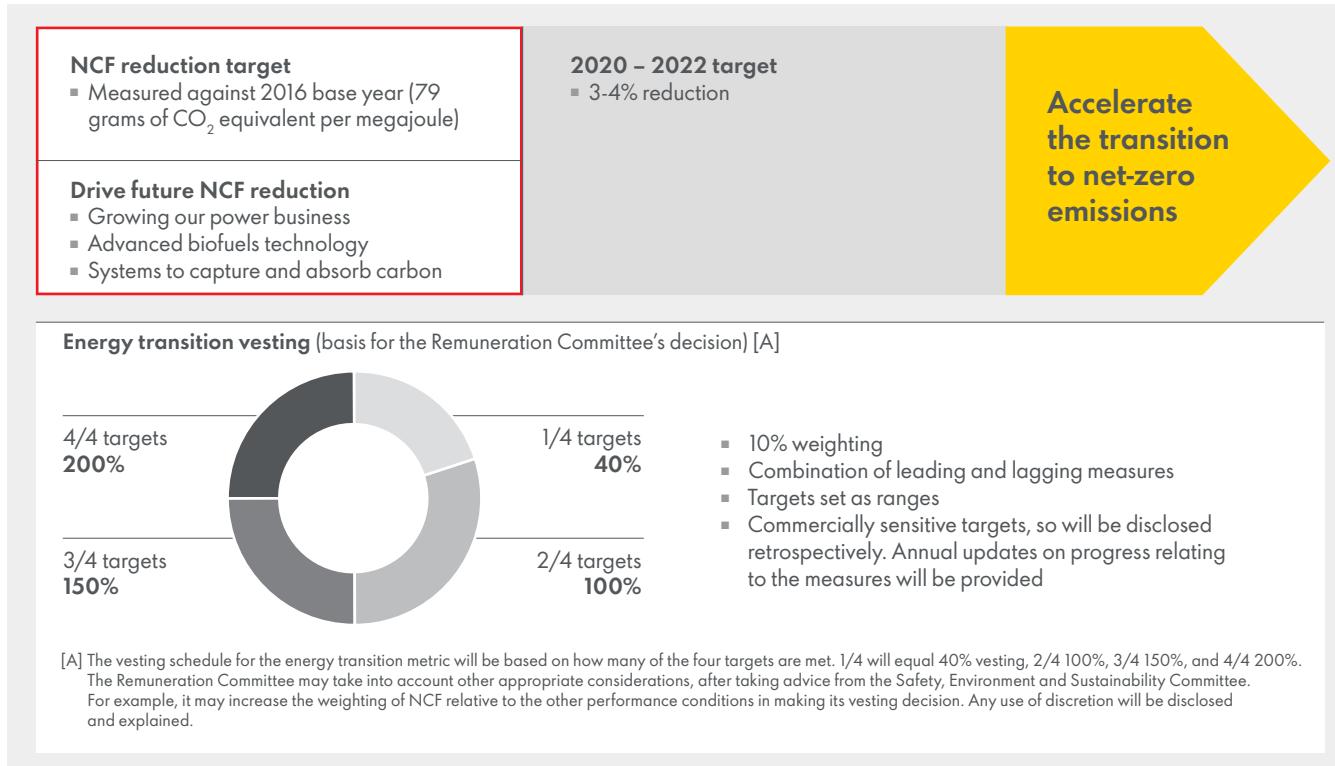
Leading measures – the levers we will use to drive future NCF reduction:

- The growth of our power business: all decarbonisation scenarios recognise that a key way to cut greenhouse gas emissions is to increase electricity use and decarbonise electricity by shifting to renewables and gas-fired power generation. Our ambition to grow our power business is based on selective investments in generation, and in business models based on reselling power generated by others.
- Advanced biofuels and alternative fuels technology: biofuels are expected to play a valuable role in the changing energy mix and are likely to be one of the key decarbonisation levers for sectors that need to continue to use liquid fuels in the foreseeable future, such as some segments of transport and industry. For society and for Shell, commercialisation of advanced biofuel technology is one of the most important steps in energy transition.
- The development of systems to capture and absorb carbon: carbon capture and storage (CCS) and carbon sinks, such as nature-based solutions, are required as part of the global response to climate change.

Targets have been set for each element. Progress in the energy transition is not expected to be linear, because it will reflect the pace of change of society as a whole and the speed at which Shell progresses its strategic business objectives. As a result, targets have been set as ranges. These targets are commercially sensitive, so they will not be disclosed until the end of the performance period (or until they are no longer considered to be commercially sensitive). An update on our progress in relation to the measures is provided on page 165.

The vesting outcome for the part of the award weighted to the energy transition condition ranges from 0% to 200% of award. The REMCO, at its sole discretion, will determine vesting outcomes after considering achievement against the target ranges and feedback from the Safety, Environment and Sustainability Committee (SESCo). In doing so, the REMCO will take into account, in relation to each element, progress over the performance period relative to nearer-term aims in pursuit of the long-term ambition announced by Shell to reduce the NCF of energy products sold, in step with society's drive to meet the goals of the Paris Agreement. The starting point for determining the vesting outcome will be seeing how many of the targets have been met for each of the four areas. One out of four will equal 40%, two will equal 100%, three will equal 150%, and 200% will be achieved for scoring four out of four. It is important to note that performance against these elements will serve simply as a starting point for the REMCO, which will also take into account any other considerations it deems appropriate, including (without limitation) the relative importance of these elements in meeting the long-term ambition announced by Shell. For example, the REMCO may decide to allocate a greater importance to overall performance in relation to the NCF than the other three elements. The REMCO believes this approach is appropriate, given the uncertainties around the speed and direction of progress in the energy transition. The application of any discretion will be fully disclosed and explained by the REMCO.

Operation of energy transition measures in the 2020 LTIP



FCF

The FCF performance condition supports the delivery of our cash flow priorities, which are to service and reduce debt, pay dividends, buy back shares and make future capital investments.

The target for FCF, along with the ranges for threshold and outstanding performance, will be set by reference to Shell's annual operating plans, being the aggregate of our plan FCF targets over the three-year performance period. Given that FCF is heavily influenced by the volatility of oil and gas prices, the annual operating plans are updated each year to set an annual target to reflect a changing oil price premise. As a result, FCF targets are set annually for each annual operating plan and will only be disclosed in aggregate retrospectively after the three-year period. While consideration has been given to setting a three-year target at the outset, the REMCO has determined that such an approach would require adjustments for the oil and gas price premise and other matters at the end of the period, given the unpredictability and volatility in oil and gas prices. The REMCO has a long-standing "no adjustments" policy and therefore believes a more appropriate target-setting approach is to set the target based on the aggregation of the annual operating plans.

The amounts payable under this measure will range from 20% of the available maximum, for threshold performance, to full vesting for outstanding performance. A straight-line vesting schedule will apply for performance between threshold and outstanding.

Relative measures

The relative measures are based on our performance on a number of key financial metrics against the other oil majors.

For relative measures, we measure and rank growth based on the data points at the end of the performance period compared with those at the beginning of the period, using publicly reported data.

- TSR, calculated in US dollars using a 90-day averaging period around the start and end of the performance period;
- ROACE growth. For this purpose, in order to facilitate the comparison, the calculation of ROACE differs from that described in "Performance indicators" on page 43 because there is no adjustment for after-tax interest expense; and
- growth in cash flow from operating activities.

Each relative measure can vest independently with the amounts payable ranging from 0% to 200%, in accordance with the following vesting schedule:

- ranking first equals 200% vesting for the element of the LTIP weighted to that metric;
- ranking second equals 150% vesting for the element of the LTIP weighted to that metric;
- ranking third equals 80% vesting for the element of the LTIP weighted to that metric; and
- ranking fourth or fifth equals 0% vesting for the element weighted to that metric.

TSR Underpin

If the TSR ranking is fourth or fifth, the level of the award that can vest on the basis of the other measures will be capped at 50% of the maximum.

Performance update on energy transition metric

Lagging indicator – NCF

Performance measurement is subject to third-party limited assurance.

For the year ended December 31, 2020, NCF had reduced to 75 grams of CO₂ equivalent per megajoule, a 5% reduction against the baseline.

Leading indicators – power, advanced biofuels and systems to capture and absorb carbon

These targets are commercially sensitive, so they will not be disclosed until the end of the performance period (or until they are no longer considered

to be commercially sensitive). The REMCO, though, is committed to sharing progress. To date we are seeing positive progress across a range of indicators of future NCF reduction. Specific examples include:

- developments towards growing a material power business, such as the acquisition of ERM Ltd in Australia and investment in renewable energy projects such as CrossWind; and
- progress on the development of systems to capture and absorb carbon, for example the Northern Lights CCS joint venture with our partners, and nature-based solutions projects such as the acquisition of Select Carbon and Climate Bridge.

While many of these initiatives will take time to scale, they represent important steps towards building the organisational capacity and commercial value chains that will lead to future large-scale carbon reductions.

FCF

2019 LTIP award

At December 31, 2020, FCF performance is below target, with below-threshold outcomes for 2019 of \$26.4 billion (target \$35 billion) and for 2020 of \$20.8 billion (target \$38 billion). As one year of FCF performance remains, and 77.5% of the award is subject to relative and energy transition performance conditions, this does not reflect the potential vesting of the award.

2020 LTIP award

At December 31, 2020, FCF performance, \$20.8 billion for 2020, is below threshold (target \$38 billion). As two years of FCF performance remain, and 77.5% of the award is subject to relative and energy transition performance conditions, this does not reflect the potential vesting of the award.

Statement of Directors' shareholding and share interests (audited)

Shareholding guidelines

The REMCO believes that Executive Directors should align their interests with those of shareholders by holding shares in Royal Dutch Shell plc (the Company). The CEO is expected to build a shareholding with a value of 700% of base salary, and the CFO 500%. The shareholding requirement extends post-employment, such that Executive Directors will be required to maintain their shareholding requirement, or the number of shares actually held if this is less than the shareholding requirement, for a period of two years post-employment. There is a Company-sponsored nominee account which allows for restrictions to be applied on the sale or transfer of shares that are subject to holding periods and individual shareholding requirements. The restrictions remain in force beyond the Executive Director's employment.

Only unfettered shares count. Shares delivered that are subject to holding requirements also count towards the guidelines. The values of shares counting towards the shareholding guideline (as a percentage of base salary) for the CEO and CFO were 919% and 526%, respectively, at March 5, 2021. Non-executive Directors are encouraged to hold shares with a value equivalent to 100% of their fixed annual fee and to maintain that holding during their tenure.

Executive Directors' shareholding (audited)

	Value of shares counting towards guideline (% of base salary at December 31, 2020) [A]
Shareholding guideline (% of base salary)	
Ben van Beurden	700%
Jessica Uhl	500%

[A] Following the vesting of the 2018 LTIP on March 5, 2021 their respective holdings are Ben van Beurden 919% and Jessica Uhl 526%.

ANNUAL REPORT ON REMUNERATION

continued

Directors' share interests

The interests (in shares of the Company or calculated equivalents) of the Directors in office during 2020, including any interests of their connected persons, are set out in the table below.

Directors' share interests (audited)

	January 1, 2020		December 31, 2020	
	A shares	B shares	A shares	B shares
Executive Directors [A]				
Ben van Beurden	647,426	-	866,433 [B]	-
Jessica Uhl	116,168 [C]	-	240,557 [D]	-
Non-executive Directors				
Dick Boer	10,000 [E]	-	10,000	-
Neil Carson	16,000	-	16,000	
Ann Godbehere	-	4,700 [F]	-	10,000 [G]
Euleen Goh	-	12,895	-	12,895
Charles O. Holliday	-	50,000 [H]	-	50,000 [H]
Catherine J. Hughes	4,080	51,904 [I]	4,080	51,904 [I]
Martina Hund-Mejean	-	1,578 [J]	-	20,000 [K]
Gerard Kleisterlee	5,254	-	15,254 [L]	-
Sir Andrew Mackenzie	-	-	-	10,048
Abraham Schot [M]	-	-	-	-
Roberto Setubal	15,400 [N]	-	15,400 [O]	-
Sir Nigel Sheinwald	-	1,124	-	1,124
Linda G. Stuntz	-	12,400 [P]	-	12,400 [Q]
Gerrit Zalm	2,026	-	2,026	-

[A] Includes vested LTIP awards subject to holding conditions. Excludes unvested interests in shares awarded under the LTIP.

[B] Includes 174,000 RDS A shares pledged with Van Lanschot N.V.

[C] Held as 26,590 RDS A shares and 44,789 ADS (RDS.A ADS). Each RDS.A represents two A shares.

[D] Held as 34,069 RDS A shares and 103,244 ADS (RDS.A ADS). Each RDS.A represents two A shares

[E] Interests at May 20, 2020, when he was appointed as a Director.

[F] Held as 2,350 ADSs (RDS.B ADS). Each RDS.B represents two B shares.

[G] Held as 5,000 ADSs (RDS.B ADS). Each RDS.B represents two B shares.

[H] Held as 25,000 ADSs (RDS.B ADS). Each RDS.B represents two B shares.

[I] Held as 46,904 RDS B shares and 2,500 ADSs (RDS.B. ADS). Each RDS.B represents two B shares

[J] Interests at May 20, 2020, when she was appointed as a Director. Held as 789 ADS (RDS.B ADS). Each RDS.B represents two B shares.

[K] Held as 10,000 ADSs (RDS.B ADS). Each RDS.B represents two B shares.

[L] Interests at May 19, 2020, when he stood down as a Director.

[M] On August 17, 2020, Bram Schot purchased 5,500 certificates Royal Dutch Shell A Turbo Long 8,2 BNP Paribas Markets (ISIN: NL0009558519) at a price of €5.37 per certificate. These certificates are cash settlement instruments the value of which is linked to the share price of RDS A Shares. In this case, the ratio of the turbo is 1:1 and accordingly 5,500 certificates represent 5,500 RDS A shares. As at March 10, 2021, the leverage is 1.69 but fluctuates depending on the share price. If the share price increases, the leverage will decrease. The finance level is 7.57 and the stop loss level is 8.2. The finance level is adjusted on the 15th of every month. Finance costs are 1.44% on an annual basis. With a turbo long, there is a finance-level and a stop loss-level. If the underlying share price drops below the stop loss-level, the turbo long is terminated. The investor then receives the value of the difference between the finance-level and the level on which the counterparty, in this case BNP Paribas, can close the turbo. Take for example a turbo with a stop loss-level of 10 and a finance-level of 8. When the underlying share price drops below 10, which is the stop loss-level, the buyer will still receive the amount 10-8=2. However, if the share price would suddenly drop to 8 or below, the buyer will receive nothing and the total investment is lost. In most cases however, the turbo would be terminated at the stop loss-level, and the buyer receives the amount of the difference between the finance-level and the stop loss-level. The actual amount will be determined by BNP. In addition, on August 27, 2020, Bram Schot purchased 100 Leonteq Express Euro Denominated Certificates on ING, Royal Dutch Shell, Unilever (ISIN: CH0470808913), with a nominal value of €1,000 each at a price of €515 per certificate. These certificates are cash settlement instruments of which payment of a conditional coupon depends for 1/3 on the development of the price of the RDS A Shares on Euronext Amsterdam and, as such, is a financial instrument linked to the RDS A Shares. Both transactions took place before Bram Schot became a Director of the Company.

[N] Held as 7,700 ADSs (RDS.A ADS). Each RDS.A represents two A shares.

[O] Interests at May 19, 2020, when he stood down as a Director. Held as 7,700 ADSs (RDS.A ADS). Each RDS.A represents two A shares

[P] Held as 6,200 ADSs (RDS.A ADS). Each RDS.A represents two A shares.

[Q] Interests at May 19, 2020, when she stood down as a Director. Held as 6,200 ADSs (RDS.A ADS). Each RDS.A represents two A shares.

The only changes to Director's shareholdings as at March 5, 2021 are that:

- Sir Andrew Mackenzie acquired 7,396 RDS B shares on February 15, 2021;
- on February 12, 2021, Bram Shot purchased (i) an additional 2,500 certificates Royal Dutch Shell A Turbo Long 8,2 BNP Paribas Markets (ISIN: NL0009558519) at a price of €7.69 per certificate; and (ii) an additional 50 Leonteq Express Euro Denominated Certificates on ING, Royal Dutch Shell, Unilever (ISIN: CH0470808913), with a nominal value of €1,000 each at price of €715 per certificate; and
- following the vesting of the 2018 LTIP award, Ben van Beurden's share interests increased by 112,100 RDS A shares, and Jessica Uhl's by 28,059 RDS.A ADS.

At March 5, 2021, the Directors and Senior Management (pages 114-123) of the Company beneficially owned, individually and in aggregate (including shares under option), less than 1% of the total shares of each class of the Company shares. These shareholdings are not considered sufficient to affect the independence of the Directors.

Directors' scheme interests

The table below shows the aggregate position for Directors' interests under share schemes at December 31, 2020. These are RDS A shares for Ben van Beurden and A ADS for Jessica Uhl. During the period from December 31, 2020, to March 5, 2021, scheme interests have changed as a result of the vesting of the 2018 LTIP on March 5, 2021, and because of the 2021 LTIP awards made on March 5, 2021, as described on pages 161 and 163 respectively.

Directors' scheme interests (audited)

	Share plan interests [A]					
	LTIP subject to performance conditions [B]		DBP not subject to performance conditions [C]		Total	
	2020	2019	2020	2019	2020	2019
Ben van Beurden [D]	662,751	660,814	-	56,783	662,751	717,597
Jessica Uhl [E]	179,565	173,509	-	-	179,565	173,509

[A] Includes unvested long-term incentive awards and notional dividend shares accrued at December 31. Interests are shown on the basis of the original awards. The shares subject to performance conditions can vest at between 0% and 200%. Dividend shares accumulate each year on an assumed notional LTIP/DBP award. Such dividend shares are disclosed and recorded on the basis of the number of shares conditionally awarded but, when an award vests, dividend shares will be awarded only in relation to vested shares as if the vested shares were held from the award date. Shares released during the year are included in the "Directors' share interests" table.

[B] Total number of unvested LTIP shares at December 31, 2020, including dividend shares accrued on the original LTIP award.

[C] The number of shares deferred from the bonus (original DBP award) and the dividend shares accrued on these at December 31, 2019. DBP awards have been discontinued with the final awards taking place in 2017. No DBP awards remain outstanding following the final vesting of these awards in March 2020. Delivery of the original DBP award and the related accrued dividend shares is not subject to performance condition.

[D] RDS A shares.

[E] RDS.A ADS.

Dilution

In any 10-year period, no more than 5% of the issued ordinary share capital of the Company may be issued or issuable under executive (discretionary) share plans adopted by the Company, or 10% when aggregated with awards under any other employee share plan operated by the Company. To date, no shareholder dilution has resulted from these plans, although it is permitted under the rules of the plans, subject to these limits.

Payments to past Directors (audited)

No payments to past Directors were made in 2020. Payments below €5,000 are not reported as they are considered de minimis.

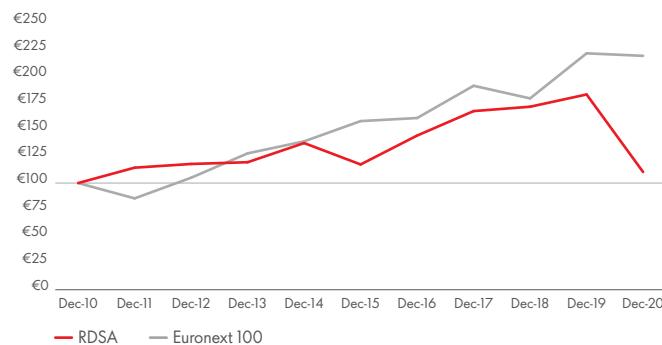
TSR performance and CEO pay

Performance graphs

The graphs compare the TSR performance of Royal Dutch Shell plc over the past 10 financial years with that of the companies comprising the Euronext 100 and the FTSE 100 share indices. The Board regards these indices as appropriate broad market equity indices for comparison, because they are the leading market indices in Royal Dutch Shell plc's home markets.

Historical TSR performance (RDSA)

Value of hypothetical €100 holding



Historical TSR performance (RDSB)

Value of hypothetical £100 holding



CEO pay outcomes

The following table sets out the single total figure of remuneration, the annual bonus payment and long-term incentive (LTI) vesting rates compared with the respective maximum opportunity, for the CEO for the past 10 years.

CEO pay outcomes

Year	CEO	Single total figure of remuneration (€000)	Annual bonus award against maximum opportunity	LTI vesting against maximum opportunity
2020	Ben van Beurden	5,841	0%	45%
2019	Ben van Beurden	9,963	21%	74%
2018	Ben van Beurden	20,138	79%	95%
2017	Ben van Beurden	8,909	81%	35%
2016	Ben van Beurden	8,593	66%	42%
2015	Ben van Beurden	5,576	98%	8%
2014	Ben van Beurden [A]	24,198	94%	49%
2013	Peter Voser	8,456	44%	30%
2012	Peter Voser	18,246	83%	88%
2011	Peter Voser	9,941	90%	30%

[A] Ben van Beurden's single total figure for 2014 was impacted by the increase in pension accrual (€10.695 million) calculated under the UK reporting regulations and tax equalisation (€7.905 million) as a result of his promotion and prior assignment to the UK.

Change in remuneration of Directors and employees from 2019 to 2020

As Royal Dutch Shell plc does not have any direct employees, the table below compares the remuneration of the Directors of Royal Dutch Shell plc with an employee comparator group consisting of local employees in the Netherlands, the UK and the USA. The local employee population of these countries is considered to be a suitable employee comparator group because: these are countries with a significant Shell employee base; a large proportion of senior managers come from these countries; and the REMCO considers remuneration levels in these countries when

setting base salaries for Executive Directors. For the purposes of comparison, the change in employee remuneration is calculated by reference to the change in salary scale, benefits and annual bonus for a notional employee in each of the base countries, not by reference to the actual change in pay for a group of employees.

Taxable benefits are those that align with the definition of taxable benefits applying in the respective country. In line with the "Single total figure of remuneration for Executive Directors" table, the annual bonus is included in the year in which it was earned.

Change in remuneration of Directors and employees

	RDS employees	UK, US & NL employees	Executive Directors				Non-executive Directors [A]						
			CEO	CFO	NC	AG	EG	CH	CJH	GK	RS	NS	LS
Salaries	N/A	3%	2%	2%	86%	16%	0%	0%	-10%	-62%	-62%	-2%	-61%
Taxable benefits	N/A	0%	-24%	28%	0%	0%	0%	-2%	0%	0%	-64%	-100%	-93%
Annual bonus	N/A	-100%	-100%	-100%	0%	0%	0%	0%	0%	0%	0%	0%	0%

[A] Dick Boer, Martina Hund-Mejean, Sir Andrew Mackenzie and Abraham Schot were appointed as Directors during the course of 2020. They have been excluded from the table, because they had no previous year's remuneration for comparison.

ANNUAL REPORT ON REMUNERATION

continued

Relative importance of spend on pay

The table below sets out distributions to shareholders by way of dividends and share buybacks, and remuneration paid to or receivable by employees for the last five years, together with annual percentage changes.

Relative importance of spend on pay

Year	Dividends and share buybacks [A]		Spend on pay (all employees) [B]	
	\$ billion	Annual change	\$ billion	Annual change
2020	9.1	-64%	12.1	-8%
2019	25.4	26%	13.2	-1%
2018	20.2	29%	13.4	-6%
2017	15.6	4%	14.3	-9%
2016	15	25%	15.7	-8%

[A] Dividends paid, which includes the dividends settled in shares via our Scrip Dividend Programme and repurchases of shares as reported in the "Consolidated Statement of Changes in Equity".

[B] Employee costs, excluding redundancy costs, as reported in Note 26 to the "Consolidated Financial Statements".

Spend on pay can be compared with the major costs associated with generating income by referring to the "Consolidated Statement of Income". Over the last five years, the average spend on pay was 5% of the major costs of generating income. These costs are considered to be the sum of: purchases; production and manufacturing expenses; selling, distribution and administrative expenses; research and development; exploration; and depreciation, depletion and amortisation.

Total pension entitlements (audited)

During 2020, Ben van Beurden and Jessica Uhl accrued retirement benefits under defined benefit plans. The pensions accrued under these plans at December 31, 2020 are set out below. The exchange rates used for conversion into euros and dollars are at December 31, 2020.

Accrued pension (audited)

Thousand	Local	€	\$
Ben van Beurden [A]	1,313	1,313	1,615
Jessica Uhl [B]	1,247	1,014	1,247

[A] The accrued benefits are disclosed on a per annum basis.

[B] Jessica Uhl has an annual choice of two accrual formulas with different forms of benefits. One is in the form of a lifetime annuity and the other allows for a lump-sum payment. She elected to accrue benefits up to 2018 under the latter, and the eventual lump-sum benefit is shown. From 2019, she elected to accrue benefits as a lifetime annuity. The value of this accrued benefit at December 31, 2020 was \$8,156 per annum plus a lump sum of \$227,029. She also has a deferred Dutch defined benefit pension plan, as a result of a prior Shell assignment on local Dutch terms and conditions. The age at which Jessica Uhl can receive any pension benefit without an actuarial reduction under this plan is 60. The value of the deferred pension benefit is €3,427 per annum.

The age at which Ben van Beurden can receive any pension benefit without actuarial reduction is 68 and for Jessica Uhl it is 65. Any pension benefits on early retirement are reduced using actuarial factors to reflect early payment. No payments were made in 2020 regarding early retirement or in lieu of retirement benefits.

Please refer to page 163 for further details (Pension).

External appointments

The Executive Directors held no external appointments in 2020.

Statement of voting at 2020 AGM

Shell's 2020 AGM was held on May 19, 2020, in the Netherlands. The result of the poll in respect of Directors' remuneration was as follows:

Approval of Directors' Remuneration Report

Votes	Number	Percentage
For	3,806,079,000	95.44%
Against	181,791,609	4.56%
Total cast	3,987,870,609 [A]	100.00%
Withheld [B]	25,782,042	

[A] Representing 51.08% of issued share capital.

[B] A vote "withheld" is not a vote under English law and is not counted in the calculation of the proportion of the votes "for" and "against" a resolution.

The result of the poll in respect of the Directors' Remuneration Policy was as follows:

Approval of Directors' Remuneration Policy

Votes	Number	Percentage
For	3,705,707,055	92.91%
Against	282,966,810	7.09%
Total cast	3,988,673,865 [A]	100.00%
Withheld [B]	24,979,832	

[A] Representing 51.09% of issued share capital.

[B] A vote "withheld" is not a vote under English law and is not counted in the calculation of the proportion of the votes "for" and "against" a resolution.

Directors' employment arrangements and letters of appointment

Executive Directors are employed for an indefinite period. Non-executive Directors, including the Chair, have letters of appointment. Details of Executive Directors' employment arrangements can be found in the Directors' Remuneration Policy on page 179.

Further details of Non-executive Directors' terms of appointment can be found in the "Other regulatory and statutory information" on page 189 and the "Governance framework" report on page 128.

Compensation of Directors and Senior Management

During the year ended December 31, 2020, Shell paid and/or accrued compensation totalling \$36 million (2019: \$38 million) to Directors and Senior Management for services in all capacities while serving as a Director or member of Senior Management, including \$3 million (2019: \$3 million) accrued to provide pension, retirement and similar benefits. The amounts stated are those recognised in Shell's income on an IFRS basis. See Note 27 to the "Consolidated Financial Statements".

Personal loans or guarantees were not provided to Directors or Senior Management.

CEO pay ratio

	Option	25th percentile pay ratio	Median pay ratio	75th percentile pay ratio
2020	A	93:1	57:1	38:1
Total pay and benefits:		£55,584	£90,972	£136,007
Salary:		£49,117	£75,365	£118,291
2019	A	147:1	87:1	54:1
Total pay and benefits:		£59,419	£100,755	£161,717
Salary:		£40,417	£56,721	£79,991
2018	A	202:1	143:1	92:1
Total pay and benefits:		£88,112	£124,459	£193,027
Salary:		£53,528	£80,407	£96,074

Shell has chosen to use option A to calculate the CEO pay ratio in accordance with guidance from the UK government that this is the preferred approach and the most statistically accurate method for identifying the ratios. Under option A, a comparable single total figure for all UK employees has been calculated in order to identify the employees whose pay and benefits are at the 25th, 50th and 75th percentiles for comparison with the CEO. Employee pay has been calculated based on the total pay and benefits paid in respect of 2020 for all employees who were employed on December 31, 2020. For part-time workers and joiners in the year, pay and benefits have been annualised based on the proportion of their working time in the UK during the year. This is calculated with an approach consistent with the methodology for determining annual bonuses. The REMCO believes that this provides a fair and reasonable calculation of the pay ratios for Shell employees in the UK.

The ratio of the CEO's pay to the median UK worker is 57. The global pay ratio, calculated by comparing the CEO single figure to the average employee headcount cost, is 50. The ratio has changed for 2020 compared with 2019, mainly because of the decrease in the single figure of remuneration for the CEO as a result of no 2020 annual bonus and the lower LTIP vesting outcome in comparison with 2019. The pay and benefits for the 25th, 50th and 75th percentile employees have also reduced in relation to 2019, primarily because there was no annual bonus for the majority of employees. The REMCO believes this outcome is appropriate and consistent with Shell's philosophy of pay for performance.

Workforce engagement

The REMCO took a wide perspective in making the remuneration decisions for 2020 and determining the 2020 policy. As examples, in 2020 the REMCO reviewed the following:

- Aspects of Shell's response to the COVID-19 pandemic that affected employees' pay and benefits. These included the decisions not to increase salaries for 2021 and to set the annual bonus scorecard outcome at zero, as well as policies that supported the health, safety and well-being of employees.
- The provision of retirement benefits to employees across Shell.
- Remuneration markers such as the CEO pay ratio and gender pay reporting under the UK Equality Act 2010 (Gender Pay Gap Information) Regulations and voluntary ethnicity pay reporting in the UK. The REMCO noted Shell's average UK gender pay gap had narrowed in 2020 to 18.0% (from 18.7% in 2019), continuing the positive trend since 2017 (22.2%). This is due to a continued upward trend in the proportion of women in Shell's upper and upper middle pay quartiles, and the REMCO has confidence in the policies Shell has to increase the representation of women at all levels in the organisation. The REMCO also noted, that in the first year of reporting, the average UK ethnicity pay gap was 8.5%.

Executive remuneration structures in Shell are strongly aligned with the broader Shell pay policy:

- In recent years the Group scorecard architecture has been identical to the Executive Committee and Senior Executive scorecard in terms of measures, weightings and targets.
- Executive Directors and Executive Committee members participate in the LTIP. Around 150 Senior Executives participate in the same plan. The measures and metrics for that plan also apply to 50% of the Performance Share Plan (PSP) awarded to around 16,500 employees.
- All employees in the Group participate in the relevant pension plan for their country based on their date of joining. Shell does not operate separate executive pension arrangements.

This consistency means that less explanation of executive remuneration structures is required than in companies where alignment is not the default practice. To support an ongoing dialogue with employees regarding how pay connects to Company strategy, a video was shared with employees, presented by the REMCO Chair, explaining the key features of the new 2020 Directors' Remuneration Policy in March 2020, alongside an article on the Shell intranet sharing why it matters for employees.

ANNUAL REPORT ON REMUNERATION

continued

STATEMENT OF 2021 PLANNED IMPLEMENTATION OF POLICY

The Directors' Remuneration Policy as detailed on pages 173-181 took effect from May 19, 2020, after it was approved by shareholders at the 2020 AGM. It will be effective until the 2023 AGM, unless a further policy is proposed by Shell and approved by shareholders before then. This section describes elements of the policy that will apply for 2021.

Executive Directors

Salaries

There will be no salary increases for 2021. Salaries will be maintained at 2020 levels, which are €1,588,000 for Ben van Beurden and €1,035,000 for Jessica Uhl. This is consistent with the approach taken for the majority of employees for 2021.

Annual bonus

To ensure that the scorecard remains well aligned with our strategic and operational priorities, the REMCO has reviewed the structure of the 2021 scorecard. The REMCO has decided to focus on four key areas: financial delivery, operational excellence, progress in the energy transition, and safety.

Cash flow from operations (CFFO) remains the metric we will use to measure financial delivery. This reflects our ability to generate the cash necessary to fund investment in our future business and distributions to our shareholders. We are increasing the weighting of this metric from 30% to 35%.

Production and LNG Liquefaction volumes have been retired as performance metrics. Reflecting the ongoing importance of operational delivery, performance will be assessed against two measures:

- Asset management excellence: measured against availability for Upstream, midstream and downstream, each equally weighted, in order to maintain a strong ongoing focus on operating our assets to plan, delivering scheduled downtime activities on time and minimising unscheduled shutdowns; and
- Project delivery excellence: our ability to successfully execute large and complex projects remains essential, and we will continue measuring how well we deliver our material projects on time and to budget.

We are separating out energy transition to provide a clear and visible focus on the importance of making progress in this area. Measures will initially focus on the operational delivery of our ambitions, and we expect this section of the scorecard to evolve and expand as we accelerate the transition of our business to a net-zero emissions business by 2050, in step with society. For 2021, performance will be assessed against:

- GHG abatement: a new metric that measures execution of GHG abatement projects and sets us on a trajectory towards achieving net-zero operational emissions; and
- GHG emissions intensity: no change to this measure, which sets emission-intensity targets for our main lines of business.

Our commitment to safety remains at the heart of everything we do. We are increasing the weighting on safety in the scorecard to 15%. The measures relating to safety will be as follows:

- Personal safety: a new Serious Injury and Fatality Frequency (SIF-F) metric will replace Total Recordable Case Frequency as our measure of personal safety performance. This is to ensure we focus our attention and learning on those incidents with the potential to cause the most serious harm; and
- Process safety: no change to the number of Tier 1 and 2 operational safety incidents as our measure of process safety.

The performance measures, weightings and link to strategy for the 2021 performance year are set out below:

2021 annual bonus scorecard measures and weightings

Performance measure	Weighting
Financial	35%
Operational excellence	35%
Progress in the Energy Transition	15%
Safety	15%
	Link to strategy
Financial ▪ Cashflow from operating activities	Aligned with our financial priorities, reflecting our ability to generate cash to service and reduce debt, pay the dividend and fund capital investment.
Operational excellence ▪ Asset management excellence ▪ Project delivery excellence	These metrics measure the effectiveness with which we operate our assets and portfolio base. This operational performance underpins the successful delivery of our financial framework and ambitions to progress in the energy transition.
Progress in the Energy Transition ▪ GHG abatement ▪ GHG management	These metrics are focused on managing and reducing our operational emissions, supporting our ambition to reduce the emissions from the manufacture of our products by 2050.
Safety ▪ Serious Injury and Fatality Frequency ▪ Tier 1 & 2 process safety	These metrics are designed to ensure an ongoing focus on personal and operational safety.

Annual bonus scorecard targets are not disclosed prospectively because to do so in a meaningful manner would require the disclosure of commercially sensitive information. Scorecard targets will be disclosed in the subsequent Directors' Remuneration Report when they are no longer deemed to be commercially sensitive.

Long-term Incentive Plan

On March 5, 2021, a conditional award of performance shares under the LTIP was made to the Executive Directors resulting in 231,679 Royal Dutch Shell plc A shares (A shares) being conditionally awarded to Ben van Beurden and 69,972 Royal Dutch Shell plc A American Depository Shares (A ADSs) being conditionally awarded to Jessica Uhl. The award had a face value of 264.5% (maximum performance outcome 529%) of the base salary for the CEO and 248.5% (maximum performance outcome 497%) of the base salary for the CFO, excluding potential share price appreciation and dividends.

In making these awards, the REMCO considered the Company's share price and determined to use the closing share price on the award. But to moderate the impact of any potential windfall gains arising from share price volatility in 2020, the 2021 awards have been reduced 11.8% for the CEO and 8.0% for the CFO from the usual target award levels. This is equivalent to a 50% of the share price reduction since the previous award. Further discussion on the REMCO's approach to managing windfall gains is set out on page 155.

For LTIP awards made in 2021, performance will be assessed over a three-year period based on four financial measures and an energy transition condition. The weighting of the energy transition condition has been increased to 20%, reflecting the increasing importance of delivering on the strategic business transformations required to succeed in the energy transition.

The target for the FCF metric over the three-year performance period will be based on the annual operating plan and shareholder guidance. These targets are considered commercially sensitive and will be disclosed retrospectively, with annual updates on progress provided.

The NCF target range for the 2021-2023 LTIP grant is set as a 6-8% reduction from the 2016 NCF of 79 grams of CO₂ equivalent per megajoule. Our leading measures have also evolved as we have deepened our understanding of the speed and direction of the energy transition and revised our business strategies. For 2021-2023 we will measure performance based on three baskets of leading measures:

- building the foundations of a material Power business;
- growing new clean(er) energy product offerings; and
- developing carbon sinks.

The targets for these leading energy transition measures are commercially sensitive, and will be disclosed retrospectively where possible.

2021 LTIP measures and vesting schedule			
Energy transition	20%	Absolute measures	Relative measures
Free cash flow	20%		
TSR	20%		
ROACE growth		20%	
CFFO growth			20%
Link to strategy		Vesting schedule (% of initial LTIP award)	
Energy transition Metrics focused on the strategic business transformations that will seek to enable long-term success in the energy transition.		Metrics: a. NCF reduction target b. Build the foundation of a material Power business c. Grow new clean(er) energy product offerings d. Develop carbon sinks Vesting based on how many targets are achieved: 1/4 = 40% 3/4 = 150% 2/4 = 100% 4/4 = 200% REMCO may take into account other appropriate considerations.	
Free cash flow Recognition of the importance of generating cash after net capital expenditure to service and reduce debt, pay dividends, buy back shares and make future capital investments.		Maximum – 200% Target – 100% Threshold – 40% Below threshold – 0%	
TSR Assessment of actual value created for shareholders.		1st – 200% 2nd – 150% 3rd – 80% 4th or 5th – nil	
ROACE growth Indicator of capital discipline.			
CFFO growth Source of capital expenditure commitments which support sustainable growth based on portfolio and cost management.			
TSR underpin If TSR is in fourth or fifth, vesting is capped at 50% of maximum.			
Holding period Three years post-vesting, which remains in force post-tenure.			

Discretion, adjustment (malus) and recovery (clawback)

Variable pay elements are subject to adjustment (malus) and recovery (clawback) provisions. The REMCO may adjust an award, for example by lapsing part or all of it, reducing the number of shares which would otherwise vest, by imposing additional conditions on it, or imposing a new holding period or applying clawback.

Please refer to the policy section on pages 173, 175 and 177 for a full description of the circumstances under which discretion, malus and clawback might be applied to a variable pay award.

Pension

Ben van Beurden's pension arrangements comprise a defined benefit plan for which the maximum pensionable salary has increased to €100,861 for 2021 and a net pay defined contribution pension plan with an employer contribution of 27% of salary in excess of this amount.

Jessica Uhl's US retirement benefit arrangements include the Shell Pension Plan, a defined benefit plan, and a defined contribution plan with an employer contribution of 10% of salary. She also has a deferred Dutch defined benefit pension plan, as a result of a prior Shell assignment on local Dutch terms and conditions.

Further details of Executive Director pension arrangements can be found on page 163.

ANNUAL REPORT ON REMUNERATION

continued

Non-executive Directors' fees

Non-executive Directors' fees 2021

	€	Other fees
Chair of the Board	850,000	
Non-executive Director	135,000	
Senior Independent Director	55,000	
Audit Committee		Non-executive Directors receive an additional fee of €5,000 for any Board meeting involving intercontinental travel – except for one meeting a year held in a location other than The Hague.
Chair [A]	60,000	
Member	25,000	
Safety, Environment and Sustainability Committee		
Chair [A]	35,000	
Member	17,250	
Nomination and Succession Committee		
Chair [A]	25,000	
Member	12,000	
Remuneration Committee		
Chair [A]	40,000	
Member	17,250	

[A] The chair of a committee does not receive an additional fee for membership of that committee.

The Chair's fee is determined by the REMCO and the annual fee for Charles O. Holliday was set at €850,000 upon appointment in 2015 and will remain unchanged for 2021. Mr Holliday will step down as Chair following the 2021 AGM. Following a review of the competitive positioning of the fee by the REMCO, the annual fee for the new Chair will also be €850,000. The Chair of the Board does not receive any additional fee for chairing the Nomination and Succession Committee or attending any other Board committee meeting.

The Non-executive Directors receive a basic fee. There are additional fees for the Senior Independent Director, a Board committee chair or a Board committee member for each committee. Non-executive Directors receive an additional fee of €5,000 for most Board meetings involving intercontinental travel. Business expenses (including transport between home and office and occasional business-required partner travel) and associated tax are paid or reimbursed by Shell. The Chair has use of a Shell-provided apartment while in The Hague.

The Board reviews Non-executive Directors' fees periodically to ensure that they are aligned with those of other major listed companies, using the largest 30 companies by market capitalisation listed on the FTSE and the European Comparator group as the primary points of reference. The last general review was in 2018. There was a review of the Chair of the Board's fee in 2021 and the Nomination and Succession Committee fees in 2019. Fees will remain unchanged for 2021.

DIRECTORS' REMUNERATION POLICY

The Directors' Remuneration Policy sets out:

- A summary of proposed changes to the Directors' Remuneration Policy, page 173;
- Executive Directors' Remuneration Policy, page 174; and
- Non-executive Directors' Remuneration Policy, page 180.

This section describes the Directors' Remuneration Policy (Policy) which, following shareholder approval at the 2020 Annual General Meeting (AGM), came into effect from May 19, 2020, and will be effective until the 2023 AGM, unless a further policy is proposed by Royal Dutch Shell plc (the Company) and approved by shareholders in the meantime.

The principles underpinning the REMCO's approach to executive remuneration are the foundation for everything we do, and are:

- Alignment with Shell's strategy: the Executive Directors' compensation package should be strongly linked to the achievement of stretching targets that are seen as indicators of the execution of Shell's strategy;
- Pay for performance: the majority of the Executive Directors' compensation, (excluding benefits and pensions), should be linked directly to Shell's performance through variable pay instruments;
- Competitiveness: remuneration levels should be determined by reference internally against Shell's Senior Management and externally against companies of comparable size, complexity and global scope;
- Long-term creation of shareholder value: Executive Directors should align their interests with those of shareholders by holding shares in Shell;
- Consistency: the remuneration structure for Executive Directors should generally be consistent with the remuneration structure for Shell's Senior Management. This consistency builds a culture of alignment with Shell's purpose and a common approach to sharing in Shell's success;
- Compliance: decisions should be made in the context of the Shell General Business Principles and Code of Conduct. The REMCO also

seeks to ensure compliance with applicable laws and corporate governance requirements when designing and implementing policies and plans; and

- Risk assessment: the remuneration structures and rewards should meet risk-assessment tests to ensure that shareholder's interests are safeguarded and that inappropriate actions are avoided.

The Executive Directors' remuneration structure is made up of a fixed element of basic pay and two variable elements: the annual bonus (50% delivered in shares) and the Long-term Incentive Plan (LTIP). Variable pay outcomes are conditional on the successful execution of the operating plan in the short term and the delivery of strategic goals and financial outperformance over the longer term. The award of shares under the bonus and LTIP, along with significant shareholding requirements, are intended to ensure executives have a sizeable shareholding in Royal Dutch Shell plc (the Company) and experience the same outcomes as shareholders.

During 2018 and 2019, the REMCO reviewed the Remuneration Policy to ensure that the Policy continues to be aligned with Shell's strategy, including delivery of shareholder returns. REMCO determined that while the current policy remains appropriate in many respects, certain changes will support the REMCO to simplify remuneration structures and address the management of quantum. For each area of the policy, the REMCO has considered market practice, the corporate governance environment and feedback from shareholders. The Safety, Environment and Sustainability Committee (SESCo) has provided input to the development of the sustainable development and energy transition metrics. Any potential conflict of interest is mitigated by the independence of the REMCO members and the REMCO Terms of Reference.

A summary of the main changes to the Policy for the Executive Directors is outlined below. No significant changes were made to the Policy for Non-executive Directors.

Remuneration element	Proposed Changes to Policy	Rationale for the change
Annual Bonus	<ul style="list-style-type: none"> ▪ Reduction of the CEO's target bonus from 150% to 125%; and ▪ Removal of the individual performance factor for Executive Directors. 	<ul style="list-style-type: none"> ▪ Simplification: the asymmetry in the CEO's bonus structure and the inclusion of individual performance factors were creating undue complexity; and ▪ Transparency: The annual bonus is now solely linked to the performance of Shell to support clarity and transparency of outcomes.
Long-Term Incentive Plan	<ul style="list-style-type: none"> ▪ Reduction of the target LTIP grant from 400% to 300% of base salary; and ▪ Inclusion of an energy transition metric. 	<ul style="list-style-type: none"> ▪ Management of quantum: to moderate the quantum of pay and assist the REMCO in managing the range of outcomes; and ▪ Alignment to strategy: inclusion of the energy transition metric strengthens the LTIP's alignment to Shell's strategy and purpose.
Discretion, Malus and Clawback	<ul style="list-style-type: none"> ▪ After reviewing the single figure outcomes for the year, the REMCO will consider an adjustment for the purposes of managing remuneration quantum, taking into account performance, the operation of the remuneration structures and any other relevant considerations. An explanation of any discretionary adjustment would be set out in the relevant Director's Remuneration Report; ▪ Alignment of malus and clawback provisions so that these are the same. Inclusion of corporate failure as an adjustment event; and ▪ Amendment of provisions in the share plan such that for future grants, awards may be adjusted for any reason. 	<ul style="list-style-type: none"> ▪ Corporate governance: to assist the REMCO in managing the risks from behavioural-based incentive schemes; and ▪ Management of quantum: to assist the REMCO in managing the range of outcomes.
Pension	<ul style="list-style-type: none"> ▪ New Executive Directors who are members of a defined benefit pension arrangement will have their pensionable salary capped at the salary applicable immediately prior to appointment, with the exception of existing US base country participants who will have the bonus removed from the definition of pensionable base salary instead. The Executive Director will join a defined contribution scheme in their base country for contributions made in respect of salary above the defined benefit pensionable salary, or in exceptional circumstances, receive a cash allowance equivalent to the contribution above the cap; and ▪ For recruitment: Explicit confirmation that new appointees, whether internally promoted or newly hired, will be provided with a pension in line with the wider workforce in their base country. 	<ul style="list-style-type: none"> ▪ Management of quantum: to moderate the quantum of pay and assist the REMCO in managing the range of outcomes; and ▪ Corporate governance: to adopt best practice in line with external guidelines.
Shareholding Requirement	<ul style="list-style-type: none"> ▪ CFO requirement increased to 500% of base salary; and ▪ Extended so it applies for a period of two years post-employment (at the lower of the shareholding requirement or the number of shares held at departure). 	<ul style="list-style-type: none"> ▪ Alignment with shareholders: further aligns executives with the long-term interests of shareholders.

DIRECTORS' REMUNERATION POLICY continued

EXECUTIVE DIRECTORS

Executive Directors' remuneration policy table

Purpose and link to strategy	Maximum opportunity	Operation and performance management
Salary and pensionable base salary		
Provides a fixed level of earnings to attract and retain Executive Directors.	€2,000,000	<p>Reviewed annually with adjustments effective from January 1.</p> <p>In making salary determinations, the REMCO will consider:</p> <ul style="list-style-type: none"> ■ the market positioning of the compensation packages; ■ comparison with Senior Management salaries; ■ the employee context, and planned average salary increase for other employees across the Netherlands, the UK and the USA; ■ the experience, skills and performance of the Executive Director, or any change in the scope and responsibility of their role; ■ general economic conditions, Shell's financial performance, and governance trends; and ■ the impact of salary increases on pension benefits and other elements of the package. <p>For Executive Directors employed outside their base country, euro base salaries are translated into their home currency for pension purposes. Pensionable base salaries are maintained in line with euro base salaries taking into account exchange rate fluctuations and other factors as determined by the REMCO.</p>
Benefits		
Provides benefits, in line with those applicable to the wider workforce, in order to attract and retain Executive Directors.	<p>The maximum opportunity is the cost of providing the benefit under Shell's standard policy. These costs can vary.</p> <p>For certain benefits, for example, relocation and tax equalisation, the maximum opportunity will be the grossed-up cost of meeting the specific Executive Director's costs.</p>	Typical benefits include car allowances and home-to-office transport, risk benefits (for example ill-health, disability or death-in-service), security provision, and employer contributions to insurance plans (such as medical). Precise benefits will depend on the Executive Director's specific circumstances. Post-retirement benefits such as healthcare and ongoing security provision may be applicable. Shell's mobility policies may apply, such as for relocation and tax return preparation support, as may tax equalisation related to expatriate employment prior to Board appointment, or in other limited circumstances to offset double taxation. The REMCO may adjust the range and scope of the benefits offered in the context of developments for other employees in relevant countries. Personal loans or guarantees are not provided to Executive Directors.
Annual bonus		
Rewards the delivery of short-term operational targets as derived from Shell's operating plan.	<p>Maximum bonus (as a percentage of base salary):</p> <ul style="list-style-type: none"> ■ Chief Executive Officer (CEO): 250% ■ Chief Financial Officer (CFO): 240% <p>Target levels (as a percentage of base salary):</p> <ul style="list-style-type: none"> ■ CEO: 125% ■ CFO: 120% 	<ul style="list-style-type: none"> ■ The bonus is determined by reference to performance from January 1 to December 31 each year; ■ Annual bonus = base salary x target bonus % x scorecard result (0-2); ■ Taking the Shell operating plan into consideration, REMCO sets stretching scorecard targets and weightings which support the delivery of the strategy. Measures are related to financial performance, operational excellence and sustainable development. Indicative weightings are 30%, 50% and 20% respectively. This balance ensures that the achievement of short-term financial performance does not undermine future shareholder value creation; ■ Scorecard targets will be disclosed in a subsequent Directors' Remuneration Report when they are no longer deemed to be commercially sensitive; ■ There are no prescribed thresholds or minimum levels of performance that equate to a prescribed payment under the Policy and this structure can result in no bonus being awarded; ■ The annual bonus is subject to malus provisions before it is delivered and to clawback provisions thereafter; ■ The REMCO retains the ability to adjust performance measure targets and weightings year-by-year within the overall target and maximum payouts approved in the Policy; and ■ In the event that another Executive Director joins the Board, the REMCO will determine their target and maximum bonus, which will not exceed the target and maximum for the CEO.

Executive Directors' remuneration policy table continued

Purpose and link to strategy	Maximum opportunity	Operation and performance management
Long-term Incentive Plan (LTIP)		
Rewards longer-term value creation linked to Shell's strategy. The measures predominantly focus on financial growth and increases in value compared with the other oil majors, supported by measures focused on the achievement of Shell's ambitions in the energy transition.	Target award of 300% base salary.	<ul style="list-style-type: none"> Award levels are determined annually by the REMCO within the approved policy maximum; Awards may vest between 0% and 200% of the initial award, depending on Shell's performance assessed on either an absolute basis against strategic targets or on a relative basis against the other oil majors; Performance metrics and targets are set by the REMCO at the beginning of the relative performance period. When setting performance targets, the REMCO allocates weightings to each metric as it considers appropriate, taking into account strategic priorities; For 2020, performance is assessed over three years based 90% on financial metrics (TSR, ROACE, FCF and CFFO) which support our strategic ambition to provide a world-class investment case and 10% on a measure focused on thriving in the energy transition; Additional shares are released representing the value of dividends payable on the vested shares, as if these had been owned from the award date; LTIP awards (net of tax) must be held for a further three years to align with Shell's longer-term time horizon and strategy; The LTIP award is subject to malus provisions before it is delivered and to clawback provisions thereafter; The REMCO may adjust or change the LTIP measures, targets and weightings to ensure continued alignment with Shell's strategy; and In the event that another Executive Director joins the Board, the REMCO will determine their award level.
Discretion, Malus and Clawback		
Enables the management of risks from behavioural-based incentive schemes and the REMCO to manage the range of pay outcomes.	Adjustment events exist for the purposes of applying malus and clawback.	The REMCO retains the discretion to adjust mathematical outcomes of the annual bonus scorecard and / or LTIP vesting for any Executive Director if and to the extent that it considers this appropriate at their sole discretion.
	The REMCO retains discretion to adjust pay outcomes.	<p>The use of any discretion will be disclosed and explained.</p> <p>The REMCO may adjust pay outcomes for the purposes of managing quantum. This would be done at the REMCO's discretion after considering single figure outcome for the year, taking into account Shell's performance, the operation of the remuneration structures and any other relevant considerations.</p>
Please refer to page 177 for a summary of the defined adjustment events.		
Pension		
Provides a competitive retirement provision under the individual's base country benefits policy, to attract and retain Executive Directors.	Determined by the rules of the base country pension plan of which the Executive Director is a member.	Executive Directors' retirement benefits are maintained in line with those of the wider workforce in their base country. Only base salary is pensionable, unless country plan regulations specify otherwise and cannot legally be disallowed. The rules of the relevant plans detail the pension benefits which members can receive. The REMCO retains the right to amend the form of any Executive Director's pension arrangements where appropriate, for example in response to changes in legislation to ensure the original objective of this element of remuneration is preserved.
		<p>New Executive Directors, whether internal appointees or external hires, will be provided with a retirement benefit in line with the wider workforce in their base country. For individuals who are members of a defined benefit pension arrangement:</p> <ul style="list-style-type: none"> The pensionable salary will be capped at the salary applicable immediately prior to appointment, with the exception of existing US base country participants who will have the bonus removed from the definition of pensionable base salary instead; and The Executive Director will join a defined contribution scheme in their base country for contributions made in respect of salary above the defined benefit pensionable salary, or in exceptional circumstances, receive a cash allowance equivalent to the contribution above the cap.
Shareholding requirement		
Aligns interests of Executive Directors with those of shareholders by creating a connection between individual wealth and Shell's long-term performance.	Shareholding (% of base salary): <ul style="list-style-type: none"> CEO: 700% CFO: 500% 	<p>Executive Directors are expected to build up their shareholding to the required level over a period of five years from appointment and, once reached, to maintain this level for the full period of their appointment. The intention is for the shareholding guideline to be reached through retention of vested shares from share plans. The REMCO will monitor individual progress and retains the ability to adjust the guideline in special circumstances on an individual basis.</p> <p>The Executive Director will be required to maintain their shareholding requirement (or existing shareholding if lower) for a period of two years from the date they cease to be an employee.</p> <p>In the event that another Executive Director joins the Board the REMCO will determine their Shareholding requirement level, which will not be less than 200% in line with corporate governance best practice.</p>

DIRECTORS' REMUNERATION POLICY continued

Notes to the Executive Directors' remuneration policy table

Comparator group

The benchmarking comparator group consists of the other oil majors (BP, Chevron, ExxonMobil, and Total) and a selection of major Europe-based companies.

The comparator companies are reviewed by the REMCO as part of the Remuneration Policy review every three years. The last review took place in 2019 in preparation for the 2020 Directors' Remuneration Policy vote. No changes to the comparator group are proposed.

The other oil majors are included in the comparator group as these represent our closest direct competitors operating in similar market conditions. The Europe-based companies are selected based on their size, complexity and global reach. The REMCO uses benchmark data from these companies only as a guide to the competitiveness of the remuneration packages. We do not seek to position our remuneration at any defined point against the benchmarked positions.

The REMCO retains the right to alter the comparator group as it sees fit in order to ensure it remains an appropriate and relevant benchmark.

2020 European comparator group

Allianz	Daimler	Rio Tinto
AstraZeneca	Diageo	Roche
BAT	GlaxoSmithKline	Siemens
Bayer	Nestle	Unilever
BHP Billiton	Novartis	Vodafone

Benefits

Benefits for Executive Directors deemed taxable in the UK are included as taxable benefits in the single total figure of remuneration table. These elements may include transport to and from home and office, the provision of home security, and occasional business-required partner travel, which are generally considered legitimate business expenses rather than components of remuneration.

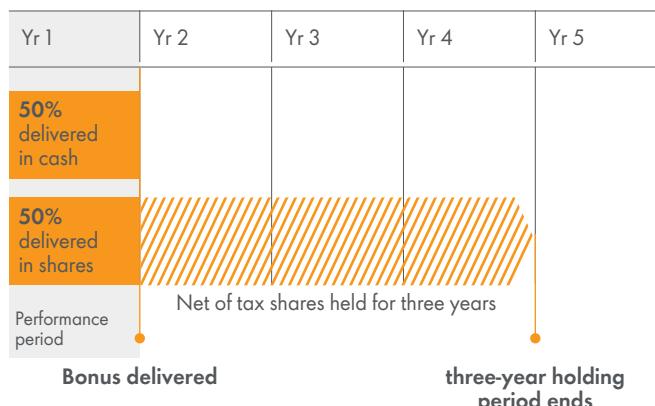
Annual bonus

For the 2020 performance year, the scorecard framework will consist of cash flow from operating activities (30% weight), operational excellence (50% weight) and sustainable development (20% weight). Targets are derived from the annual business plan. These measures are designed to drive focus on the financial and operational performance critical to our success as a world-class investment case and to maintain a strong licence to operate, underpinned by our commitment to safety and journey to thrive in the energy transition. The REMCO believes it is important for annual variable pay to remain balanced, with operational and environmental components, complementing the LTIP's focus on longer-term financial and strategic outcomes. The same annual bonus scorecard applies to the majority of group employees, supporting consistency of remuneration and alignment of objective across employees and senior management.

For future years, the specific measures and weightings for the annual bonus scorecard will be reviewed annually by the REMCO and adjusted accordingly to evolve with Shell's strategy and circumstances. The annual review will also consider the scorecard target and outcome history over a decade to ensure that the targets set remain stretching but realistic.

The REMCO retains the right to exercise its judgement to adjust the mathematical bonus scorecard outcome to ensure that the bonus scorecard outcome for Executive Directors reflects other aspects of Shell's performance which the REMCO deems appropriate for the reported year.

Annual bonus – time horizon



Long-term Incentive Plan

The LTIP rewards longer-term performance linked to Shell's strategy, which includes cash generation, capital discipline, value created for shareholders as well as progress towards meeting our ambition to thrive in the energy transition.

For 2020, the absolute measures will be FCF and energy transition, and relative growth compared with our peers will be based on: TSR, ROACE and CFFO. The relative measures, which focus on outperforming our closest competitors on key financial metrics, are supported by the absolute FCF metric which provides cash to service and repay debt, make shareholder distributions and fund capital investment. These are aligned with our strategic ambition to be a world-class investment case, and are supported by an energy transition measure focused on thriving in the energy transition and delivering our NCF target.

For the relative measures, 200% vests for first position, 150% for second, 80% for third and 0% for ranking fourth or fifth. The comparator group consists of four of the strongest companies in our industry (BP, Chevron, ExxonMobil and Total). Outperforming Shell's closest competitors on key financial metrics is challenging. A vesting outcome of 80% for median performance (40% of maximum) in a small comparator group is considered appropriate by the REMCO. The REMCO is aware that vesting for median performance is generally set at a limit of 25% of maximum for other UK companies. However, these are typically applied against a larger comparator group.

The REMCO will regularly review the measures, weightings and comparator group, and retains the right to adjust these to ensure that the LTIP continues to serve its intended purpose with a stretching level of challenge. If the REMCO was to propose any material changes to the LTIP performance metrics, it would consult with major shareholders.

TSR underpin

If the TSR ranking is fourth or fifth, the level of the award that can vest on the basis of the other measures will be capped at 50% of the maximum payout for the LTIP.

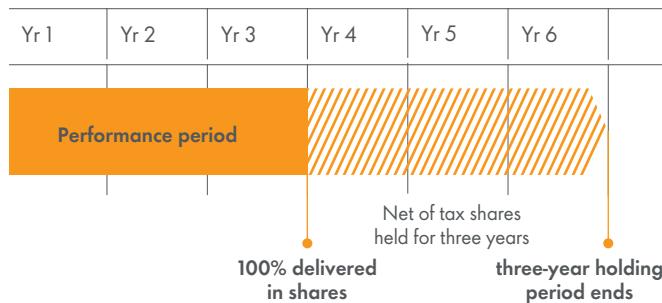
The detailed weightings and metrics applicable to the 2020 bonus scorecard are set out on page 160.

The detailed weightings and metrics applicable to the 2020 grant are set out on page 164.

Performance Period

LTIP performance is assessed over a three-year period. Vested shares from the LTIP are subject to a further three-year holding period post-vesting. This holding period commences on the date of vesting and remains in force beyond an Executive Director's tenure. This time horizon is deemed to be suitable for incentive purposes but is recognised as short relative to some of Shell's operations. However, the REMCO believes that it provides for broad alignment with shareholder interests when coupled with significant shareholding requirements.

LTIP time horizon



Discretion, malus and clawback

Variable pay awards may be made subject to adjustment events. At the discretion of REMCO, such an award may be adjusted before delivery (malus) or reclaimed after delivery (clawback) if an adjustment event occurs.

Adjustment events will be specified in award documentation and it is intended that they will, for example, relate to restatement of financial statements due to material non-compliance with a financial reporting requirement; misconduct by an Executive Director or misconduct through their direction or non-direction; any material breach of health and safety or environment regulations; serious reputational damage to Shell; material failure of risk management; corporate failure; or other exceptional events as determined at the discretion of the REMCO. The REMCO retains the right to alter the list of adjustment events in respect of future awards.

In addition, the REMCO retains the discretion to adjust mathematical outcomes if and to the extent that it considers this appropriate. This power to adjust the outcomes is broad and includes adjusting the outcomes to zero. For example, an adjustment might be made if the REMCO considers:

- The mathematical outcomes do not reflect the wider financial or non-financial performance of RDS or the participant over the performance period;
- The LTIP vesting percentage is not appropriate in the context of circumstances that were unexpected or unforeseen at award; and
- There is any other reason why an adjustment is appropriate.

It is not anticipated that discretion would be used for upwards adjustment. If, in exceptional circumstances, it was considered, this would be done only after consultation with major shareholders.

Performance outcomes and/or share price appreciation make it difficult to predict the final amounts delivered under the LTIP at the time of award. In years where the vesting outcome makes the total remuneration

inappropriate for any Executive Director, the REMCO will consider an adjustment to the annual bonus outcome or the LTIP vesting outcome for the purposes of managing remuneration quantum. In making any adjustment to the annual bonus or LTIP vesting outcome for this purpose REMCO will consider the overall level of remuneration for the Executive Director, the operation of the annual bonus, the operation of the LTIP, the wider performance of Shell over the performance periods, as well as the internal context for other employees.

An explanation of any discretionary adjustment would be set out in the relevant Directors' Remuneration Report.

Treatment of outstanding awards

Awards granted prior to the approval and implementation of this Policy and/or prior to an individual becoming an Executive Director will continue to vest and be delivered in accordance with the terms of the original award even if this is not consistent with the terms of this Policy.

As at March 10, 2020, this applies to Executive Directors Ben van Beurden and Jessica Uhl who each have outstanding awards under the LTIP.

Shareholding

The REMCO believes significant shareholding by Executive Directors is an important way of ensuring that shareholders and Executive Directors share the same priorities. Shareholding is one of Shell's core remuneration principles as it creates a balanced connection between individual wealth and Shell's long-term performance. This will support effective governance and an ownership mindset. Significant shareholding requirements reflect the performance timescales of Shell and are aligned with absolute shareholder return.

The CEO is expected to build up a shareholding of seven times their base salary over five years from appointment. The CFO is expected to build up a shareholding of five times their base salary over the same period. In the event of an increase to the guideline multiple of salary, for every additional multiple of salary required, the director will have one extra year to reach the increased guideline, subject to a maximum of five years from the date of the change.

Executive Directors will be required to maintain their shareholding requirement (or their existing shareholding if less than the guideline) for a period of two years post-employment.

The holding periods for LTIP vested shares and shares delivered as part of the annual bonus continue to apply after Executive Directors leave employment.

Differences for Executive Directors from other employees

The remuneration structure and approach to setting remuneration levels is consistent across Shell, with consideration given to location, seniority and responsibilities. However, a higher proportion of total remuneration is tied to variable pay for Executive Directors and members of Senior Management.

The salary for each Executive Director is determined based on the indicators in the "Executive Directors' remuneration policy table", which reflect the international nature of the Executive Directors' labour market. The salary for other employees is normally set on a country basis.

DIRECTORS' REMUNERATION POLICY continued

Executive Directors are eligible to receive the standard benefits and allowances provided to other employees. The provisions which are not generally available for other employees are described in "Benefits".

The methodology used for determining the annual bonus for Executive Directors is broadly consistent with the approach for Shell employees generally. However, bonuses for the majority of Shell employees are determined taking into account individual and business performance, whereas bonuses for Executive Directors are based solely on business performance. Although the makeup and weightings scorecard used for the majority of Shell employees is currently aligned with the scorecard, these scorecards may differ if required to support the achievement of business objectives. All Executive Directors and Executive Committee members receive 50% of their annual bonus in shares, which are subject to a three-year holding period.

Executive Directors are not eligible to receive new awards under employee share plans other than the LTIP, although awards previously granted will continue to vest in accordance with the terms of the original award. Selected employees participate in the Performance Share Plan (PSP). The operation of the PSP is similar to the LTIP, but currently differs, for example, in some performance measures and their relative weightings. As at March 2020, around 51,000 employees participate in one or more of Shell's global share plans and/or incentive plans, further supporting alignment with shareholder interests.

Executive Directors' retirement benefits are maintained in line with those of the wider workforce in their base country.

Illustration of potential remuneration outcomes

The charts on this page represent estimates under four performance scenarios ("Minimum", "On-target", "Maximum" and "Maximum", assuming a 50% share price appreciation between award and vest") of the potential remuneration outcomes for each Executive Director resulting from the application of 2020 base salaries to awards made in accordance with the proposed Policy. The majority of Executive Directors' remuneration is delivered through variable pay elements, which are conditional on the achievement of stretching targets.

The REMCO will review the formulaic Single Figure outcome relative to the quality of performance outcomes and adjust these, taking into account Shell's performance, shareholder experience, the operation of the remuneration structures and any other relevant factors, to ensure that the highest variable pay outcomes are only achieved in years with the highest quality performance.

The scenario charts are based on future Policy award levels and are combined with projected single total figures of remuneration. The pay scenarios are forward-looking and only serve to illustrate the future Policy. For simplicity, the minimum, on-target and maximum scenarios assume no share price movement and exclude dividend accrual, for the portion of the bonus paid in shares and the LTIP, although dividend accrual during the performance and holding period applies. The scenarios are based on the current CEO (Ben van Beurden) and CFO (Jessica Uhl) roles.

Performance scenarios

	Minimum	Target	Maximum[A]
Base salary (2020)	✓	✓	✓
Benefits (2019 actual)	✓	✓	✓
Pension (2020 estimate)	✓	✓	✓
Bonus	NIL	125% CEO 120% CFO	250% CEO 240% CFO
LTIP	NIL	300% CEO 270% CFO	600% CEO 540% CFO

[A] Maximum assuming 50% share price appreciation.



Recruitment

The REMCO determines the remuneration package for new Executive Director appointments. These appointments may involve external or internal recruitment or reflect a change in role of a current Executive Director.

When determining remuneration packages for new Executive Directors, the REMCO will seek a balanced outcome which allows Shell to:

- attract and motivate candidates of the right quality;
- take into account the individual's current remuneration package and other contractual entitlements;
- seek a competitive pay position relative to our comparator group, without overpaying;
- encourage relocation if required; and
- honour entitlements (for example, variable remuneration) of internal candidates before their promotion to the Board. The REMCO will follow the approach set out in the table below when determining the remuneration package for a new Executive Director.

Recruitment – Remuneration package

Component	Approach	Maximum
Ongoing remuneration	The salary, benefits, annual bonus, long-term incentives and pension benefits will be positioned and delivered within the framework of the Executive Directors' remuneration policy.	As stated in the "Executive Directors' remuneration policy table".
Compensation for the forfeiture of any awards under variable remuneration arrangements	To facilitate external recruitment, one-off compensation in consideration for forfeited awards under variable remuneration arrangements entered into with a previous employer may be required. The REMCO will use its judgement to determine the appropriate level of compensation by matching the value of any lost awards under variable remuneration arrangements with the candidate's previous employer. This compensation may take the form of a one-off cash payment or an additional award under the LTIP. The compensation can alternatively be based on a newly created long-term incentive plan arrangement where the only participant is the new director. The intention is that any such compensation would, as far as possible, align to the duration and structure of the award being forfeited.	An amount equal to the value of the forfeited variable remuneration awards, as assessed by the REMCO. Consideration will be given to appropriate performance conditions, performance periods and clawback arrangements.
Replacement of forfeited entitlements other than any awards under variable remuneration arrangements	There may also be a need to compensate a new Executive Director in respect of forfeited entitlements other than any awards under variable remuneration arrangements. This could include, for example, pension or contractual entitlements, or other benefits. On recruitment, these entitlements may be replicated within the Executive Directors' remuneration policy or valued by the REMCO and compensated in cash.	An amount equal to the value of the forfeited entitlements, as assessed by the REMCO.
	In cases of internal promotion to the Board, any commitments made which cannot be effectively replaced within the Executive Directors' remuneration policy may, at the REMCO's discretion, continue to be honoured.	
Exceptional recruitment incentive	Apart from the ongoing annual remuneration package and any compensation in respect of the replacement of forfeited entitlements, there may be circumstances in which the REMCO needs to offer a one-off recruitment incentive in the form of cash or shares to ensure the right external candidate is attracted (e.g. to the industry). The REMCO recognises the importance of internal succession planning but it must also have the ability to compete for talent with other global companies. The necessity and level of this incentive will depend on the individual's circumstances. The intention will be that this is only used in genuinely exceptional circumstances.	Subject to the limits set out in the "Executive Directors' remuneration policy table".
Pension	New appointees will be provided with a pension in line with the wider workforce in their base country. For defined benefit members: <ul style="list-style-type: none"> ■ The pensionable salary is capped at executive committee level pay for defined benefit purposes (with the exception of participants in the US plan where the bonus is removed from the definition of pensionable pay); and ■ The member joins an appropriate base country defined contribution mechanism in excess of the cap, or exceptionally a pension cash allowance equivalent to the defined contribution level is payable in excess of the cap. 	In accordance with the pension provision applicable to the wider workforce in the base country.

Executive Directors' employment arrangements and letters of appointment

The Dutch Executive Directors are employed for an indefinite period. Executive Directors with the Netherlands as their base country will be employed on the basis of a contract of employment governed by Dutch employment law. For Executive Directors with a base country other than the Netherlands, REMCO will determine their employment arrangements based on a number of considerations, including Dutch immigration requirements and base country retirement benefits. Executive Directors' employment arrangements are available for inspection at the AGM or on request. For further details on appointment and re-appointment of Directors, see the "Governance Framework" on page 128 and "Other Regulatory and Statutory Information" on page 189.

End of employment

Notice period

Employment arrangements of Executive Directors can generally end by either the employee or the employer providing one month's notice, or the applicable statutory notice period. For example, under Dutch law, the statutory notice period for the employer will vary in line with the length of service, with the maximum being four months' notice. Under Dutch law, termination payments are not linked to the contract's notice period.

The Netherlands statutory end-of-employment compensation

With effect from July 1, 2015, employment legislation in the Netherlands introduced statutory end-of-employment compensation. Under this legislation, every termination (other than following retirement or for cause) of a Dutch employment contract that has continued for a minimum of two years will give rise to an obligation to pay the departing employee transition compensation ("transitievergoeding"). The statutory compensation is capped at one times the annual salary, which is deemed to include variable pay such as the annual bonus. Executive Directors are expected not to claim transition compensation or any other applicable statutory compensation over and above the agreed compensation for loss of office as set out in the "End of employment" table on page 180.

Outstanding entitlements

In cases of resignation or dismissal for cause, fixed remuneration (base salary, benefits, and employer pension contributions) will cease on the last day of employment, variable remuneration elements will generally lapse and the Executive Director is not eligible for compensation for loss of office.

The information, on page 180, generally applies to termination of employment by Shell giving notice, by mutual agreement, or in situations where the employment terminates because of retirement with Shell consent at a date other than the normal retirement date, redundancy or in other similar circumstances at the REMCO's discretion.

DIRECTORS' REMUNERATION POLICY continued

End of employment

Provision	Policy
Compensation for loss of office	<p>For Executive Directors appointed between January 1, 2011 and December 31, 2016, employment contracts include a cap on termination payments of one times annual pay (base salary plus target bonus). Delivery of compensation is mitigated by a contractual obligation for the Executive Director to seek alternative employment and Shell's ability to implement phased payment terms.</p> <p>For Executive Directors appointed on or after January 1, 2017, the REMCO may offer a termination payment of up to one times base salary (target bonus will not be included). However, REMCO may be obligated to pay statutory compensation over and above the compensation for loss of office to a departing Executive Director who asserts a statutory claim thereto. Delivery of compensation is mitigated by a contractual obligation for the Executive Director to seek alternative employment and Shell's ability to implement phased payment terms.</p> <p>The provision of standard end-of-employment benefits such as repatriation costs, security provision and outplacement support may also be included, as deemed reasonable by the REMCO.</p> <p>The REMCO may adjust the termination payment for any situation where a full payment is inappropriate, taking into consideration applicable law, corporate governance provisions, the applicability of any statutory compensation and the best interests of Shell and shareholders as a whole.</p>
Annual bonus	<p>Any annual bonus in the year of departure is prorated based on service. Depending on the timing of the departure, the REMCO may consider the latest scorecard position or defer payment until the full-year scorecard result is known.</p> <p>Bonuses delivered in shares represent the bonus which a participant has already earned and carry no further performance conditions; therefore, these shares will be unrestricted at the conclusion of the normal deferral or holding period respectively and no proration will apply.</p>
LTIP	Outstanding awards are prorated on a monthly basis, by reference to the Executive Director's service within the performance period. They will generally survive the end of employment and will remain subject to the same vesting performance conditions, and malus and clawback provisions, as if the Executive Director had remained in employment. The three-year holding period will also remain in force for any awards made on or after January 1, 2017. If the participant dies before the end of the performance period, the award will vest at the target level on the date of death. In case of death after the end of the performance period, the award will vest as described in this Policy.

NON-EXECUTIVE DIRECTORS

Non-executive Directors' remuneration policy table

Fee structure	Approach to setting fees	Other remuneration
Non-executive Directors (NEDs) receive a fixed annual fee for their directorship. The size of the fee will differ based on the position on the Board: Chair of the Board fee or standard Non-executive Director fee.	The Chair's fee is determined by the REMCO. The Board determines the fees payable to NEDs. The maximum aggregate annual fees will be within the limit specified by the Articles of Association and in accordance with the NEDs' responsibilities and time commitments.	Business expenses incurred in respect of the performance of their duties as a NED will be paid or reimbursed by Shell. Such expenses could include transport between home and office and occasional business-required partner travel. NEDs may receive a token of recognition on retirement from the board. The maximum value for this is €300. Where required, the Chair is offered Shell-provided accommodation in The Hague. The REMCO has the discretion to offer other benefits to the Chair as appropriate to their circumstances. Where business expenses or benefits create a personal tax liability to the Director, Shell may cover the associated tax.
Additional annual fee(s) are payable to any Director who serves as Senior Independent Director, a Board committee chair, or a Board committee member.	The Board reviews NED fees periodically to ensure that they are aligned with those of other major listed companies.	The Chair and the other NEDs cannot receive awards under any incentive or performance-based remuneration plans, and personal loans or guarantees are not granted to them.
A NED receives either a chair or member fee for each committee. This means that a chair of a committee does not receive both fees.		NEDs do not accrue any retirement benefits as a result of their non-executive directorships with Shell.
NEDs receive an additional fee for any Board meeting involving intercontinental travel – except for one meeting a year held in a location other than The Hague.		NEDs are encouraged to hold shares with a value equivalent to 100% of their fixed annual fee and maintain that holding during their tenure.

Non-executive Directors' letters of appointment

NEDs, including the Chair, have letters of appointment. NEDs' letters of appointment are available for inspection at the AGM or on request. For further details on appointment and re-appointment of Directors, see the "Governance Framework" on page 128 and "Other Regulatory and Statutory Information" on page 189.

Non-executive Director recruitment

The REMCO's approach to setting the remuneration package for NEDs is to offer fee levels and specific benefits (where appropriate) in line with the "Non-executive Directors' remuneration policy table" and subject to the Articles of Association. NEDs are not offered variable remuneration or retention awards.

When determining the benefits for a new Chair, the individual circumstances of the future Chair will be taken into account.

Non-executive Director termination of office

No payments for loss of office will be made to NEDs.

Consideration of overall pay and employment conditions

When setting the Policy, no specific employee groups were consulted. However, Shell seeks to promote and maintain good relations with employee representative bodies as part of its employee engagement performance as required.

When determining Executive Directors' remuneration structure and outcomes, the REMCO reviews a set of information, including relevant reference points and trends, which includes internal data on employee remuneration (for example, employee relations matters in respect of remuneration and average salary increases applying in the Netherlands, UK and the USA). During the Policy review, pay and employment conditions of the wider Shell employee population were taken into account by adhering to the same performance, rewards and benefits philosophy for the Executive Directors, as well as overall benchmarking principles. Furthermore, any potential differences from other employees (see "Differences for Executive Directors from other employees") were taken into account when providing the REMCO with advice in the formation of this Policy.

Dialogue between management and employees is important, with the annual Shell People Survey being one of the principal means of gathering employee views on a range of matters. The Shell People Survey includes questions inviting employees' views on their pay and benefit arrangements. Shell also encourages share ownership among employees, and many are shareholders who are able to participate in the vote on the Policy at the AGM.

The REMCO is kept informed by the CEO, the Chief Human Resources & Corporate Officer and the Executive Vice President Remuneration and HR Operations on the bonus scorecard and any relevant remuneration matters affecting other senior executives, extending to multiple levels below the Board and Executive Committee.

Consideration of shareholder views

The REMCO engages with major shareholders on a regular basis throughout the year and this allows it to hear views on Shell's remuneration approach and test proposals when developing or evolving the Policy. Recent examples of the REMCO responding to shareholder views include: considering the quantum of executive pay and the use of alternative reward structures; introducing the Energy Transition metric to the LTIP in line with our strategic ambitions; removing the individual performance modifier from the calculation of annual bonus outcomes to make remuneration structures simpler and more transparent to shareholders; reducing the CEO's target bonus from 150% to 125%; reducing the CEO's LTIP grant; and enabling the broader use of discretion to manage remuneration outcomes.

The REMCO will review the Policy regularly to ensure it continues to reinforce Shell's long-term strategy and remains closely aligned with shareholders' interests.

Additional policy statement

The REMCO reserves the right to make payments outside the Policy in limited exceptional circumstances, such as for regulatory, tax or administrative purposes or to take account of a change in legislation or exchange controls, and only where the REMCO considers such payments are necessary to give effect to the intent of the Policy.

Signed on behalf of the Board

/s/ Linda M. Coulter

LINDA M. COULTER

Company Secretary
March 10, 2021

OTHER REGULATORY AND STATUTORY INFORMATION

This section of the Annual Report contains the remaining information which the Directors are required to report on each year and for the year ended December 31, 2020. There are other matters that are required to be reported on and that have been disclosed in other sections of the Annual Report, as summarised below:

Management Report	<p>This Directors' Report, together with the Strategic Report, serves as the Management Report for the purpose of Disclosure Guidance and Transparency Rule 4.1.8R.</p> <p>Both the Directors' Report and Strategic Report have been presented in accordance with and reliance on English law, and the liabilities of the Directors in connection with those reports shall be subject to the limitations and restrictions provided by such law.</p>	<p>Directors' Report: pages 124-181 Strategic Report: pages 4-111</p>
Corporate governance	The Company's statement on corporate governance, as required by DTR7.2.3R, is incorporated in this Directors' Report by way of reference.	Directors' Report: pages 124-181
Business relationships [A]	A statement, summarising the Directors' business relationships with suppliers, customers and others.	Strategic Report: pages 4-111
Employee engagement	Information on how Directors have engaged with employees.	Workforce Engagement: pages 138-139
Directors' interests [B]	<p>The interests (in shares of the Company or calculated equivalents) of the Directors in office at the end of the year, including any interests of a "connected person".</p> <p>Changes in Directors' share interests during the period from December 31, 2020, to March 10, 2021.</p>	<p>Annual Report on Remuneration: pages 157</p>
Likely future developments	Information relating to likely future developments.	Provided throughout the Strategic Report: pages 4-111
Research and development	Information relating to Shell's research and development, including expenditure.	Shell Story: pages 10-17
Diversity and inclusion	Information concerning diversity and inclusion. This includes information on the equal opportunities in recruitment, career development, promotion, training and rewards for all our people, including those with disabilities.	Our people: pages 108-111
Employee communication and involvement	Information concerning employee communication and involvement.	Our people: pages 108-111
Corporate social responsibility	<p>A summary of Shell's approach to corporate social responsibility.</p> <p>Further details will be available in the Shell Sustainability Report 2020.</p>	<p>Environment and society: pages 85-93 Our people: pages 108-111</p>
Branches	<p>A list of our subsidiaries, joint ventures and associates.</p> <p>Our activities and interests are operated through subsidiaries, branches of subsidiaries, joint ventures and associates which are subject to the laws and regulations of many different jurisdictions.</p>	Additional Information, Appendix 1: pages 308-323
Greenhouse gas emissions	Information relating to greenhouse gas emissions.	Climate change and energy transition: pages 94-107
Risk management	<p>Detail on risk factors.</p> <p>Information on emerging risks.</p>	<p>Risk Factors: pages 28-37 Other regulatory and statutory information: pages 182-189</p>
Financial risk management, objectives and policies	Descriptions of the use of financial instruments and Shell's financial risk management objectives and policies, and exposure to market risk (including price risk), credit risk and liquidity risk.	Consolidated Financial Statements: Note 19, pages 251-255
Listing rule information [C]	Information relating concerning the amount of interest capitalised by Shell.	Consolidated Financial Statements: Note 6, pages 233
Listing rule information [C]	The Remuneration Committee Report.	Directors' Remuneration Report: pages 153 - 181
Listing rule information [C]	Details of the Company's long-term incentive schemes as required by LR 9.4.3R	Directors' Remuneration Report: pages 153 - 181
Significant shareholdings	Information concerning significant shareholdings.	Shareholder information: pages 300-304

[A] This meets the purposes of Schedule 7 to The Companies (Miscellaneous Reporting) Regulations 2018.

[B] "Connected person" has the meaning given to "person closely associated" within the Market Abuse Regulation.

[C] This information is given in accordance with Listing Rule 9.8.4R. Further information in connection with Listing Rule 9.8.4R is contained in the remainder of "Other Statutory Information" which follows on 183-189.

MODERN SLAVERY ACT STATEMENT

We prioritise buying from and encouraging local providers by procuring goods and services from local suppliers who meet the standards we require. The standards include those relating to human rights, labour practices and business integrity and are governed by the Shell Supplier Principles. Monitoring is undertaken centrally in connection with the preparation of the Shell Group's Modern Slavery Act (MSA) Statement which is prepared by taking proposed inputs from Shell companies in scope of the MSA as to their steps taken to ensure modern slavery does not occur in their supply chain or organisation. The Shell Group Statement is approved by the Board of Royal Dutch Shell plc, after approval by the boards of Shell companies which are in scope of the MSA.

DISCLOSURE OF INFORMATION TO AUDITORS

In accordance with section 418 of the Act, each of the persons who is a Director at the date of approval of this Report confirms that, so far as the Director is aware, there is no relevant audit information of which the Company's auditor is unaware. The Director has taken all steps that he or she ought to have taken as a Director in order to make himself or herself aware of any relevant audit information and to establish that the Company's auditor is aware of that information.

FINANCIAL STATEMENTS, DIVIDENDS AND DIVIDEND POLICY

The "Consolidated Statement of Income" and "Consolidated Balance Sheet" can be found on pages 217 and 218 respectively.

Subject to Board approval, Shell aims to grow the dividend per share by around 4% every year, and once the Shell Group's net debt level has reached \$65 billion, Shell will target the distribution of 20-30% of its cash flow from operations to shareholders. The Board may choose to return cash to shareholders through a combination of dividends and share buybacks. When setting the level of shareholder remuneration, the Board looks at a range of factors, including the macro-environment, the underlying business earnings and cash flow of the Shell Group, the current balance sheet, future investment and divestment plans, and existing commitments.

Interim dividends are currently declared by the Board and paid on a quarterly basis. Shell does not currently pay a "final" dividend, which would need to be voted on by shareholders, requiring the introduction of a resolution at the AGM. This would delay the payment of the fourth quarter dividend (currently paid in late March) until after the AGM, which is towards the end of May, a delay of around seven weeks. Our approach to dividend payments is not uncommon for companies distributing returns to shareholders on a quarterly basis.

Shell pays its dividend in USD, EUR or GBP fully electronically either in CREST or via interbank transfers.

The Directors have announced a fourth quarter interim dividend as set out in the table below, payable on March 29, 2021, to shareholders on the Register of Members at the close of business on February 19, 2021. The closing date for dividend currency elections was March 5, 2021 [A] and the euro and sterling equivalents announcement date is March 15, 2021.

[A] A different dividend currency election date may apply to shareholders holding shares in a securities account with a bank or financial institution ultimately through Euroclear Nederland. This may also apply to other shareholders who do not hold their shares either directly on the Register of Members or in the corporate sponsored nominee arrangement. Such shareholders can contact their broker, financial intermediary, bank or financial institution for the election deadline that applies.

VIABILITY STATEMENT

The "Strategic Report" includes information about Shell's strategy, financial condition, cash flows and liquidity, as well as the factors, including the principal risks, likely to affect Shell's future development. It also describes Shell's business model, including competitive advantages and key strengths. The Directors assess Shell's prospects both at an operating and strategic level, each involving different time horizons. To this end, the Directors assess Shell's portfolio and strategy against a wide range of outlooks, including assessing the potential impacts of various possible energy transition pathways and scenarios for changes in societal expectations in relation to climate change. Shell recognises in its strategy that the world is transitioning to a lower-carbon energy system (see "Climate change and energy transition"). The Risk Factors section provides an overview of the principal risks Shell is exposed to in its operations.

On an annual basis, the Directors approve a detailed three-year operating plan, which forecasts Shell's cash flows and ability to service financing requirements, pay dividends and fund investing activities during the period. Shell's three-year operating plan contains assumptions in relation to internal and external parameters, including recovery from the impacts of the COVID-19 pandemic. Some of the key assumptions include the impact of commodity prices, exchange rates, future carbon costs, agreements like LNG contract renewals, production levels and product demand, and schedules of growth programmes. Considering the degree of change possible in these parameters, Shell has deemed a three-year period of assessment appropriate for the longer-term viability statement.

In making the going concern and longer term viability assessment, Shell has also considered the financial impact of each of the following severe but possible scenarios that could threaten Shell's viability. In reviewing these stress tests, the Directors have considered possible mitigation steps and have made certain assumptions regarding the availability of future funding options, including credit lines, debt facilities, possible asset disposals, changing levels of shareholder returns, and the ability to raise future financing in line with the operating plan window.

Scenario	Link to principal risks
A significant HSSE event	[A]
Unplanned shutdown of a major cash-generating asset for a year	[A]
A low oil and gas price environment (Brent at 2021: \$40, 2022: \$40, 2023: \$45 MOD)	[B] and [D]
A significant HSSE event in a low oil and gas price environment	[A], [B] and [D]
Sustained impact from politically adverse developments, lower growth in developing countries, as well as lower growth in Europe	[C]
Global macroeconomic uncertainties (including those from a pandemic) - low oil and gas price environment, negative impact on oil product and chemical margins, and long-term demand reduction	[B], [C] and [D]

OTHER REGULATORY AND STATUTORY INFORMATION continued

The list below is the sub-set of Group Principal Risks that may have an impact on viability and have been assessed in the above stress case scenarios.

- A. The nature of our operations exposes us, and the communities in which we work, to a wide range of health, safety, security and environment risks.
- B. We are exposed to macroeconomic risks including fluctuating prices of crude oil, natural gas, oil products and chemicals.
- C. We are exposed to treasury and trading risks, including liquidity risk, interest rate risk, foreign exchange risk, commodity price risk and credit risk. We are affected by the global macroeconomic environment and by financial and commodity market conditions.
- D. We seek to execute divestments in pursuing our strategy. We may be unable to divest these assets successfully in line with our strategy.

Furthermore, as a result of the events that have occurred in 2020, including the COVID-19 pandemic and significant fall in oil and gas prices during the first half of the year, the Board have received regular updates in relation to the financial framework. The short-term cash preservation measures, including opex and capex reduction, not to continue with the next tranche of the share buyback programme, lower dividend payments, and debt issuance, and the medium-term measures including the reshape of Shell's portfolio and organisation demonstrate the quantitative and qualitative actions being taken to support the viability of the Company.

Taking account of Shell's position and principal risks at December 31, 2020, the Directors have a reasonable expectation that Shell will be able to continue in operation and meet its liabilities as they fall due over its three-year operating plan period.

GOING CONCERN

In assessing the appropriateness of the going concern assumption over the period to 31 March 2022 (the 'going concern period'), management have stress tested Shell's most recent financial projections to incorporate a range of potential future outcomes by considering Shell's principal risks, further potential downside pressures on commodity prices and cash preservation measures, including reduced future operating costs, capital expenditure and dividend distributions. This assessment confirmed that Shell has adequate cash, other liquid resources and undrawn credit facilities to enable it to meet its obligations as they fall due in order to continue its operations during the going concern period. Therefore, the Directors consider it appropriate to continue to adopt the going concern basis of accounting in preparing these audited Condensed Consolidated Financial Statements.

NON-FINANCIAL INFORMATION STATEMENT

The Non-Financial Information Statement below forms part of the Strategic Report on pages 4-111.

Non-Financial Information Statement

Reporting requirement	Where to read more in this report	Page
Business Model	Shell story	10
Non-financial KPIs	Performance indicators	43
Environmental matters	Environment and society, Climate change and energy transition	85, 94
Employees	Our people and Directors' Report	108, 124
Social matters	Environment and society	85
Respect for human rights	Environment and society	85
Anti-corruption and anti-bribery matters	Our people	108

REPURCHASES OF SHARES

On July 26, 2018, the Company announced the start of a share buyback programme of at least \$25 billion, subject to further progress with debt reduction and oil price conditions. On March 23, 2020, the Company announced that in light of the economic and oil price environment, it had decided not to continue with the next tranche of the share buyback programme following the completion of the tranche announced on January 30, 2020. On April 14, 2020, the seventh tranche of the share buyback programme was completed, and no further tranches were undertaken in 2020. As announced on October 29, 2020, the Shell Group's cash allocation framework includes a target to reduce net debt to \$65 billion and following that an aim to increase distributions to shareholders through a combination of Shell's progressive dividend and share buybacks.

To ensure that the Company had the necessary authority to continue to buy back its shares when the time is considered appropriate, at the 2020 AGM, shareholders granted an authority for the Company to repurchase up to a maximum of 783 million of its shares (excluding purchases for employee share plans). This authority expires on the earlier of the close of business on August 19, 2021, or the end of the 2021 AGM.

As at December 31, 2020, 496 million A shares with a nominal value of €34.7 million (\$41.8 million) and 39 million B shares with a nominal value of €2.8 million (\$3.2 million) (6.85% of the Company's total issued share capital at December 31, 2020) had been cumulatively purchased and cancelled since the beginning of this programme, for a total cost of \$15.8 billion including expenses, at an average price of \$29.45 per share. The purpose of the shares repurchased in 2020 under the share buyback programme was to reduce the issued share capital of the Company. This is to offset the number of shares issued under the Scrip Dividend Programme and to reduce the equity issued in connection with the Company's combination with BG Group. The Scrip Dividend Programme was cancelled with effect from the fourth quarter 2017 interim dividend. More information can be found at www.shell.com/scrip. Since the completion of the tranche announced on January 30, 2020, no further shares have been bought back by the Company. This means that 783 million shares could still be repurchased under the current AGM authority.

The Board continues to regard the ability to repurchase issued shares in suitable circumstances as an important part of Shell's financial management. A new resolution will be proposed at the 2021 AGM to renew the authority for the Company to purchase its own share capital, up to specified limits, for a further year. This proposal will be described in more detail in the 2021 Notice of Annual General Meeting.

BOARD OF DIRECTORS

The names of the Directors who held office during the year can be found on pages 144-121. Information on the Directors who are seeking appointment or reappointment is included in the Notice of Annual General Meeting.

QUALIFYING THIRD-PARTY INDEMNITIES

The Company has entered into a Deed of Indemnity (Deed) with each Director of the Company who served during the year. The terms of each of these Deeds are identical and they reflect the statutory provisions on indemnities contained in the Companies Act 2006 (CA 2006). Under the terms of each Deed, the Company has agreed to indemnify the Director, to the widest extent permitted by the CA 2006, against any loss, liability or damage, howsoever caused (including in respect of a Director's own negligence), suffered or incurred by a Director in respect of their acts or omissions while or in the course of acting as a Director or employee of the Company, any associated company or affiliate (within the meaning of the CA 2006). In addition, the Company shall lend funds to Directors as required to meet reasonable costs and expenses incurred or to be incurred by them in defending any criminal or civil proceedings brought

against them in their capacity as a Director or employee of the Company, associated company or affiliate, or, in connection with certain applications brought under the CA 2006. The provisions in the Company's Articles relating to arbitration and exclusive jurisdiction are incorporated, mutatis mutandis, into the Deeds entered into by each Director and the Company.

The Company has provided both indemnities and Directors' and officers' insurance to the Directors in connection with the performance of their responsibilities. Copies of these indemnities and the Directors' and officers' insurance policies are open to inspection. A copy of the form of these indemnities has been previously filed with the US Securities and Exchange Commission.

RELATED PARTY TRANSACTIONS

Save as set out below and other than disclosures given in Notes 9 and 27 to the "Consolidated Financial Statements" on pages 238 and 262-263, there were no transactions or proposed transactions that were material to either the Company or any related party. Nor were there any transactions with any related party that were unusual in their nature or conditions.

On February 27, 2020 the fully-consolidated Shell Midstream Partners, L.P. (SHLX) signed an agreement with its Shell-controlled general partner to eliminate all incentive distribution rights and economic general partner interest in SHLX and convert the general partner's two per cent general partner interest in SHLX into a non-economic general partner interest in SHLX. SHLX also entered into a Purchase and Sale Agreement with Shell affiliates to acquire our 79% interest in the Mattox Pipeline Company LLC, which owns the Mattox Pipeline, and certain logistics assets at the Shell Norco Manufacturing Complex. Both transactions completed on April 1, 2020. As consideration for the assets and the elimination of incentive distribution rights, Shell received 160 million newly issued SHLX common units, plus \$1.2 billion of Series A perpetual convertible preferred units at a price of \$23.63 per unit.

POLITICAL CONTRIBUTIONS

No donations were made by the Company or any of its subsidiaries to political parties or organisations during the year. Shell Oil Company administers the non-partisan Shell Oil Company Employees' Political Awareness Committee (SEPAC), a political action committee registered with the US Federal Election Commission. Eligible employees may make voluntary personal contributions to the SEPAC. All employees' contributions comply with federal and state law and are publicly reported in accordance with US election laws. Shell Oil Company does not exercise control over SEPAC's funding decisions.

RECENT DEVELOPMENTS AND POST-BALANCE SHEET EVENTS

See Note 30 to the "Consolidated Financial Statements" on page 264.

SHARE CAPITAL

The Company's issued share capital at December 31, 2020, is set out in Note 8 to the "Parent Company Financial Statements" on pages 289-290. The percentage of the total issued share capital represented by each class of share is given below.

Share capital percentage

Share class	%
A	52.53
B	47.47
Sterling deferred	de minimis

TRANSFER OF SECURITIES

There are no restrictions on transfer or limitations on the holding of the ordinary shares other than under the Articles, under restrictions imposed by law or regulation (for example, insider trading laws) or pursuant to the Company's Share Dealing Code.

SHARE OWNERSHIP TRUSTS AND TRUST-LIKE ENTITIES

Shell has three primary employee share ownership trusts and trust-like entities: a Dutch foundation (stichting) and two US Rabbi Trusts. The shares held by the Dutch foundation are voted by its Board and the shares in the US Rabbi Trusts are voted by the Voting Trustee, Newport Trust Company. Both the Board of the Dutch foundation and the Voting Trustee are independent of Shell.

The UK Shell All Employee Share Ownership Plan has a separate related share ownership trust. Shares held by the trust are voted by its trustee, Computershare Trustees Limited, as directed by the participants.

AUDITOR

A resolution relating to the appointment of Ernst & Young LLP as auditor for the financial year 2021 will be proposed at the 2021 AGM.

ANNUAL GENERAL MEETING

The AGM will be held on May 19, 2021, at Carel van Bylandtlaan 16, 2596 HR, The Hague, The Netherlands. The Notice of Annual General Meeting will include details of the business to be put to shareholders at the AGM.

CONFLICTS OF INTEREST

In accordance with the Act and the Company's Articles, the Board may authorise any matter that otherwise may involve any Directors breaching their duty to avoid conflicts of interest. The Board has adopted a procedure to address these requirements. Detailed conflict of interest questionnaires are reviewed by the Board and, if considered appropriate, authorised. Conflicts of interest as well as any gifts and hospitality received by and provided by Directors are kept under review by the Board. Further information relating to conflicts of interest can be found in the Articles, available on the Shell website.

SIGNIFICANT COMMITMENTS OF THE CHAIR

The Chair's other significant commitments are given in his biography on page 114.

SHELL GENERAL BUSINESS PRINCIPLES

The Shell General Business Principles define how Shell subsidiaries are expected to conduct their affairs and are underpinned by the Shell core values of honesty, integrity and respect for people. These principles include, among other things, Shell's commitment to support fundamental human rights in line with the legitimate role of business and to contribute to sustainable development. They are designed to mitigate the risk of damage to our business reputation and to prevent violations of local and international legislation. They can be found at www.shell.com/sgbp. See "Risk factors" on pages 28-37.

OTHER REGULATORY AND STATUTORY INFORMATION continued

SHELL CODE OF CONDUCT

Directors, officers, employees and contract staff are required to comply with the Shell Code of Conduct, which instructs them on how to behave in line with the Shell General Business Principles. This Code clarifies the basic rules and standards they are expected to follow and the behaviour expected of them. These individuals must also complete mandatory Code of Conduct training.

Designated individuals are required to complete additional mandatory training on antitrust and competition laws, anti-bribery, anti-corruption and anti-money laundering laws, financial crime, data protection laws and trade compliance requirements (see "Risk factors" on page 28-37). The Shell Code of Conduct can be found at www.shell.com/codeofconduct.

CODE OF ETHICS

Executive Directors and Senior Financial Officers of Shell must also comply with the Code of Ethics. This Code is specifically intended to meet the requirements of Section 406 of the Sarbanes-Oxley Act. It can be found at www.shell.com/codeofethics.

INDEPENDENT PROFESSIONAL ADVICE

All Directors may seek independent professional advice in connection with their role as a Director. All Directors have access to the advice and services of the Company Secretary. The Company has provided both indemnities and Directors' and officers' insurance to the Directors in connection with the performance of their responsibilities. Copies of these indemnities and the Directors' and officers' insurance policies are open to inspection. A copy of the form of these indemnities has been previously filed with the US Securities and Exchange Commission.

RESULTS PRESENTATIONS AND ANALYSTS' MEETINGS

The planned dates of the quarterly, half-yearly and annual results presentations, as well as all major analysts' meetings, are announced in advance on the Shell website and through a regulatory release.

Generally, presentations are broadcast live via webcast and teleconference. Other meetings with analysts or investors are not normally announced in advance, nor can they be followed remotely by webcast or any other means. Procedures are in place to ensure that discussions in such meetings are always limited to non-material information or information already in the public domain.

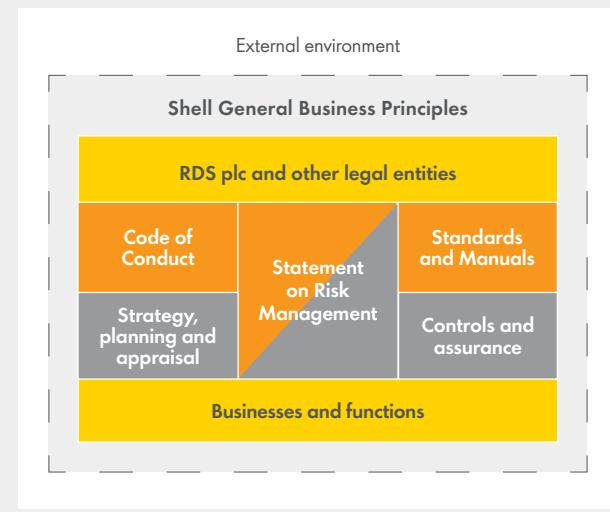
Results and meeting presentations can be found at www.shell.com/investor. This is in line with the requirement to ensure that all shareholders and other parties in the financial market have equal and simultaneous access to information that may influence the price of the Company's securities.

RISK MANAGEMENT AND CONTROLS

The Board is responsible for maintaining a sound system of risk management and internal control, and for regularly reviewing its effectiveness.

A single overall control framework is in place for the Company and its subsidiaries that is designed to manage rather than eliminate the risk of failure to achieve business objectives. It therefore only provides reasonable and not absolute assurance against material misstatement or loss.

CONTROL FRAMEWORK



- The **Foundation** elements of the Shell Control Framework define the principles that underpin the Shell Group's activities.
- The **Management processes** define activities critical to an effective control framework.
- The **Structural** component defines how businesses and functions facilitate achievement of the Shell Group's overall business objectives, while respecting the separate legal identity of the individual Shell companies that implement them.

The Control Framework diagram illustrates the key components – "Foundations", "Management processes" and "Structural" – that make up the Control Framework. "Foundations" comprises the objectives, principles and rules that underpin and establish boundaries for Shell activities. "Management processes" refers to the more significant management processes, including how strategy, planning and appraisal are used to improve performance and how risks are to be managed through effective controls and assurance. The "Structural" component defines how Businesses and Functions facilitate achievement of the Shell group's overall business objectives.

Risk management

The "Statement on Risk Management" is a foundation element of Shell's Control Framework and a key enabler of many of its management processes. We assess risks across the Shell Group in terms of three distinct categories:

- Strategic risks: we consider current and future portfolio considerations, examining parameters such as country concentration or exposure to higher-risk countries. We also consider long-range developments in order to test key assumptions or beliefs in relation to energy markets.
- Operational risks: we consider material operational exposures across Shell's entire value chain, and promote a more granular assessment of key risks facing the organisation.
- Conduct and culture risks: we consider alignment of our policies, practices and behaviours against our purpose and core values.

To support risk assessment across each category, Shell has developed a risk appetite framework, which helps management establish and articulate the level of risk that they are willing to accept in pursuit of Shell's strategy and objectives, noting that there are also risks that Shell accepts or does not seek to fully mitigate. The financial framework sets an overarching boundary condition in the consideration of risk appetite, as the financial resilience of Shell should logically inform the aggregate level of risk appetite that could be sustained.

Shell's principal risks and the broad array of measures used to manage each risk are described on pages 28-37. During the year, management regularly reviews these principal risks and associated risk responses and implements further remedial actions as appropriate. The Executive Committee and the Board regularly consider Group-level risks, framed across the three categories above, together with the associated control mechanisms and risk responses. In 2020, specific attention was given to our response to the COVID-19 pandemic (see "Responding to the COVID-19 Pandemic" on page 188).

Management and the Board also consider emerging risks, defined as risks where the scope, impact and likelihood are still uncertain, but which could have a material effect on achieving Shell's strategy and objectives in the future. These risks are identified through, (among other procedures), the monitoring of external developments, scenario planning, the status of risk indicators, learnings from incidents and assurance findings, and the appraisal of Shell's forward-looking plans. Once identified, we undertake activities to monitor, prepare for and/or reduce the future impact, where possible, should such emerging risks materialise.

The system of risk management and internal control over financial reporting is an integral part of the Control Framework. Regular reviews are performed to identify the significant risks to financial reporting and the key controls designed to address them. These controls are documented, responsibility is assigned, and they are monitored for design and operating effectiveness. Controls found to be ineffective are remediated.

Shell has a climate change risk management structure which is supported by standards, policies and controls (see "Risk factors" on page 29 and "Climate change and energy transition" on pages 94-107). Climate change and risks resulting from greenhouse gas emissions have been identified as significant risk factors for Shell and are managed in accordance with other significant risks through the Board and Executive Committee.

Many of our major projects and operations are conducted in joint arrangements or associates, which may reduce the degree of control and ability to identify and manage risks (see "Risk Factors" on page 35). In each case, Shell appoints a representative to manage its interests who seeks to ensure that such projects operate under equivalent Shell standards to Shell.

We operate in more than 70 countries that have differing degrees of political, legal and fiscal stability. This exposes us to a wide range of political developments that could result in changes to contractual terms, laws and regulations. In addition, we and our joint arrangements and associates face the risk of litigation and disputes worldwide (see "Risk Factors" on page 30). We continuously monitor geopolitical developments and societal issues relevant to our interests. Employees who engage with government officials are subject to specific training programmes, procedures and regular communications, in addition to Shell General Business Principles and Shell Code of Conduct compliance. We are prepared to exit a country if we believe we can no longer operate in that country in accordance with our standards and applicable law, and we have done so in the past.

The Board confirms it has carried out a robust assessment of Shell's principal risks, including a robust process for identifying, evaluating and managing Shell's principal risks. The Board confirms it has carried out a robust assessment of Shell's emerging risks, the procedures in place to identify the emerging risks, and how risks are being managed or mitigated to help Shell achieve its strategy and objectives. This has been in place throughout 2020 and up to the date of this Report; is regularly reviewed by the Board; and accords with the FRC Guidance on risk management, internal control and related financial and business reporting.

Review of the effectiveness of risk management and internal control

The Board has delegated authority to the Audit Committee to assist it in fulfilling its responsibilities in relation to the effectiveness of the risk management framework and internal control system, the integrity of financial reporting as well as consideration of compliance matters. (see "Audit Committee Report" on pages 145-152).

The Audit Committee met six times this year and received regular reports from the Chief Internal Auditor on notable internal audits and those with a significant impact on control effectiveness. The Audit Committee also reviewed significant financial, business and compliance control incidents and received regular reports on business integrity issues. The Audit Committee also requested updates on specific financial, operational and compliance control issues throughout the year. The Audit Committee Chair provided an update to the Board after every Audit Committee meeting.

During and after such reports, the Board has an opportunity to request further information and/or ask clarifying questions, which it does to varying degrees depending on the issue. Similarly, the Chairs of the Safety, Environment and Sustainability Committee (SESCo) and the Nigeria Special Litigation Committee, an ad hoc Board committee, also provide regular updates after each of their respective meetings covering, among other matters, the respective aspects of controls that they monitor pursuant to their Terms of Reference. The Audit Committee and SESCO minutes, once approved, are further provided to the Board and incorporated into Board minutes to ensure full access to and review by all Directors. These aspects, together with the 2020 Reports respectively produced by the Executive Vice President Taxation and Controller and Chief Internal Auditor, the External Auditors, the Chairs of the Disclosure Committee and the Financial Reporting Control Committee and the Chief Ethics & Compliance Officer, as well as summaries of the Annual Proved Reserves Disclosure and the Full Year HSSE & Social Performance Assurance Report, enable the Board's ongoing monitoring and annual review of material controls.

An annual review of the effectiveness of risk management and internal control was carried out by both the Executive Committee and the Audit Committee. This was based on their own insights and experience throughout the year as well as outcomes from the Group-level risk reviews and the Group Assurance Letter process, a structured internal assessment of compliance with legal and ethical requirements and the Shell Control Framework carried out by each Executive Director. As part of their annual review, the Executive Committee and Audit Committee also considered input from the Chief Internal Auditor, Chief Ethics & Compliance Officer and the External Auditor. The insights and conclusions from this annual assessment were reviewed and discussed by the Board.

The Board confirms that it has conducted its annual review of the effectiveness of Shell's system of risk management and internal control in respect of 2020, such review covering all material controls, including financial, operational and compliance controls.

OTHER REGULATORY AND STATUTORY INFORMATION continued

Responding to the COVID-19 pandemic

The COVID-19 pandemic has transformed economies, government policies, markets and businesses globally. Shell has been responding to the pandemic with a broad, structured approach to ensure we support our colleagues, suppliers, customers and the communities where we work, while ensuring resilience in our day-to-day operations and overall financial framework. A dedicated Group Coordination Team, under the direct supervision of the Executive Committee, has been in place to oversee Shell's risk response plans globally.

We have taken many steps to protect the health of our colleagues, including requiring or encouraging office-based staff to work from home, depending on the advice of local authorities. We are providing the technology support to ensure up to 70,000 colleagues can work remotely each day. We have developed comprehensive COVID-safe return to site approaches across Shell's offices with small-scale proof-of-concept tests.

For people working on our platforms offshore, or our facilities onshore, we enforce social distancing, carry out health screening and have procedures in place to allow the safe evacuation of any suspected cases of COVID-19.

To keep our customers safe at our retail sites we launched Clean+, a global initiative to provide enhanced cleaning, regular sanitisation of common touchpoints, free sanitiser and/or wipes, protection for staff and reminders to maintain safe distancing.

Management at all levels continue to engage extensively with staff to understand and respond to the stresses placed on them as a result of the pandemic. A confidential counselling service is available to help colleagues experiencing the psychological impact of the pandemic,

and we continue to provide extra online resources to help people manage their physical and mental well-being.

To sustain our operations and supply chains, which in turn support our suppliers and customers, we have business continuity plans in place across all our businesses, functions and operating sites. These plans are adjusted as needed by considering short- and medium-term "likely" and "worst case" scenarios developed by the Group Coordination Team. Examples of specific enhanced controls include the strengthening of our global web content filtering capability in response to the switch from office to remote working and additional measures to improve cyber-awareness. We have reiterated and emphasised adherence to Shell's compliance rules (including the Code of Conduct). Shell's Crisis Management Standard is also being used to guide our operational risk responses, and our country chair network has been strengthened to address specific challenges that arise at local levels.

Throughout the pandemic, we have maintained a strong focus on our cash allocation framework, using a bespoke COVID-19 risk register to monitor the effectiveness of our risk responses to ensure the financial resilience of our portfolio. These responses included the implementation of certain cash preservation measures. More details are provided on pages 81-84.

We expect many of our risk response measures to stay in place in 2021. We continue to adjust and apply our learnings from this experience to ensure we remain resilient in this new macroeconomic environment. Detailed information about the impact of the pandemic on Shell's principal risks and our responses to these impacts is provided on pages 28-37.

MANAGEMENT'S EVALUATION OF DISCLOSURE CONTROLS AND PROCEDURES OF SHELL

Shell's CEO and CFO have evaluated the effectiveness of Shell's disclosure controls and procedures at December 31, 2020. Based on that evaluation, they concluded that Shell's disclosure controls and procedures are effective.

MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING OF SHELL

Management, including the CEO and CFO, is responsible for establishing and maintaining adequate internal control over Shell's financial reporting and the preparation of the "Consolidated Financial Statements". It conducted an evaluation of the effectiveness of Shell's internal control over financial reporting and the preparation of the "Consolidated Financial Statements" based on the Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). On the basis of this evaluation, management concluded that, at December 31, 2020, the Company's internal control over financial reporting and the preparation of the "Consolidated Financial Statements" was effective.

THE TRUSTEE'S AND MANAGEMENT'S EVALUATION OF DISCLOSURE CONTROLS AND PROCEDURES FOR THE ROYAL DUTCH SHELL DIVIDEND ACCESS TRUST

The Trustee of the Royal Dutch Shell Dividend Access Trust (the Trustee) and Shell's CEO and CFO have evaluated the effectiveness of the disclosure controls and procedures in respect of the Dividend Access Trust (the Trust) at December 31, 2020. On the basis of this evaluation, these officers have concluded that the disclosure controls and procedures of the Trust are effective.

THE TRUSTEE'S AND MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING OF THE ROYAL DUTCH SHELL DIVIDEND ACCESS TRUST

The Trustee and the Company's management are responsible for establishing and maintaining adequate internal control over the Trust's

financial reporting. The Trustee and the Company's management conducted an evaluation of the effectiveness of internal control over financial reporting based on the Internal Control - Integrated Framework (2013) issued by COSO. On the basis of this evaluation, the Trustee and management concluded that, at December 31, 2020, the Trust's internal control over financial reporting was effective.

CHANGES IN INTERNAL CONTROL OVER FINANCIAL REPORTING

There has not been any change in the internal control over financial reporting of Shell or the Trust that occurred during the period covered by this Report that has materially affected, or is reasonably likely to materially affect, the internal control over financial reporting of Shell or the Trust. Material financial information of the Trust is included in the "Consolidated Financial Statements" and is therefore subject to the same disclosure controls and procedures as Shell. See the "Royal Dutch Shell Dividend Access Trust Financial Statements" on pages 294-297 for additional information.

ARTICLES OF ASSOCIATION

The Company's Articles of Association (Articles) were adopted at the 2019 AGM. The Articles may only be amended by a special resolution of the shareholders in a general meeting. A full version of the Company's Articles can be found at www.shell.com/investors.

MANAGEMENT AND DIRECTORS

The Company has a single-tier Board of Directors headed by a Chair, with management led by a CEO. See "The Board of Royal Dutch Shell plc" on page 114 and Senior Management on page 122.

DIRECTORS' SHAREHOLDING QUALIFICATION

While the Articles do not require Directors to hold shares in the Company, the Remuneration Committee believes that Executive Directors should align their interests with those of shareholders by holding shares in the Company.

The CEO is expected to build up a shareholding of seven times base salary over five years from appointment and the CFO is expected to build up a shareholding of five times base salary over the same period. In the event that another Executive Director joins the Board, the Remuneration Committee will determine their shareholding requirement, which will not be less than 200% of their base salary.

Executive Directors will be required to maintain their requirement (or existing shareholding if less than the guideline) for a period of two years post-employment. Non-executive Directors are encouraged to hold shares with a value equivalent to 100% of their fixed annual fee and to maintain that holding during their tenure. Information on the Directors with shares in the Company can be found in the "Directors' Remuneration Report" on pages 153-156.

APPOINTMENT AND RETIREMENT OF DIRECTORS

The Company's Articles, the Corporate Governance Code and the Companies Act 2006 govern the appointment and retirement of Directors. Board membership and biographical details of the Directors are provided on pages 114-121. However, Directors follow the direction laid out in the Code and stand for re-election annually.

During the year, Dick Boer and Martina Hund-Mejean (effective May 20, 2020), Sir Andrew Mackenzie and Bram Schot (effective October 1, 2020) were appointed to the Board. Further, Gerard Kleisterlee, Linda Stuntz and Roberto Setubal stood down from the Board at the 2020 AGM held on May 19, 2020.

On March 11, 2021, the Company announced the appointment of Sir Andrew Mackenzie as Chair of the Board of Royal Dutch Shell plc, with effect from the conclusion of the 2021 AGM. Andrew replaces Chad Holliday, who stands down following the 2021 AGM after more than 10 years' service. Sir Nigel Sheinwald will also stand down following the 2021 AGM, after serving nine years on the Board. Jane Lute will be proposed to shareholders for appointment as a Non-executive Director, effective May 19, 2021. The 2021 AGM is currently scheduled for May 18, 2021.

RIGHTS ATTACHING TO SHARES

The full rights attaching to shares are set out in the Company's Articles of Association. The Company can issue shares with any rights or restrictions attached to them as long as this is not restricted by any rights attached to existing shares. These rights or restrictions can be decided either by an ordinary resolution passed by the shareholders or by the Board as long as there is no conflict with any resolution passed by the shareholders.

VOTING

Currently, only the A and B shares have voting rights. The voting rights of each A share and each B share are equal and carry one vote at a general meeting of the Company.

The sterling deferred shares are not ordinary shares and therefore have different rights and restrictions attached to them.

CHANGE OF CONTROL

There are no provisions in the Articles that would delay, defer or prevent a change of control.

DIRECTORS' RESPONSIBILITIES IN RESPECT OF THE PREPARATION OF THE ANNUAL REPORT AND ACCOUNTS

The Directors are responsible for preparing the Annual Report, including the financial statements, in accordance with applicable laws and regulations. These require the Directors to prepare financial statements for each financial year. As such, the Directors have prepared the (i) Consolidated Financial Statements in accordance with international accounting standards in conformity with the requirements of the UK Companies Act 2006, and therefore in accordance with International Financial Reporting Standards adopted pursuant to Regulation (EC) No 1606/2002 as it applies in the European Union; and (ii) Parent Company Financial Statements in accordance with international accounting standards in conformity with the

requirements of the UK Companies Act 2006. In preparing these financial statements, the Directors have also elected to comply with IFRS as issued by the International Accounting Standards Board (IASB). The Directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of Shell and the Company and of the profit or loss of Shell and the Company for that period. In preparing these financial statements, the Directors are required to:

- adopt the going concern basis unless it is inappropriate to do so;
- select suitable accounting policies and then apply them consistently;
- make judgements and accounting estimates that are reasonable and prudent; and
- state whether international accounting standards in conformity with the requirements of the UK Companies Act 2006, International Financial Reporting Standards adopted pursuant to Regulation (EC) No 1606/2002 as it applies in the European Union and International Financial Reporting Standards as issued by the IASB have been followed.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the transactions of Shell and the Company and disclose with reasonable accuracy, at any time, the financial position of Shell and the Company and to enable them to ensure that the financial statements comply with the Companies Act 2006 (the Act) and, as regards the Consolidated Financial Statements, with Article 4 of the IAS Regulation and therefore are in accordance with IFRS as adopted by the EU. The Directors are also responsible for safeguarding the assets of Shell and the Company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Each of the Directors, whose names and functions can be found on pages 114-121, confirms that, to the best of their knowledge:

- the financial statements, which have been prepared in accordance with international accounting standards in conformity with the requirements of the UK Companies Act 2006, International Financial Reporting Standards adopted pursuant to Regulation (EC) No 1606/2002 as it applies in the European Union and International Financial Reporting Standards as issued by the IASB, give a true and fair view of the assets, liabilities, financial position and profit of Shell and the Company; and
- the Management Report includes a fair review of the development and performance of the business and the position of Shell, together with a description of the principal risks and uncertainties that it faces.

Furthermore, so far as each of the Directors is aware, there is no relevant audit information of which the auditors are unaware, and each of the Directors has taken all the steps that ought to have been taken in order to become aware of any relevant audit information and to establish that the auditors are aware of that information.

The Directors consider that the Annual Report, including the financial statements, taken as a whole, is fair, balanced and understandable and provides the information necessary for shareholders to assess Shell's position and performance, business model and strategy.

The Directors consider it appropriate to continue to adopt the going concern basis of accounting in preparing the financial statements.

The Directors are responsible for the maintenance and integrity of the Shell website (www.shell.com). Legislation in the UK governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Signed on behalf of the Board

/s/ Linda M. Coulter

LINDA M. COULTER

Company Secretary

March 10, 2021



FINANCIAL STATEMENTS AND SUPPLEMENTS

192	Independent Auditor's Report related to the Consolidated and Parent Company Financial Statements
216	Consolidated Financial Statements
265	Supplementary information – oil and gas (unaudited)
283	Parent Company Financial Statements
292	Independent Auditor's Report to Computershare Trustees of the Royal Dutch Shell Dividend Access Trust and the Board of Directors of Royal Dutch Shell plc
294	Royal Dutch Shell Dividend Access Trust Financial Statements



GENERATING **SHAREHOLDER VALUE**

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF ROYAL DUTCH SHELL PLC

1. OUR OPINIONS AND CONCLUSIONS ARISING FROM OUR AUDIT

1.1 Our unmodified opinion on the financial statements

In our opinion, the financial statements of Royal Dutch Shell plc (the Parent Company) and its subsidiaries (collectively, Shell or Group):

- give a true and fair view of the state of Shell's and of the Parent Company's affairs as at December 31, 2020 and of Shell's loss and the Parent Company's income for the year then ended;
- have been properly prepared in accordance with International Accounting Standards in conformity with the requirements of the Companies Act 2006 and, as regards the Group financial statements, both International Financial Reporting Standards (IFRS) adopted pursuant to Regulation (EC) No. 1606/2002 as it applies in the European Union (EU) and IFRS as issued by the International Accounting Standards Board (IASB); and
- have been prepared in accordance with the requirements of the Companies Act 2006.

1.2 What we have audited

We have audited the financial statements of Royal Dutch Shell plc and its subsidiaries for the year ended December 31, 2020, which are included in the Annual Report and comprise:

Shell	Parent Company
Consolidated Balance Sheet as at December 31, 2020	Balance Sheet as at December 31, 2020
Consolidated Statement of Income for the year then ended	Statement of Income for the year then ended
Consolidated Statement of Comprehensive Income for the year then ended	Statement of Comprehensive Income for the year then ended
Consolidated Statement of Changes in Equity for the year then ended	Statement of Changes in Equity for the year then ended
Consolidated Statement of Cash Flows for the year then ended	Statement of Cash Flows for the year then ended
Related Notes 1 to 30 to the Consolidated Financial Statements, including a summary of significant accounting policies	Related Notes 1 to 14 to the Parent Company Financial Statements

The financial reporting framework that has been applied in the preparation of the financial statements is applicable law and International Accounting Standards in conformity with the requirements of the Companies Act 2006 and, as regards the Group financial statements, both IFRS adopted pursuant to Regulation (EC) No. 1606/2002 as it applies in the European Union and IFRS as issued by the IASB.

2. BASIS FOR OUR OPINION

We conducted our audit in accordance with International Standards on Auditing (UK) (ISA (UK)) and applicable law. Our responsibilities under those standards are further described in the 'Our responsibilities for the audit of the financial statements' section of our report below. We are independent of Shell and the Parent Company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the Financial Reporting Council's Ethical Standard as applied to listed public interest entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained during the planning, execution and conclusion of our audit is sufficient and appropriate to provide a suitable basis for our opinion.

3. CONCLUSIONS RELATING TO GOING CONCERN

In auditing the financial statements, we have concluded that the directors' use of the going concern basis of accounting in the preparation of the financial statements of the Group is appropriate. Our evaluation of the directors' assessment of the Shell Group and Parent Company's ability to continue to adopt the going concern basis of accounting included the following:

- we obtained an understanding of the controls over management's going concern evaluation. We then evaluated the design of these controls and tested their operating effectiveness. We tested management's controls over the review and approval of the business operating plan and the underlying economic assumptions;
- we assessed the information used in the going concern assessment for consistency with the operating plan and information obtained through auditing other areas of the business, obtained an understanding of the business planning process and challenged the central assumptions, including those relating to climate risk and the energy transition. We involved our economist to review Shell's global economic scenarios as well as their economic projections in 10 major countries;
- given that management prepare forecasts for other business purposes that go beyond March 31, 2022 (the going concern period), we have used such forecasts in our management challenge process and considered events and conditions beyond the period of management's assessment that may cast significant doubt over the entities' ability to continue as going concerns; and
- we conducted severe but plausible independent stress testing and a reverse stress test to determine the conditions under which Shell could potentially experience a liquidity shortfall. This included assuming lower Brent prices of \$20/bbl for 2021 and 2022 and overlaying the assumptions that Shell will not achieve any further asset sales over this period, will not have access to new capital raising and no access to commercial paper programmes. Under this stress testing, we concluded that there would still be sufficient facilities available for Shell to continue as a going concern.

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the Group's and Parent Company's ability to continue as going concerns until 31 March 2022.

In relation to the Group and Parent Company's reporting on how they have applied the UK Corporate Governance Code, we have nothing material to add or draw attention to in relation to the directors' statement in the financial statements about whether the directors considered it appropriate to adopt the going concern basis of accounting.

Our responsibilities and the responsibilities of the directors with respect to going concern are described in the relevant section of this report. However, because not all future events or conditions can be predicted, this statement is not a guarantee as to the Company's or Group's ability to continue as a going concern.

4. OVERVIEW OF OUR AUDIT APPROACH

UPDATING OUR UNDERSTANDING OF SHELL'S BUSINESS AND ITS ENVIRONMENT

Our global audit team has deep industry experience through working for many years on the audits of large integrated international oil and gas companies and commodity trading organisations. Our audit planning starts with updating our view on external market factors, for example geopolitical risk, the potential impact of climate change and the energy transition, commodity price risk and major trends in the industry. In 2020, the oil and gas industry suffered severe macro-economic shocks due to factors such as the impact of COVID-19 on the global economy and on GDP growth, the pace of decarbonisation and the energy transition and the volatility in the oil price, refining margins and in demand for petroleum products.

In planning our 2020 audit, we were mindful that there is increased importance on companies providing stakeholders with information on significant judgements applied in the preparation of the financial statements, including the sources of estimation uncertainty and other key assumptions in light of economic and market uncertainty, climate risk and the energy transition. Shell has focused on cost control, capital spending, cash flow management, tackling climate change and is undertaking a fundamental restructuring. As part of our audit, we understood Shell's energy transition strategy and how this is reflected in setting oil and gas commodity price assumptions, refining margin assumptions, the estimation of oil and gas reserves, the recoverable amounts of assets and the recognition and measurement of provisions. This assessment was conducted in light of the commitments that Shell has made with respect to decarbonisation in order to be a net-zero emissions energy business by 2050.

Our updated understanding of Shell's business and the environment in which it operates informed our risk assessment procedures.

The current macro-economic environment has created heightened estimation uncertainty and an elevated risk of material misstatement of Shell's asset and liability carrying values. These factors had a pervasive impact on Shell's financial statements and increased the risk around key areas of accounting judgement, such as impairment, inventory valuation and provisioning. We also faced additional audit risk due to the fact that the entire 2020 audit was conducted under remote working conditions. We have therefore clarified, and shown as a separate risk, the risk of employee and management fraud as a result of remote working and the potential implications of the restructuring announcement on the stability of the control environment.

The risks we identified were as follows:

- impairment of PP&E (including exploration and production assets and refineries) and joint ventures and associates (JVA);
- the risk of unrealised trading gains and losses being recognised as a result of errors, unauthorised trading activity or deliberate misstatement of Shell's trading position;
- risk of fraud through management override within other significant revenue streams; and
- the risk of both employee and management fraud, including financial statement fraud to overstate financial results or position, misappropriation of assets and illegal acts in responding to the current environment.

Our additional areas of audit focus were:

- the estimation of decommissioning and restoration provisions;
- legal proceedings and other contingencies, with specific emphasis on OPL 245;
- uncertain tax positions;
- trading valuation (including mark-to-market, hedging, impairment and credit losses);
- identification of onerous regasification contracts in the LNG portfolio;
- inventory valuation (in relation to net realisable value);
- recognition and measurement of deferred tax assets;
- pension asset and liability valuations;
- recoverability of government receivables;
- the impact of climate change and the energy transition on the financial statements;
- the dividend distribution process, including the determination of realised profits and losses for the purposes of making distributions under the Companies Act 2006 (this area of audit focus relates to the parent company only); and
- the recoverable amount of investments held by the parent company (this area of audit focus relates to the parent company only).

In conducting our audit procedures, we changed the nature of our testing compared to the prior year through developing alternative means of obtaining sufficient and appropriate audit evidence, including through our enhanced use of technology and digital audit techniques.

The use of these digital audit tools provided us with an integrated view of risk, thus enabling us to focus our audit effort on operating units with higher risk profiles. They also enabled us to perform risk-led analyses of entire populations of data.

IDENTIFYING AND ASSESSING THE RISKS OF MATERIAL MISSTATEMENT

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF ROYAL DUTCH SHELL PLC

continued

4. OVERVIEW OF OUR AUDIT APPROACH

continued

Our determination of materiality in uncertain times

For the purposes of determining whether the financial statements are free from material misstatement due to fraud or error, we define materiality as the magnitude of misstatement that, either individually or in the aggregate, could reasonably be expected to influence the economic decisions of the users of these financial statements. In determining this year's materiality, we have considered both Shell's changing risk landscape and the unique combination of macro-economic factors, including current market volatility, disruption in demand and production and global supply chain oversupplies in 2020.

The world is in an uncertain place and will be so for some time. However, we believed that it was important that, in setting materiality in these uncertain times, we did not overreact to what is expected to be a relatively temporary phenomenon – especially when Shell continues to be the same company structurally. In the 4th Quarter of 2020 and post year-end, the oil price has more than recovered to the levels it was before the pandemic and oil price collapse in March 2020. Our key criterion in determining materiality remained our perception of the needs of Shell's investors. We considered which earnings, activity or capital-based measure aligned best with the expectations of the Audit Committee and users of Shell's financial statements. In so doing, we applied a 'reasonable investor perspective', which reflected our understanding of the common financial information needs of the members of Shell as a group.

For the previous four years, we believed that investor needs were best met by basing materiality on normalised adjusted earnings, which excludes identified items and are adjusted for tax (adjusted earnings). However, for 2020, in light of the extraordinary circumstances under which Shell was operating, we undertook a fundamental review of the possible alternative bases on which to determine materiality. We considered alternative benchmarks to adjusted earnings, including revenue, EBITDA, total assets and equity. These indicated a range for materiality of \$1.1 billion to \$2.0 billion, with the capital-based measures being at the top end of this range.

We believed that an adjusted earnings approach remained appropriate, despite the fact that the difficult trading environment would distort short-term earnings-based measures. Although this was an unprecedented time for Shell and the industry and there was uncertainty around how long negative price impacts would last, views of economists and market participants were that demand would return and that the supply/demand balance would be re-addressed over time. By applying an adjusted earnings approach, the materiality range narrowed to \$1.0 billion to \$1.3 billion. We planned our 2020 audit using the bottom end of this range, which resulted in the following materiality measures for 2020:

- planning materiality: \$1,000 million (2019: \$1,200 million);
- performance materiality: \$500 million (2019: \$900 million); and
- reporting differences threshold: \$50 million (2019: \$60 million).

Our determination of performance materiality was underpinned by our assessment of the potential impact of remote working on Shell throughout the year and the potential impact on Shell's control environment of the restructuring programme (Project Reshape). We confirmed with the Audit Committee that they were satisfied that these levels of materiality were appropriate. We kept our assessment of materiality under review throughout the year.

Our scope was tailored to the circumstances of our audit of Shell and was influenced by our determination of materiality and our assessed risks of material misstatement.

We reassessed our 2020 audit scope following the completion of our 2019 audit. Our starting point was the consolidated 2019 financial reporting data by Area of Operation (AoO). We identified those AoOs that were significant by virtue of their contribution to Shell's results or significant by virtue of their associated risk or complexity. In doing this we considered the history or expectation of unusual or complex transactions, potential for or history of material misstatements, the previous effectiveness of controls, our assessment in relation to fraud, bribery or corruption; and internal audit findings. We then considered the adequacy of account coverage and remaining audit risk of AoOs not directly covered by audit procedures. Finally, we sense checked our scope to the prior year, ensured that there was appropriate unpredictability and made the necessary changes where appropriate.

By following this approach, our audit effort focused on higher risk areas, such as management judgements. Our group wide procedures enabled us to obtain audit evidence over the AoOs that were not full, specific or specified procedure scope.

ASSESSING MATERIALITY (SECTION 5)

DETERMINING THE SCOPE OF OUR AUDIT (SECTION 6)

IDENTIFYING KEY AUDIT MATTERS (SECTION 7)

We have identified the following key audit matters that, in our professional judgement, had the greatest effect on our overall audit strategy, the allocation of resources in the audit and in directing the global audit team's efforts:

- the impact of climate risk and the energy transition on the financial statements;
- the estimation of oil and gas reserves, including reserves used in the calculation of depreciation, depletion and amortisation (DD&A), impairment testing to evaluate the recoverable amounts of production assets and in the estimation of decommissioning and restoration provisions;
- the recoverable amounts of exploration and production assets, and investments in joint ventures and associates;
- the estimation of future refining margins to evaluate the recoverability of manufacturing assets;
- the estimation of decommissioning and restoration (D&R) provisions;
- the recognition and measurement of deferred tax assets;
- revenue recognition: the risk of unrealised trading gains and losses being recognised as a result of errors, unauthorised trading activity or deliberate misstatement of the group's trading positions;
- the dividend distribution process, including the determination of realised profits and losses for the purposes of making distributions under the Companies Act 2006 (this key audit matter relates to the Parent Company only); and
- the recoverable amount of investments held by the Parent Company (this key audit matter relates to the Parent Company only).

In the current year, in response to the changes in the economic environment, we have added two key audit matters that were not reported as key audit matters in our 2019 report. These relate to: (1) the impact of climate risk and the energy transition on the financial statements; and (2) impairment of investments held by the Parent Company.

5. OUR ASSESSMENT OF MATERIALITY

The scope of our work is influenced by our view of materiality and our assessed risks of material misstatement. As we develop our audit strategy, we determine materiality at the overall level and at the individual account level (referred to as our 'performance materiality' (see below).



INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF ROYAL DUTCH SHELL PLC continued

5. OUR APPLICATION OF MATERIALITY continued

Overall materiality

What we mean

We apply the concept of materiality both in planning and performing our audit, as well as in evaluating the effect of identified misstatements (including omissions) on our audit and in forming our audit opinion. For the purposes of determining whether or not Shell's financial statements are free from material misstatement (whether due to fraud or error), we define materiality as the magnitude of misstatements that, individually or in the aggregate, could reasonably be expected to influence the economic decisions of the users of these financial statements. We are required to establish a materiality level for the financial statements as a whole that is appropriate in light of Shell's particular circumstances.

Our overall materiality provides a basis for identifying and assessing the risk of material misstatement and determining the nature and extent of our audit procedures. Our evaluation of materiality requires professional judgement and necessarily takes into account qualitative as well as quantitative considerations. It also considers our assessment of the expectations of those charged with governance at Shell and users of Shell's financial statements. As required by auditing standards, we reassess materiality throughout the duration of the audit.

Level set

Group materiality

We set our preliminary overall materiality for Shell's Consolidated Financial Statements at \$1,000 million (2019: \$1,200 million). We kept this under review throughout the year and reassessed the appropriateness of our original assessment in light of Shell's results and external market conditions. Based on these reviews and reassessments, we did not find it necessary to revise our level of overall materiality.

Parent Company materiality:

We determined materiality for the Parent Company to be \$1.0 billion (2019: \$2.6 billion), which is 0.4% of equity (2019: 1% of equity). We concluded that equity remains an appropriate basis to determine materiality for an investment holding company. However, we identified an indicator of impairment in the carrying value of the Parent Company's investments, which represent the majority of the equity value of the Parent Company. As a result, we concluded it was appropriate to align the Parent Company materiality with the lower materiality of the Group. Any balances in the Parent Company financial statements that were relevant to our audit of the consolidated group were audited using an allocation of group performance materiality.

Our basis of determining materiality in uncertain times

Our assessment of overall materiality was \$1,000 million. This was derived from an average of Shell's earnings for 2018 and 2019 and the estimated result for 2020 on an adjusted earnings basis reported by Shell in its quarterly results announcements, and adjusted for an effective tax rate.

In determining materiality, auditing standards require us to use benchmark measures, such as pre-tax income, total revenue, total assets and equity. Nevertheless, we have to exercise considerable judgement, including which earnings, activity or capital-based measure aligns best with the expectations of users of Shell's financial statements and the Audit Committee.

In determining this year's materiality, we have considered both Shell's changing risk landscape and various macro-economic factors, such as the impact of the pandemic on the global economy and on GDP growth, the pace of decarbonisation and the energy transition and volatility in oil and gas prices and in demand for petroleum products.

The world is in an uncertain place and will be so for some time. However, we believed that it was important that, in setting materiality in these uncertain times, we did not overreact to what is expected to be a relatively temporary phenomenon – especially when Shell continues to be the same company structurally. In the 4th Quarter of 2020 and post year-end, the oil price has more than recovered to the levels it was before the pandemic and oil price collapse in March 2020. Our key criterion in determining materiality remained our perception of the needs of Shell's investors.

We considered which earnings, activity or capital-based measure aligned best with the expectations of the Audit Committee and users of Shell's financial statements. In so doing, we applied a 'reasonable investor perspective', which reflected our understanding of the common financial information needs of the members of Shell as a group.

For the previous four years, we believed that investor needs were best met by basing materiality on adjusted earnings. However, for 2020, in light of the extraordinary circumstances under which Shell was operating, we undertook a fundamental review of the possible alternative bases on which to determine materiality. We considered alternative benchmarks to adjusted earnings, including revenue, EBITDA, total assets and equity. These indicated a range for materiality of \$1.1 billion to \$2.0 billion, with the capital-based measures being at the top end of this range.

In light of this analysis, we re-considered whether or not an adjusted earnings approach remained appropriate, despite the fact that the difficult trading environment would distort short-term earnings-based measures. In so doing, we reflected on the following factors:

- the use of adjusted earnings allows investors to understand how management has performed despite the commodity price environment, as opposed to because of it;
- analyst forecasts predominately feature adjusted earnings, which exclude identified items, as the basis for their forecasts. The analyst consensus data supports our judgement that adjusted earnings, excluding identified items, remains the key indicator of performance from a reasonable investor perspective;
- although this is an unprecedented time for Shell and the industry and there is uncertainty around how long negative price impacts will last, views of economists and market participants are that demand will return and that the supply/demand balance will be re-addressed over time; and
- Shell were not forecasting a significant drop in volumes in 2020 (although there would be some impacts as capital expenditure reductions flowed through later in the year). This provided further support to this being a price driven impact on earnings rather than one relating to Shell's fundamental business model, underlying activities and produced and manufactured volumes.

On the basis of our analysis of these factors, we concluded that we should continue to focus on Shell's adjusted earnings reported by Shell in its quarterly results announcements and adjusted for an effective tax rate.

By applying an adjusted earnings approach, the materiality range narrowed from our initial range of \$1.1 billion to \$2.0 billion to \$1.0 billion to \$1.3 billion. We planned our 2020 audit using the bottom end of this range.

The identified items excluded in 2020 were: net divestment gains (\$0.3 billion), net impairments (\$28.1 billion charge), fair value accounting of commodity derivatives and certain gas contracts (\$1.2 billion charge), onerous contract provisions (\$1.4 billion charge), redundancy and restructuring (\$0.9 billion charge), and the aggregate of other individually small items (net \$0.7 billion charge).

The identified items excluded in 2019 were: net divestment gains (\$2.6 billion), net impairments (\$4.2 billion charge), fair value accounting of commodity derivatives and certain gas contracts (\$0.6 billion gain), redundancy and restructuring (\$0.1 billion charge), and the aggregate of other individually small items (net \$0.8 billion charge).

The identified items excluded in 2018 were: net divestment gains (\$3.3 billion), net impairments (\$1.0 billion charge), fair value accounting of commodity derivatives and certain gas contracts (\$1.1 billion gain), redundancy and restructuring (\$0.2 billion charge), and the aggregate of other individually small items (net \$0.1 billion charge).

Performance materiality

What we mean

Having established overall materiality, we determined 'performance materiality', which represents our tolerance for misstatement in an individual account. It is calculated as a percentage of overall materiality in order to reduce to an appropriately low level the probability that the aggregate of uncorrected and undetected misstatements exceeds overall materiality of \$1,000 million for Shell's financial statements as a whole.

Once we had determined our audit scope, we then assigned performance materiality to our various in-scope operating units. Our in-scope operating unit audit teams used this assigned performance materiality in performing their group audit procedures. The performance materiality allocation is dependent on the size of the operating unit, measured by its contribution of earnings to Shell, or other appropriate metric, and the risk associated with the operating unit.

Level set

In assessing the appropriate level of performance materiality, we consider the nature, the number and impact of the audit differences identified in 2019 as well as the overall control environment.

At the planning stage of the audit, which was at the very start of the pandemic, we set our performance materiality at 75% (2019: 75%) of planning materiality, namely \$750 million (2019: \$900 million). However, we noted that the developing macro-economic environment was creating heightened estimation uncertainty and an elevated risk of material misstatement of Shell's asset and liability carrying values. These factors had a pervasive impact on Shell's financial statements and increased the risk around key areas of accounting judgement. We also faced additional audit risk due to the fact that the entire 2020 audit was conducted under remote working conditions.

Consequently, we kept our planning and performance materiality under ongoing review. Whilst we confirmed that the overall materiality level of \$1,000 million remained appropriate, in the second half of 2020, we revised performance materiality downwards to be 50% of planning materiality (\$500 million). This decision was based on the following considerations:

- the potential impacts of remote working through the year-end close;
- the heightened estimation uncertainty;
- the potential impact on Shell's control environment of the restructuring programme (Project Reshape); and
- corrected and uncorrected errors.

The primary impact of reducing our performance materiality was a reduction in the testing thresholds that were assigned to our component teams, which led to larger sample sizes for the purposes of our substantive audit testing.

In 2020, the range of performance materiality allocated to operating units was \$75 million to \$325 million (2019: \$135 million to \$450 million). This is set out in more detail in section 6 below.

Audit difference reporting threshold

What we mean

This is the amount below which identified misstatements are considered to be clearly trivial.

The threshold is the level above which we collate and report audit differences to the Audit Committee.

We also report differences below that threshold that, in our view, warrant reporting on qualitative grounds. We evaluate any uncorrected misstatements against both the quantitative measures of materiality discussed above and in light of other relevant qualitative considerations in forming our opinion.

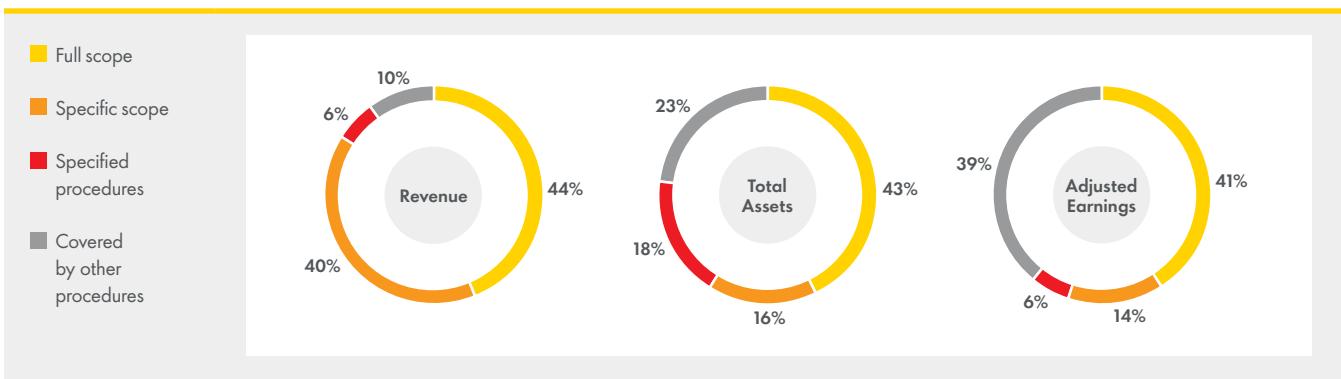
Level set

We agreed with the Audit Committee that we would report to the Committee all audit differences more than \$50 million (2019: \$60 million), as well as differences below that threshold that, in our view, warranted reporting on qualitative grounds.

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF ROYAL DUTCH SHELL PLC continued

6. OUR SCOPE OF THE AUDIT OF SHELL'S FINANCIAL STATEMENTS

What we mean	We are required to establish an overall audit strategy that sets the scope, timing and direction of our audit, and that guides the development of our audit plan. Audit scope comprises the physical locations, operating units, activities and processes to be audited that, in aggregate, are expected to provide sufficient coverage of the financial statements for us to express an audit opinion.
Criteria for determining our audit scope and selection of in-scope operating units	Our assessment of audit risk and our evaluation of materiality determined our audit scope for each operating unit within Shell which, when taken together, enabled us to form an opinion on the financial statements under ISA (UK). Our audit effort was focused towards higher risk areas, such as management judgements, and on operating units that we considered significant based upon size, complexity or risk.
	We reassessed our 2020 audit scope following the completion of our 2019 audit. Our starting point was the consolidated 2019 financial reporting data by Area of Operation (AoO). We identified those AoOs that were significant by virtue of their contribution to Shell's results or significant by virtue of their associated risk or complexity. In doing this we considered the history or expectation of unusual or complex transactions, potential for or history of material misstatements, the previous effectiveness of controls, our forensic assessment in relation to fraud, bribery or corruption, and internal audit findings. We then considered the adequacy of account coverage and remaining audit risk of AoOs not directly covered by audit procedures. Finally, we sense checked our scope to the prior year and also ensured that there was appropriate unpredictability in our scope and made the necessary changes where appropriate.
	By following this approach, our audit effort focused on higher risk areas, such as management judgements. Our group wide procedures enabled us to obtain audit evidence over the AoOs that were not full, specific or specified procedure scope.
	The reduction in our 2020 (\$1,000 million) planning materiality compared to 2019 (\$1,200 million) did not increase the number of components in our audit scope. However, what did change was the nature of our testing, where we developed alternative means of obtaining sufficient and appropriate audit evidence, including through our enhanced use of technology and digital audit techniques.
	We kept our audit scope under review throughout the year to reflect changes in Shell's underlying business and risks; however no significant changes were required.
Full and specific scope	We selected 48 operating units (2019: 49) across 14 countries (2019: 11) based on their size or risk characteristics. We performed full scope audits of the complete financial information of 17 operating units (2019: 17). For 31 operating units (2019: 32) we performed specific scope audit procedures on individual account balances within the operating unit based on their size and risk profiles.
Specified procedures	In addition to the 48 operating units (2019: 49) discussed above, we selected a further 45 operating units (2019: 41) where we performed procedures at the operating unit level that were specified by the group engagement team in response to specific risk factors and in order to ensure that, at the overall group level, we reduced and appropriately covered the residual risk of error.
	In addition, specified procedures were performed at the group level on a further 90 operating units. These procedures included the testing of Shell's centralised activities addressing the implications of significant and complex accounting matters across all operating units, testing controls for the revenue and purchase to pay processes, including IT general and IT application controls, segment level impairment reviews, procedures over the forecasts as they relate to deferred tax asset recoverability and review of pension scheme assumptions and procedures over unusual accounting transactions including acquisitions, divestments and redundancies.
Group procedures	For the remaining 607 operating units (2019: 614), we performed supplementary audit procedures in relation to Shell's centralised group accounting and reporting processes. These included, but were not limited to, Shell's activities addressing the appropriate elimination of intercompany balances and the completeness of provisions for litigation and other claims. We performed testing of both manual and consolidation journal entries throughout the year, homogenous processes and controls at the Business Service Centres (BSCs) and testing of group wide IT systems. We performed a disaggregated analytical review on each financial statement line item and also tested Shell's analytical procedures performed at a group, segment and function level.
	In addition to this testing, we applied our Risk Scan analytics techniques, which consolidate internal and external data to inform us of higher risk components to be included in scope. This allowed us to risk rate each of the 742 operating units whereby we identified 230 operating units where we believed that it was appropriate to carry out targeted testing. This included the audit of manual journal entries and/or the testing of payments to third party vendors to ensure that these had been approved in line with Shell's policies and had an appropriate business rationale.
	Our coverage by full, specific, specified and group procedures is illustrated below. The summary is by Total assets, adjusted earnings and Revenue. Overall, our full, specific and specified procedures accounted for 61% of Shell's absolute adjusted earnings reported by Shell in its quarterly results announcements and adjusted for an effective tax rate. The remaining adjusted earnings were covered by Group wide procedures.
	The Parent Company is located in the United Kingdom and audited directly by the Group engagement team.



Allocation of performance materiality to the in-scope operating units

The level of materiality that we applied in undertaking our audit work at the operating unit level was determined by applying a percentage of our total performance materiality. This percentage is based on the significance of the operating unit relative to Shell as a whole and our assessment of the risk of material misstatement at that operating unit. In 2020 the range of materiality applied at the operating unit level was \$75 million to \$325 million (2019: \$135 million to \$450 million). The operating units selected, together with the ranges of materiality applied, were:

Location	Segment / Function	No. of operating units	Range of materiality applied \$ million
Full scope operating units:			
Australia, Qatar	Integrated Gas	4	100-150
Brazil, Nigeria, USA	Upstream	4	100-150
USA	Oil Products and Chemicals	2	100
Bahamas, Singapore, The Netherlands, UAE, UK, USA	Trading and Supply	7	187-325
Total full scope operating units			17
Specific scope operating units:			
Malaysia, UK, Indonesia	Upstream	3	100
Singapore, USA	Oil Products and Chemicals	5	100
Singapore, The Netherlands, UK, USA	Corporate	12	100-150
Canada, Singapore, UAE, UK, USA, South Korea	Trading and Supply	11	75
Total specific scope operating units			31
Total full and specific scope operating units			48

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF ROYAL DUTCH SHELL PLC continued

6. OUR SCOPE OF THE AUDIT OF SHELL'S FINANCIAL STATEMENTS continued

Group evaluation, review and oversight of component teams

The group engagement partner and Senior Statutory Auditor, Allister Wilson, has overall responsibility for the direction, supervision and performance of the Shell audit engagement in compliance with professional standards and applicable legal and regulatory requirements. He is supported by 14 segment and function partners and associate partners, who are based in the Netherlands and the UK, and who together with related staff, comprise the integrated group engagement team. This group engagement team established the overall group audit strategy, communicated with component auditors, performed work on the consolidation process and evaluated the conclusions drawn from the audit evidence as the basis for forming EY's opinion on the group financial statements.

For the purpose of the group audit, the group engagement team is responsible for directing, supervising, evaluating and reviewing the work of EY global network firms operating under their instruction (local EY teams) to assess whether:

- the work was performed and documented to a sufficiently high standard;
- the local EY audit team demonstrated that they had challenged management sufficiently and had executed their audit procedures with a sufficient level of scepticism; and
- there is sufficient appropriate audit evidence to support the conclusions reached.

The group engagement team provided detailed instructions to our BSC and in-country teams to drive the audit strategy and execution in a coordinated manner. However, travel restrictions presented challenges to us exercising sufficient and appropriate direction, supervision, oversight and review of overseas EY audit teams such that we had adequate involvement in their work.

Under normal circumstances, Allister Wilson and other group audit partners and directors would visit in-scope operating units and Shell's BSCs. The purpose of these visits would be to discuss the audit approach with the local EY teams and any issues arising from their work, meet with local management, attend planning and closing meetings and review key audit working papers on risk areas. However, in planning our audit, we assumed a worst-case scenario where travel restrictions and lockdowns would persist throughout the period of the audit. As a result, we developed an audit strategy that enabled the group engagement team to fulfil its responsibilities under auditing standards to evaluate, review and oversee the work of component teams on a remote basis.

In the absence of group team members being able to travel to visit local EY teams at component locations, this process included maintaining a continuous and open dialogue with our component teams, as well as holding formal closing meetings quarterly, to ensure that we were fully aware of their progress and results of their procedures. Between quarters, and during critical periods of the audit, we increased the use of online collaboration tools to facilitate team meetings, information sharing and the evaluation, review and oversight of component teams. We requested more detailed deliverables from component teams and we utilised fully the interactive capability of EY Canvas, our global audit workflow tool, to review remotely the underlying work performed. Our experience of this way of working – with both Shell and our teams – was positive. The technology proved to be robust and resilient in supporting the new way of working.

Involvement with local EY teams

Shell has centralised processes and controls over key areas within its BSCs. Members of the group engagement team provide direct oversight, review and coordination of our BSC audit teams. Our BSC teams performed centralised testing in the BSCs for certain accounts, including revenue, cash and payroll. In establishing our overall approach to the group audit, we determined the type of work that needed to be undertaken at each of the operating units or BSCs by the group engagement team or by auditors from other local EY teams.

The group engagement team performed procedures directly on 90 of the in-scope operating units. For the operating units where the work was performed by local EY auditors, we determined the appropriate level of involvement of the group engagement team to enable us to conclude that sufficient appropriate audit evidence had been obtained.

During 2020, the group team were unable to carry out physical site visits. However, we performed virtual site visits at those locations that we would normally have visited in person. We also joined the virtual site visits at 3 locations carried out by the Audit Committee.

The Senior Statutory Auditor and other group audit partners, associate partners and directors conducted virtual site visits of operating units across 7 countries as well as each of Shell's four BSCs. The countries and the BSC locations visited were as follows:

Countries visited	BSCs
Australia	India [A]
Brazil [A]	Malaysia [A]
Nigeria [A]	Philippines [A]
Singapore	Poland [A]
Qatar	
UK [A]	
USA [A]	

[A] These were visited multiple times on a virtual basis

7. OUR ASSESSMENT OF KEY AUDIT MATTERS

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) that we identified. As Shell's auditors, we are required to determine – from the matters communicated by us to the Audit Committee during the year – those matters that required significant attention from us in performing our audit of Shell's 2020 Consolidated and Parent Company Financial Statements. In making this determination we took the following into account:

- the risks that we believed were significant to our audit and therefore required special audit consideration;
- areas of higher assessed risk of material misstatement that influenced our audit focus;
- significant audit judgements relating to areas in Shell's Consolidated and Parent Company Financial Statements, including accounting estimates that we identified as having high estimation uncertainty;
- the effect on our audit of significant events or transactions that occurred during the period; and
- those assessed risks of material misstatement that had the greatest effect on the allocation of resources in the audit and directing the efforts of the audit team.

On this basis, we identified the following key audit matters that, in our professional judgement, were of most significance in our audit of Shell's 2020 Consolidated and Parent Company Financial Statements. These matters included those that had the greatest effect on:

- our overall strategy;
- the allocation of resources in the audit; and
- directing the efforts of our audit team.

The key audit matters have been addressed in the context of the audit of Shell's Consolidated and Parent Company Financial Statements as a whole, and in forming our opinions thereon, and we do not provide a separate opinion on these matters. The table below describes the key audit matters, a summary of our procedures carried out and our key observations that we communicated to the Audit Committee.

In the current year, we have added two key audit matters that were not reported as key audit matters in our 2019 report. These relate to: (1) the impact of climate risk and the energy transition on the financial statements; and (2) the recoverable amount of investments held by the Parent Company (this key audit matter relates to the Parent Company only).

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF ROYAL DUTCH SHELL PLC continued

7. OUR ASSESSMENT OF KEY AUDIT MATTERS continued

THE IMPACT OF CLIMATE RISK AND THE ENERGY TRANSITION ON THE FINANCIAL STATEMENTS

Description of the key audit matter	Our response to the risk
The financial impacts of climate change and the energy transition remain an area of audit focus, as they have a pervasive impact on many areas of accounting judgement and estimate and, therefore, our audit. Risk is elevated compared to 2019 due to the increased focus on climate change of investors and regulators.	Our audit procedures took account of the content of a letter dated 5 November 2020 sent by Sarasin and Partners to the Audit Committee Chair regarding their call for "Paris-aligned" accounts, as well as the document published on the same date by the Institutional Investors Group on Climate Change (IIGCC) entitled "Investor Expectations for Paris-aligned Accounts" and the FRC's climate change thematic review. The procedures we carried out included the following: <ul style="list-style-type: none">■ understanding Shell's processes around the climate change and energy transition-related disclosures in the Annual Report, including risk assessment, viability and greenhouse gas emissions' reporting;■ assessing the reasonableness of Shell's carbon prices included as part of the forecast operating plan, going concern and viability assessments with assistance of EY auditors with expertise in climate change;■ assessing the consistency of Shell's public statements on energy transition and climate change with significant judgements and estimates reflected in the financial statements (for example oil and gas reserve estimates, future capital and operating expenses assumptions and assumed refining margins);■ assessing the historical accuracy of disclosures made in the Annual Report. This included considering the disclosure recommendations of the TCFD and the appropriateness of Shell's disclosures in respect thereof;■ we made inquiries of management relating to Shell's assessment of its resilience to the energy transition;■ we evaluated Shell's long-term pricing assumptions against the IEA outlook;■ we assessed the energy transition assumptions within the estimation of oil and gas reserves;■ we assessed the reasonableness of Shell's refining margin estimation methodology, particularly in light of the expected impacts of a lower carbon world. For example, we read reports from independent, third-party sources in order to identify potential contrary evidence and to assess the reasonableness of key inputs and assumptions used in Shell's refining margin model. These inputs included refining capacity additions, expected refinery closures, carbon dioxide costs and the strategic and political behaviour of National Oil Companies;■ we mapped the climate change and energy transition risks to key audit areas; and■ with the assistance of EY auditors with expertise in climate change, we assessed and challenged the reasonableness of Shell's narrative disclosures around material climate risk. In addition, we evaluated the consistency between these narrative disclosures and the financial statements.
Climate change presents financial risk both to business and to the global economy. The Financial Stability Board established the Task Force on Climate-related Financial Disclosures (TCFD) to develop recommendations for more effective climate-related disclosures that could promote more informed investment, credit and insurance underwriting decisions and, in turn, enable stakeholders to understand better the concentrations of carbon-related assets in the financial sector and the financial system's exposures to climate-related risks.	The audit risk is that critical accounting estimates or judgements do not reflect material climate risks and could, as a result, mislead investors. For example, forecast assumptions that underpin management's operating plan used in assessing the recoverable amount of assets, particularly oil and gas price assumptions relevant to upstream oil and gas PP&E assets, and refining margins relevant to manufacturing assets, may not appropriately reflect the macro-economic impacts of the pandemic, combined with changes in supply and demand due to climate risk and the energy transition.
Shell has incorporated climate-related risks and opportunities into their risk management and strategic planning processes and is focused on increasing transparency and promoting investors' understanding of its strategies to respond to the risks and opportunities presented by climate change (see page 94).	Similarly, there is an audit risk that the narrative disclosures around material climate risk in the Annual Report and the financial statements are not aligned. The critical accounting judgements and estimates that are impacted by climate risk and the energy transition include the following: <ul style="list-style-type: none">■ the estimation of oil and gas reserves and resources;■ the useful economic lives of PP&E and the estimation of depreciation, depletion and amortisation (DD&A);■ impairment assessments for goodwill, PP&E and joint ventures and associates, including the recovery of exploration and evaluation assets that may no longer be considered to be economic due to the impact of climate risk and the energy transition on oil and gas prices;■ the recognition and measurement of decommissioning and restoration (D&R) provisions, including operations that historically have been assumed to have indefinite lives;■ the recognition and measurement of Deferred Tax Assets; and■ climate change-related litigation brought against Shell that may lead to an outflow of resources or otherwise impact Shell's business.
Key observations communicated to the Shell Audit Committee Critical accounting judgements and estimates	The audit procedures were performed principally by the group engagement team.

Key observations communicated to the Shell Audit Committee

Critical accounting judgements and estimates

In January 2021, we reported to the Audit Committee that we did not see any evidence that Shell's balance sheet overstated assets or understated liabilities. For Upstream and Integrated Gas assets, we were satisfied that the reserves used in the DD&A calculation do not extend to an unrealistic period in the future based on our current understanding of expected future developments. For Oil Products and Chemicals assets, we considered the fundamental shift in the refining market driven by overcapacity in the mid-term, energy transition in the long-term, and further exacerbated by the impacts of COVID-19 in the short to medium term. Given the headroom that supports the carrying amount of goodwill that is allocated to CGUs at the segment level, we were satisfied that the carrying amount of goodwill was appropriately recorded.

Also, based on our assessment of the relevant facts and circumstances as well as the audit evidence obtained from legal counsel, we were satisfied with management's assertion that no provision should currently be made in respect of climate change-related litigation.

Key observations in relation to the other financial impacts of climate change and the energy transition are included in the other key audit matters below.

Investor expectations for 'Paris-aligned Accounts'

The IIGCC expect auditors to provide reassurance that the accounts incorporate material climate risks, and whether or not the accounts can be considered 'Paris-aligned'. In order to meet this expectation, the IIGCC's paper outlines the following four steps auditors should take to 'encourage Paris-aligned financial statements':

Key steps investors expect auditors to take	Our response communicated to the Audit Committee
Consideration of material climate risks: Confirmation that critical accounting estimates or judgements reflect material climate risks, in line with accounting standards.	The other key audit matters below include details of the audit procedures performed in considering climate risk and the energy transition in the execution of our audit, together with the conclusions that we reached.
Paris-alignment: Confirmation as to whether or not these critical assumptions and estimates can be considered consistent with a 2050 net zero emissions pathway and, if not, whether Paris-aligned assumptions have been adequately considered in the Notes to the Financial Statements. If not, the auditor should indicate what reasonable Paris-aligned assumptions would be.	<p>Meeting the goals of the Paris agreement is a global aspiration that must be cemented in reality. It requires the world economy to transform in a number of complex and connected ways. Shell's financial statements reflect the world as it currently exists and what management reasonably expects based on current facts and evidence. It does not reflect what management and the world wishes and desires – a Paris-compliant world. Shell's pathway to Paris alignment is reflected in the Group's strategy. Like the rest of society, Shell is at the beginning of a journey, the speed and direction of which will change as facts and circumstances change and as management reflect these changes in the Group's evolving strategy.</p> <p>There is significant uncertainty surrounding the ways in which society and the world economy will change over the next 30 years and the extent to which such changes will meet the aspirations of the Paris Agreement. Whilst companies can commit to these aspirations, financial reporting under IFRS is based on reasonable and supportable assumptions that represent management's current best estimate of the range of economic conditions that will exist in the foreseeable future.</p>
Pathway to consistency: Alert shareholders to any inconsistency between the narrative disclosures around climate risks, the company's strategy and the financial statements.	<p>To fulfil the aspirations of the Paris Agreement, Shell's strategy will need continuously to evolve as the world economy transforms itself. For example, for Shell to reach net-zero emissions by 2050, it would also be necessary for Shell's customers to de-carbonise. Importantly also, Shell has reported in Note 2 to the Consolidated Financial Statements that their operating plan and pricing assumptions do not yet reflect Shell's 2050 net-zero emissions target. For these reasons, it is neither possible nor appropriate for EY, as Shell's auditor, to attempt to provide in our audit opinion Paris-aligned assumptions that are not in our remit to determine, and the impact that any such assumptions might be expected to have on the financial statements.</p> <p>We are satisfied that the disclosure in relation to the Board's current view on the ways in which Shell's critical accounting judgements and estimates are impacted by climate risk and the energy transition are sufficient and appropriate. However, it is not within our professional remit, responsibility or expertise to disclose in our audit opinion what we would consider to be reasonable assumptions taking the net-zero transition into account, and the impact such assumptions might have on Shell's financial statements.</p> <p>These are the board's financial statements, and it is up to the board to provide appropriate disclosures and for us to audit them and to express our professional opinion thereon. We have reported in this unqualified independent auditor's report to the members of Royal Dutch Shell plc that, in our opinion, Shell's financial statements as a whole provide a true and fair view of the group's state of affairs and loss for the year.</p>
Dividend resilience: Confirm that capital maintenance/solvency tests have appropriately considered climate risks, such as dividend legality. In many jurisdictions these rules are additional to following accounting standards, and often they demand greater prudence when dealing with foreseeable losses and liabilities.	<p>As part of reviewing the Annual Report and Accounts, with the assistance of EY auditors with expertise in climate change, we assessed and challenged the reasonableness of Shell's narrative disclosures around material climate risk and their consistency with the financial statements. We are not aware of any inconsistency between the narrative disclosures around climate risks, the company's strategy, the financial statements and our understanding of the business.</p> <p>See the key audit matter below on 'The dividend distribution process, including the determination of realised profits and losses for the purposes of making distributions under the Companies Act 2006'.</p>

Cross-reference: See the Audit Committee Report on page 150 for details on how the Audit Committee reviewed the potential impact of climate change and energy transition. Also, see Notes 2, 8 and 25 to the Consolidated Financial Statements.

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF ROYAL DUTCH SHELL PLC continued

7. OUR ASSESSMENT OF KEY AUDIT MATTERS continued

THE ESTIMATION OF OIL AND GAS RESERVES, INCLUDING RESERVES USED IN THE CALCULATION OF DEPRECIATION, DEPLETION AND AMORTISATION (DD&A), IMPAIRMENT TESTING TO EVALUATE THE RECOVERABLE AMOUNTS OF EXPLORATION AND OF PRODUCTION ASSETS AND IN THE ESTIMATION OF DECOMMISSIONING AND RESTORATION (D&R) PROVISIONS

Description of the key audit matter	Our response to the risk
This is a forecast-based valuation. Risk is unchanged compared to 2019.	Our reserves audit team includes auditors with substantial oil and gas reserves expertise, valuation experience and relevant qualifications in energy economics. The procedures we carried out included the following: <ul style="list-style-type: none"> ■ we obtained an understanding of the controls over Shell's oil and gas reserves estimation process. We then evaluated the design of these controls and tested their operating effectiveness. For example, we tested management's controls over completeness and accuracy of the financial data provided to the reservoir engineers for use in estimating oil and gas reserves; ■ we tested whether significant additions or reductions in reserves had been made in the period in which the new information became available; ■ we evaluated the professional qualifications and objectivity of Shell's internal reservoir engineers who: <ul style="list-style-type: none"> - provide the detailed preparation of the reserve estimates; and - are primarily responsible for providing independent review and challenge, and ultimately endorsement of, the reserve estimates; ■ we evaluated the completeness and accuracy of the inputs used by the internal reservoir engineers in estimating the economic limit test for the determination of oil and gas reserves by agreeing the inputs to source documentation. The economic limit of a project is reached when the operating cash flow from a project becomes negative. The economic limit test has a direct impact on DD&A and impairment. Where relevant, we assessed whether the economic limit test incorporated Shell's estimate of future carbon costs to reflect the potential impact of climate change and the energy transition. We also identified and evaluated corroborative and contrary evidence by comparing actual to prior year forecasts; ■ for undeveloped reserves, we evaluated management's development plan for compliance with the SEC rule that undrilled locations must be scheduled to be drilled within five years, unless specific circumstances justify a longer period. This evaluation was made by assessing consistency of the development projections with Shell's drilling, development and capital expenditure plans; ■ we tested the existence and completeness of the undeveloped reserves recognised. Where volumes recognised remained undeveloped for more than five years from the date they were booked, or where development was not expected for at least five years, we assessed whether or not Shell was still working towards development by comparing with future development plans, including capital expenditure plans. Also, where reserves are recognised beyond current licence terms, we obtained evidence to support the assumption that the licence would be renewed; and ■ we assessed whether or not the energy transition assumptions used in the asset plans reflected the commitments that Shell has made with respect to decarbonisation in order to be a net-zero emissions energy business by 2050, specifically considering reserve volumes expected to be lifted beyond 2030.
As described in Note 8 to the Consolidated Financial Statements, Exploration and evaluation assets amounted to \$9,226 million, and Production assets amounted to \$131,763 million. Production assets had an associated DD&A charge of \$33,806 million. The accounting for these financial statement amounts relies on management's estimation of oil and gas reserves. As further described in Note 8, impairment charges of \$20,155 million of Exploration and Production assets were recorded during the year. As described in Note 18, D&R provisions amounted to \$23,175 million.	Our procedures were led by the group engagement team, with input from our teams in Australia, Brazil, Canada, Kazakhstan, Norway, Nigeria, Qatar, Russia and the USA.
Auditing the estimation of oil and gas reserves is complex as there is significant estimation uncertainty in assessing the quantities of Shell's reserves and resources. The estimates are based on a central group of experts' assessments of petroleum initially in place, production curves and certain other inputs, including future capital and operating cost assumptions and future carbon costs.	
In-year movements are driven by revisions of previous estimates resulting from reclassifications, improved recovery assumptions, extensions and discoveries and purchases and sales of reserves in place. Revisions generally arise from new information, for example additional drilling results, changes in production patterns and changes to development plans, which are an input to the cash flows used in the measurement of Exploration and Production assets and D&R provisions.	
Auditing these financial statement areas is complex because we are required to evaluate the work of reservoir engineers and assess the appropriateness of the inputs selected by management described above. These inputs are used by reservoir engineers in estimating oil and gas reserves.	

Key observations communicated to the Shell Audit Committee

We reported that our reserves audit team included a partner with significant oil and gas reserves expertise and valuation experience. He is a graduate of the 'Ecole Polytechnique', the industrial and engineering school in France, holds a post graduate diploma from the French Petroleum School (Institut Francais du Pétrole) and lectures on oil and gas reserves. Other audit team members had relevant industry experience through working for many years on the audits of oil and gas companies.

Based on our testing, we did not identify any significant errors in the oil and gas reserves and resources and concluded that the inputs and assumptions used to estimate reserves and resources were reasonable. We reported that we had verified that significant additions to or reductions in reserves had been recorded in the appropriate period, and that they were in compliance with Shell's reserves and resources guidance.

We reported to the Audit Committee that, in light of the commitments that Shell has made to be a net-zero emissions energy company by 2050, we saw no evidence that the recognition of the reserve volumes expected to be lifted beyond 2030 results in the overstatement of Shell's balance sheet by overstating the recoverable amounts of Shell's assets or understatement of D&R provisions.

Cross-reference: See the Audit Committee Report on page 147 for details on how the Audit Committee reviewed assurances for oil and gas reserves. Also, see Notes 2, 8 and 18 to the Consolidated Financial Statements, and Supplementary information – oil and gas (unaudited) on page 265.

IMPAIRMENT OF PP&E (INCLUDING EXPLORATION AND PRODUCTION ASSETS AND REFINERIES) AND JOINT VENTURES AND ASSOCIATES (JVA)

Description of the key audit matter	Our response to the risk
<p>This is a forecast-based estimate. Risk is elevated compared to 2019 due to the increased uncertainty in future commodity prices, refining margins and demand for petroleum products, as well as the impact of the energy transition.</p> <p>As described in Notes 8 and 9 to the Consolidated Financial Statements, Shell recognised \$141 billion of Exploration and Production assets, \$50 billion of manufacturing, supply and distribution assets (refineries), as well as investments in joint ventures and associates of \$22 billion. As disclosed in Note 8 and Note 9, Shell recorded impairment charges of \$27 billion and \$0.6 billion of PP&E and JVAs respectively.</p> <p>Auditing the recoverable amounts of PP&E and investments in JVAs is complex and subjective due to the significant amount of judgement involved. The most complex judgements in forecasting future cash flows relate to management's view on the long-term oil and gas price outlook and refining margins appropriate to local markets. These judgements are particularly difficult because of increased demand uncertainty due to factors such as the macro-economic impacts of the pandemic and the pace of decarbonisation and the energy transition.</p> <p>Other judgements relate to oil and gas reserve estimates, future expected production volumes, the risking of cash flows and the expected useful lives of the assets.</p> <p>Further, given the long timeframes involved, the recoverable amounts of assets are often sensitive to the extent of the risking of the future cash flows. There is a risk of material misstatement in the event that the future cash flows do not reflect appropriately the risks specific to the asset.</p> <p>Production assets, including JVAs</p> <p>Producing assets' operational performance and the impact of external factors have a significant bearing on the estimate of the recoverable amounts of Shell's Upstream and Integrated Gas assets.</p> <p>The most complex judgement in determining the recoverable amount of Production assets within Upstream and Integrated Gas is the estimation of future oil and gas price, both in the short term and the long term. The estimation of future oil and gas prices is subject to increased uncertainty, given climate change, the energy transition and the impact of the pandemic on the demand for petroleum products. There is a risk that management's oil and gas price assumptions are not appropriate, potentially leading to a material misstatement.</p> <p>A further management judgement relates to the estimation of oil and gas reserves as there is significant estimation uncertainty in the process of assessing the quantities of Shell's reserves and resources. We have described the risk within the Estimation of oil and gas reserves key audit matter above.</p>	<p>Overall</p> <p>We obtained an understanding of the controls over Shell's asset impairment process for: (1) production assets, including joint ventures and associates; (2) exploration and evaluation assets; and (3) manufacturing, supply and distribution assets. We then evaluated the design of these controls and tested their operating effectiveness. For example, we tested controls over the identification of cash generating units, of indicators of impairment and reversals of impairment and the approval of key inputs to impairment assessments, including oil and gas prices and refining margins, discount rates and oil and gas reserves.</p> <p>We evaluated Shell's asset impairment methodology and where impairment assessments were carried out, we tested the mathematical accuracy and completeness of the models used. For those assets or investments impaired previously, we evaluated the actual results versus the assumptions made and considered if reversals were required.</p> <p>In order to evaluate the cash flow inputs of the impairment models, our procedures included the following:</p> <ul style="list-style-type: none"> ■ tested whether operating expenditure profiles, capital costs to complete construction and refinery turnaround costs, agreed to approved operator budgets and management forecasts; ■ tested whether carbon pricing was included in cash flows, where applicable; ■ reconciled reserves volumes in the impairment models and tested whether the life-of-field assumptions were consistent with those applied in the decommissioning and restoration provision models; and ■ performed sensitivity analyses on key variables in the base case cash flow models to understand the impact of changes in certain assumptions (including oil and gas prices, refining margins, production and the risking of cashflows). <p>Where impairment tests were undertaken, we performed sensitivity analyses of the models using different price scenarios and asset specific risks taking into account the nature of the asset, its location, its stage of development and associated risks.</p> <p>Oil and gas price assumptions</p> <p>To test price assumptions, we compared future short and long-term commodity prices to consensus analysts' forecasts and those adopted by other international oil companies; we evaluated whether prices were used consistently across Shell, including pricing differentials, and evaluated whether Shell's long-term price assumptions incorporated the potential impact of climate change and the energy transition by comparing the assumptions to the International Energy Agency price outlook in the Energy Outlook scenarios.</p> <p>Risking of cash flows</p> <p>We assessed the basis for adjusting the cash flows to reflect the risks of each individual asset that were not reflected in the impairment discount rate. In so doing, we considered, for Upstream and Integrated Gas, the stage of the life of the asset, the nature of the asset and tested the consistency across similar fields. In respect of refineries, we considered refining margins, refinery availability and estimated unplanned maintenance costs.</p> <p>Oil and gas reserves estimates</p> <p>The procedures we performed in relation to oil and gas estimates are described above within the Estimation of oil and gas reserves key audit matter.</p>

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF ROYAL DUTCH SHELL PLC continued

7. OUR ASSESSMENT OF KEY AUDIT MATTERS continued

IMPAIRMENT OF PP&E (INCLUDING EXPLORATION AND PRODUCTION ASSETS AND REFINERIES) AND JOINT VENTURES AND ASSOCIATES (JVA) continued

Description of the key audit matter	Our response to the risk
<p>Exploration and evaluation assets Exploration and evaluation (E&E) expenditures are capitalised on a project-by-project basis. E&E activity is inherently risky given the level of uncertainty considered in the run up to Final Investment Decision (FID). Where FID is not achieved, there is a significant judgement relating to the risk that certain E&E costs are not written off in the appropriate reporting period. Given the current environment, there is a heightened risk that projects will no longer proceed, in which case they may need to be written off. It is possible that a greater than usual number of projects will not proceed in the current environment.</p> <p>Manufacturing, supply and distribution assets In the event that there is a prolonged period of low refining margins, there may be a need to assess refineries for impairment. Auditing future refining margins is inherently complex as the margins are influenced by regional factors and there is limited external refining margin forecast data available.</p>	<p>Exploration and evaluation assets We performed a licence-by-licence risk assessment of Shell's E&E assets to identify assets with a significant risk of impairment. We assessed each significant licence area against the impairment criteria within IFRS 6, with a particular focus on those assets that were expected to be developed over the medium and long term, or those assets where the dominant commodity that will be produced is oil.</p> <p>We considered whether the development of E&E projects would be inconsistent with Shell's current strategy and may no longer be considered to be economic due to the impact of climate risk and the energy transition on oil and gas prices.</p> <p>Manufacturing, supply and distribution In addition to the procedures described above, the procedures we performed are described within the <i>Estimation of future refining margins to evaluate the recoverability of manufacturing assets</i> key audit matter below.</p> <p>The audit procedures were performed by our group engagement teams as well as our local audit teams in Australia, Brazil, Malaysia, Nigeria, Qatar, the UK and the USA, which covered 49% of PP&E and investments in joint ventures and associates across the Group.</p> <p>We also performed specified procedures over the recoverability of PP&E balances in Argentina, Australia, Brunei, Canada, Cyprus, Denmark, Egypt, Germany, Indonesia, Iraq, Italy, Kazakhstan, Malaysia, Mexico, the Netherlands, Nigeria, Philippines, Qatar, Russia, South Africa, Tanzania, Tunisia, Trinidad and Tobago and the USA which covered an additional 17% of PP&E and investments in joint ventures and associates across the Group.</p>
	<p>Key observations communicated to the Shell Audit Committee</p> <p>Oil and gas price assumptions We obtained external evidence, including price forecasts by banks, brokers, consultants and published data from Shell's peer group, to support the reasonableness of Shell's price assumptions. Overall, Shell's assumptions for both Brent and Henry Hub lie comfortably within the benchmarks that we had identified. In the short-term, Shell's Brent price assumption is the most conservative compared to our sector benchmarks and Shell's forecast aligns broadly with the sector averages from 2023 onwards.</p> <p>For Henry Hub, compared to the sector, Shell's forecast is below the average in the short-term, converging with the bank/broker, consultant and peer group averages by 2024.</p> <p>Refining margins Key observations in relation to refining margins are set out in the key audit matter below.</p> <p>Impairment discount rates Shell applied a discount rate of 6% to estimate the recoverable amount in impairment tests, with additional risking included in the cashflows. Whilst the risking of cashflows is highly judgemental, we were satisfied that the cash flows had been risked appropriately.</p> <p>Production assets, including Joint ventures and associates We reported that management's review to determine whether or not any indicators of impairment were present had considered all relevant information available at the end of each reporting period, including: the reserves and resources review process, the output of Shell's operating plan and strategic changes in Shell's intended future use of assets, including the refining portfolio, some of which were driven by the energy transition.</p> <p>For the assets where management's impairment assessment resulted in an impairment charge, the charges were within an acceptable range. Also, we were satisfied that the impairment charges were recorded in the appropriate period.</p> <p>Exploration and evaluation (E&E) assets The E&E assets that were being carried were consistent with Shell's strategy and operating plan, including the impacts of the energy transition. We were satisfied that it remained appropriate to continue to carry the E&E assets whilst the technical feasibility and commercial viability of extracting commercial reserves were being assessed.</p> <p>Manufacturing, supply and distribution assets The significant reduction in future margin assumptions represents an impairment trigger, which resulted in Shell's entire refinery portfolio being tested for impairment. We reported that, in our view, management had performed extensive and rigorous impairment assessments covering 14 refineries. Management's forecasts included appropriate risking covering margin, availability and cost downside risks. We were satisfied that the risking had been applied appropriately across the portfolio of refineries. We reported that the outcome of the impairment assessments was consistent with our analysis of expected future refining margins, based on the configuration of each individual refinery, including the fact that refineries that are able to produce the most beneficial mix of products, in particular low density products, are expected to fare more favourably and therefore have a higher recoverable amount.</p> <p>A pre-tax impairment charge of \$4.8 billion was recorded. The impairment models were most sensitive to refining margins. A +/-10% change in the long-term refining gross margin across the portfolio would have had an impact of approximately \$1.5-\$2.5 billion of additional impairment or \$1.7-\$2.7 billion of impairment reversal.</p> <p>Impairment disclosures We agreed that the disclosure of the impairments recorded during the year, including sensitivity analysis, performed by the company was appropriate.</p>

Cross-reference: See the Audit Committee Report on page 150 for details on how the Audit Committee considered impairments. Also, see Notes 2, 8 and 9 to the Consolidated Financial Statements.

THE ESTIMATION OF FUTURE REFINING MARGINS TO EVALUATE THE RECOVERABILITY OF REFINERIES

Description of the key audit matter

Our response to the risk

This is a forecast-based valuation. Risk is elevated compared to 2019 due to Shell reshaping its refining portfolio and refocusing its downstream strategy.

As described in Note 8 to the Consolidated Financial Statements, manufacturing, supply and distribution assets were \$50 billion. As further described in Note 8, an impairment charge of \$6,859 million was recorded in respect of manufacturing, supply and distribution assets. As described in Note 2, forecast refining margins are a key input to:

- assessing whether or not there are indicators that refining assets might be impaired;
- estimating the recoverable amount of refining assets; and
- whether or not there is a need for D&R provisions.

Auditing future refining margins is inherently complex as the margins are influenced by regional factors and there is limited external refining margin forecast data available. In prior years, Shell's estimation of long-term refining margins focused on the concept of reversion to mean, as opposed to attempting to forecast refining cycles. The previous approach was, by nature, backward looking and assumed that the refining margin will revert to the mean over time, unless a fundamental shift in markets had been identified.

Shell viewed the expected increase in supply of refined products with new refineries being constructed, as well as the ongoing impact of energy transition on the demand side as a fundamental shift in markets. Consequently, Shell revised its approach to estimating refining margins. The revised estimation process represented a significant shift in terms of margin methodology, reflecting energy market demand and supply fundamentals, including the energy transition, as well as the shorter-term impacts of the pandemic.

The approach incorporates long-run demand forecasts, including the impacts of the energy transition, and supply dynamics, including the speed of the industry's response to changing demand through either constructing new refineries or closing older refineries.

Under Shell's new estimation methodology, forecast average gross refining margins between 2020 and 2030 have decreased compared to the historic reversion to mean approach. As a result of over-capacity in the market, a significant decrease in refining margins is estimated between 2021 and 2025. As market rationalisation occurs, margins are forecast to recover between 2025 and 2030. The refineries that remain in operation are forecast to generate stronger margins from 2030.

We obtained an understanding of the controls over Shell's process for the estimation of refining margins. We then evaluated the design of these controls and tested their operating effectiveness. For example, we tested controls over the approval of refining margins.

Our other procedures included the following:

- we read Shell's documentation with respect to their methodology for determining refining margins and held discussions with the Shell individuals responsible for the analysis and design and implementation of Shell's new methodology and the resulting model;
- we involved our oil and gas valuations specialists to assess the reasonableness of Shell's refining margin estimation methodology and reasonableness of their assumptions;
- we read reports from independent, third-party sources in order to identify potential contrary evidence and to assess the reasonableness of key inputs and assumptions used in the model. These inputs included refining capacity additions, expected refinery closures, carbon dioxide costs and the strategic and political behaviour of National Oil Companies;
- we undertook numerical analysis of the indicative refining margins for the three key refining hubs (US Gulf Coast, North West Europe and Singapore) and compared these to market and consultant forecasts;
- we reviewed analysts' views of refining margins for each of the three refining hubs;
- we recreated refining margins from Shell's price forecasts and benchmarked these to the refining margins derived from traded futures; and
- we reperformed management's calculations for taking the forecast margins at the three regional hubs and turning them into localised margin forecasts on a refinery-by-refinery basis.

The audit procedures were performed principally by the group engagement team.

Key observations communicated to the Shell Audit Committee

We reported to the Audit Committee in July 2020 that the more significant assumptions in the new estimation methodology related to demand change, primarily as a result of the energy transition and, on the supply side, non-economic behaviour, such as investment in refineries for strategic rather than economic reasons. The structural shifts in energy markets were likely to result in more volatile future margins, as well as prolonged periods of abnormally high or low margins. This means that in an uncertain future, the risk of operating a refinery would increase and therefore a reversion to mean methodology may no longer be appropriate; this was particularly the case in an environment where the outlook was unstable and refinery owners begin to act in a manner driven by different economic fundamentals.

We confirmed to the Audit Committee that we involved our oil and gas valuations specialists in assisting us in concluding on the appropriateness of management's revised methodology and reasonableness of their assumptions. We also confirmed that we used external broker reports to support our expectations with respect to future refining margins and assessed whether or not management's projections were consistent with our independent analysis. Based on our benchmarking against these external sources, we satisfied ourselves that Shell's demand forecast assumptions and refining margins were consistent with industry forecasts; however, we noted that Shell's view was at the conservative end of the industry.

Shell's revised refining assumptions were conservative compared to other market benchmarks and represented approximately a 30% decrease compared to previous views on refining margins. We benchmarked Shell's key assumptions in estimating future refining margins to external data, where possible, and concluded that the assumptions used were reasonable and supportable, albeit conservative. The company followed a rigorous and robust process to determine the revised assumptions.

The significant reduction in future margin assumptions represented an impairment indicator (see key audit matter above).

Cross-reference: See the Audit Committee Report on page 150 for details on how the Audit Committee reviewed refining margins. Also, see Notes 2 and 8 to the Consolidated Financial Statements.

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF ROYAL DUTCH SHELL PLC continued

7. OUR ASSESSMENT OF KEY AUDIT MATTERS continued

THE ESTIMATION OF DECOMMISSIONING AND RESTORATION (D&R) PROVISIONS

Description of the key audit matter	Our response to the risk
<p>This is an estimation based on uncertain outcomes. Risk is elevated compared to 2019 due to the rationalisation of Shell's manufacturing portfolio.</p> <p>As described in Note 18 of the Consolidated Financial Statements, at December 31, 2020, Shell recognised \$23 billion of D&R provisions.</p> <p>D&R provisions are a highly judgemental area. They are based on a number of estimates and assumptions that are impacted by future activities, economic factors and the legislative environments in which Shell operates.</p> <p>D&R provisions are also affected by changes in the oil and gas reserve estimates and price assumptions, which determine the date on which production will cease.</p> <p>The main judgements in determining the D&R provisions include the appropriateness of the cost, inflation, capital cost outlook escalation rates, estimated asset lives, discount rate, cessation of production (COP), the number of days to decommission an asset and contingency rate assumptions used in the models and the consistency of their application across the portfolio.</p> <p>Industry practice has been not to recognise D&R provisions associated with refineries and petrochemicals facilities. This was on the basis that the assets were considered to have indefinite lives and, therefore, that it was considered remote that an outflow of economic benefit would be required. This was driven by the assumption that demand for oil products would continue to grow and there would be a need for more, rather than less, refining capacity; hence it was not expected that existing refineries would be shut down and decommissioned for the foreseeable future.</p> <p>During the second quarter of 2020, Shell revised downwards its discount rate for D&R provisions from 3% to 1.75%. The reduction in the rate was driven by unprecedent macroeconomic conditions due to COVID-19, which resulted in a significant drop in US treasury bond rates. The impact of the change in discount rate was to increase Shell's decommissioning liabilities by \$3.6 billion as at June 30, 2020.</p>	<p>The procedures we performed included the following:</p> <ul style="list-style-type: none"> ■ we obtained an understanding of the controls over Shell's D&R estimation process. We then evaluated the design of these controls and tested their operating effectiveness. For example, we tested controls over the review of the estimation and completeness of costs in accordance with Shell's internal guidelines; ■ we considered the increasing expectation that demand for oil products will fall, particularly in developed economies, together with Shell's plans to rationalise their manufacturing portfolio. In so doing, we challenged management's assessment of whether or not the expected useful lives of manufacturing assets remained appropriate. In particular, we challenged management's conclusion that manufacturing assets could no longer be considered to have indefinite lives, and that therefore D&R provisions were required for certain refineries. We also challenged management's assessment of the need for contingent liability disclosure in respect of certain other assets; ■ we obtained an understanding of the procedures performed by management to estimate the D&R provisions. This included understanding the processes to establish whether or not a legal or constructive obligation existed; ■ we understood changes in D&R cost estimates, and assessed whether they reflected the latest regulatory requirements and technical developments; ■ we read case studies relating to previously decommissioned sites and compared the cost of those decommissioning activities to management's assumptions; ■ we agreed key inputs such as site acreage and distillation capacity to publicly available sources; ■ we evaluated changes in assumptions for labour rates, rig type and rates, number of wells, well durations and any contingency applied; ■ we assessed changes in assumptions for the anticipated date of decommissioning; ■ in the case of non-operated assets, we understood and challenged whether management applied their own assumptions to the D&R estimate or used the operator-provided estimates; ■ we tested the D&R accounting models and assumptions therein, including discount rates, equity percentages and inflation rates. We involved our valuation specialists in testing these assumptions, including the change in Shell's discount rate assumption from 3% to 1.75% during the year; ■ we challenged the timing of recognition of D&R provisions related to projects in development; ■ we evaluated contingent liabilities and D&R provisions arising from assets previously disposed of; ■ we ensured key assumptions used were aligned with the assumptions used in other areas of measurement, such as impairment; ■ we assessed the counterparty risk of prior disposals to ascertain the risk of the related D&R provision becoming a liability of Shell; and ■ we reviewed and challenged the disclosures in the financial statements. <p>The audit procedures were performed principally by the group engagement team and our component teams in Australia, Brazil, Trinidad and Tobago, the UK and the USA.</p>

Key observations communicated to the Shell Audit Committee

Upstream and Integrated Gas

In January 2021, we reported that the Upstream and Integrated Gas D&R provisions recorded as at December 31, 2020 were fairly stated and that changes in D&R provisions during the year, including the application of the revised discount rate and capital cost outlook escalation rates, had been reflected appropriately in the financial statements.

Refineries

In January 2021, we confirmed to the Audit Committee that:

- we agreed with management's conclusion that it was no longer appropriate to consider refineries to have indefinite lives and that for manufacturing assets either D&R provisions or contingent liability disclosures were required;
- for those provisions recorded, that the amounts recorded fell within a reasonable range and that the provisions were supported by appropriate evidence;
- estimating refinery useful lives is highly judgemental, particularly when considering time periods of 50 to 100 years. In our view, management had appropriately stratified the refining portfolio and, in doing so, had made reasonable judgements as to which refineries required a provision and which required contingent liability disclosure;
- we considered Shell's risk-free rate assumption to be reasonable and supported by our analysis, based on data from the US Department of Treasury and Oxford Economics. We also concluded that changes in D&R provisions as a result of the revised discount rate, were reflected appropriately in the financial statements; and
- we agreed that the disclosure of contingent liabilities was appropriate.

Cross-reference: See the Audit Committee Report on page 147 on how the Audit Committee reviewed D&R provisions. Also, see Notes 18 and 25 to the Consolidated Financial Statements.

RECOGNITION AND MEASUREMENT OF DEFERRED TAX ASSETS

Description of the key audit matter	Our response to the risk
<p>This is an estimation based on uncertain outcomes. The realisation of these assets is largely dependent on generating substantial future profits. Risk is elevated compared to 2019 due to the increased uncertainty in forecasting future profits in the current macro-economic environment.</p>	<p>We obtained an understanding of the controls over Shell's processes for the recognition and measurement of DTAs. We then evaluated the design of these controls and tested their operating effectiveness. For example, we tested controls over projected sources of taxable income and the calculations that support the recognition of DTAs.</p>
<p>As described in Note 16 of the Consolidated Financial Statements, at December 31, 2020 Shell recognised gross deferred tax assets (DTAs) totalling \$33 billion, which are recognised within two balance sheet line items, DTAs and as an offset against deferred tax liabilities (DTLs), depending on the overall tax position in a particular jurisdiction.</p>	<p>We considered the expected timing of utilisation of the DTA, including the relevant country tax laws that apply to the utilisation of tax losses and deductible temporary differences. This included the ability to carry tax losses forward or back and any restrictions arising from ring fencing losses for tax purposes.</p>
<p>The recognition of material DTA balances is supported by the unwinding of DTLs and forecast future taxable profits, which are underpinned by Shell's assumptions, including commodity price assumptions and the timing of the unwinding of DTAs.</p>	<p>We tested the forecast timing of the unwinding of taxable temporary differences by evaluating the projected sources of taxable income and considering the nature of the temporary differences and the relevant tax law.</p>
<p>Auditing the recognition and measurement of DTAs is complex because the estimation requires significant judgement, including the timing of reversals of DTLs and the availability of future profits against which tax deductions represented by the DTAs can be offset.</p>	<p>For DTAs that are supported by forecast taxable profits or tax planning strategies, our procedures included the following:</p> <ul style="list-style-type: none"> ■ we performed sensitivity analyses over the commodity price and/or other key assumptions, including the risking of forecast profit, that underpin Shell's assessment of forecast probable taxable profits; ■ we evaluated the extent to which sufficient probable taxable profits would arise in the period within which the related losses and/or deductible temporary differences would be available for utilisation, considering for example, limits on the length of time that losses can be carried forward, if applicable, or if losses are ring fenced for tax purposes; ■ we evaluated management's negative stress test to enable us to understand the tolerance of the estimation uncertainty to further risking; and ■ we confirmed that the tax balances were calculated using substantively enacted tax laws and rates.
<p>A key judgement applied by management in assessing whether it is appropriate to recognise certain DTAs includes the expectation of probable taxable profits arising beyond Shell's 10-year planning horizon. There is greater uncertainty regarding future taxable profits that exist outside the 10-year planning period.</p>	<p>For the tax planning strategies necessary to justify the recognition of the relevant DTAs, we involved our tax professionals to evaluate whether the Company's proposed tax planning strategies were achievable.</p>
	<p>Our audit procedures over the recognition and valuation of DTAs were performed by our tax specialist teams in Australia, Brazil, Canada, the Netherlands, Malaysia, Nigeria, Singapore, Qatar, the UK and the USA, which covered 77% of the gross DTA balance. We also performed specified procedures over the recognition and valuation of DTAs in Albania, Austria, China, Egypt, France, Germany, Kazakhstan, Norway, Oman, Philippines, South Africa, Spain, Switzerland, Tanzania, Trinidad and Tobago and Tunisia, which covered an additional 14% of the gross DTA balance.</p>

Key observations communicated to the Shell Audit Committee

In January 2021, we reported to the Audit Committee that the majority of the DTAs are either offset against DTLs or are expected to be recovered from forecast profits within the operating planning horizon. In aggregate, these factors supported 97% of the recognised DTAs. The remaining 3% relied on estimated future profits between 2031 and 2040. Whilst the application of risking is judgemental, we satisfied ourselves that management's risking of forecast profit was appropriate to reflect the uncertainty throughout the forecast period.

The COVID-19 impact on the global economy and on GDP growth, together with the dramatic fall in the oil price and in demand for petroleum products, had increased the level of pressure on the recoverability of DTAs that were supported by estimated future taxable profits. However, we have concluded that there is sufficient evidence to support Shell's recognition of DTAs, although there is a greater degree of judgement required when profits beyond Shell's operating plan planning horizon are necessary to support the asset recognition.

Cross-reference: See the Audit Committee Report on page 150 for details on how the Audit Committee reviewed certain tax matters, in particular the recoverability of deferred tax assets. Also, see Notes 2 and 16 to the Consolidated Financial Statements.

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF ROYAL DUTCH SHELL PLC continued

7. OUR ASSESSMENT OF KEY AUDIT MATTERS continued

REVENUE RECOGNITION: THE RISK OF UNREALISED TRADING GAINS AND LOSSES BEING RECOGNISED AS A RESULT OF ERRORS, UNAUTHORISED TRADING ACTIVITY OR DELIBERATE MISSTATEMENT OF SHELL'S TRADING POSITIONS

Description of the key audit matter	Our response to the risk
<p>This is a risk of error in revenue due to the complexity of Shell's trading and supply function. Risk is unchanged compared to 2019.</p> <p>As described in Note 4 of the Consolidated Financial Statements, at December 31, 2020 Shell recognised \$181 billion of revenue. As described in Note 19, Shell recognised derivative financial instrument assets of \$9 billion and derivative financial instrument liabilities of \$6 billion.</p> <p>The recognition of unrealised trading gains and losses is a complex audit area. There is an inherently higher risk of error, of unauthorised trading activity or of deliberate misstatement of the group's overall trading positions.</p> <p>Shell's trading and supply function is integrated within the Oil Products, Chemicals, Integrated Gas and Upstream segments and is spread across multiple regions. The trading and supply function is inherently complex due to, amongst other things, the fact that trading is not always carried out in active markets where prices are readily available. This exposes Shell to risks that are not normally associated with core oil and gas activities. Further, in 2020, trading margins have been under pressure due to the volatility of commodity prices and demand since the start of the pandemic.</p> <p>Auditing unrealised trading gains and losses is complex because of the significant judgement used in determining the key assumptions used in valuing the trades, the risk of error, of unauthorised trading activity or of deliberate misstatement of Shell's trading positions.</p> <p>The deliberate misstatement of Shell's trading positions or mismarking of positions could result in understated trading losses, overstated trading profits and/or individual bonuses being manipulated through inappropriate inter-period profit or loss allocations.</p>	<p>We obtained an understanding of the controls over Shell's process for the recognition of revenue relating to unrealised trading gains and losses. We then evaluated the design of these controls and tested their operating effectiveness. For example, we tested controls within the front-to-end deal lifecycle across the trading and supply function and controls around the review of valuation models.</p> <p>Our trading audit professionals comprise individuals who have significant experience of auditing both large commodity trading organisations and financial institutions.</p> <p>To audit the existence, completeness and valuation of open positions, we focused specifically on over-the-counter (OTC) physical and financial transactions. Our audit procedures included the following:</p> <p>Existence:</p> <ul style="list-style-type: none"> ■ we obtained external confirmations for a sample of open trading positions with brokers and counterparties and, where necessary, we evaluated the existence of the position by agreement to signed contracts. <p>Completeness:</p> <ul style="list-style-type: none"> ■ we performed additional confirmation testing by obtaining confirmations from a sample of counterparties who had open positions in the prior trading year, but no reported trading positions in the current year; and ■ we performed procedures to identify unrecorded liabilities by comparing sales to trade receivables and purchases to trade payables that occurred near the end of the financial year to evaluate whether or not transactions were recorded in the correct period. <p>Valuation:</p> <ul style="list-style-type: none"> ■ we analysed the key valuation inputs to the valuation models; ■ we assessed Shell's valuation methodology against market practice. This included comparing the price curves and volatility assumptions adopted by Shell to external broker quotes, market consensus providers, and our independent assessments; ■ for a sample of non-complex derivatives (Level 1 and 2), we performed an independent recalculation of their fair value at the end of the year; and ■ we involved EY valuation specialists to assist us in performing independent testing of the valuation models of Level 3 contracts. We evaluated the contract terms and key assumptions against independent market information. <p>The other audit procedures we performed included:</p> <ul style="list-style-type: none"> ■ we enquired of management whether or not there were any breakdowns of trading controls or instances of rogue trading reported or known or suspected frauds; ■ we assessed the design of key controls and performed independent testing of key trading controls throughout the financial year; ■ we assessed the relevant accounting policies against IFRS and considered their appropriateness under current market conditions; and ■ we evaluated the appropriateness of presentation on both the income statement and balance sheet based on the standards required by IFRS. <p>The audit procedures were performed principally by the group engagement team and the UK and US component teams.</p>

Key observations communicated to the Shell Audit Committee

In March 2021, we reported to the Audit Committee that:

- the valuation of derivative contracts as at December 31, 2020 was appropriate;
- our testing satisfied us that the models used to value contracts were appropriate for the purposes of the valuations included in Shell's Consolidated Financial Statements;
- the unrealised gains and losses had been recorded appropriately;
- our completeness testing did not identify any unrecorded liabilities or significant cut-off issues; and
- our testing did not identify any indications of unauthorised trading activity or deliberate misstatement of Shell's trading positions.

Cross-reference: See the Audit Committee Report on page 147 for details on how the Audit Committee reviewed the Trading and Supply's control framework. Also, see Note 4 to the Consolidated Financial Statements.

THE DIVIDEND DISTRIBUTION PROCESS, INCLUDING THE DETERMINATION OF REALISED PROFITS AND LOSSES FOR THE PURPOSES OF MAKING DISTRIBUTIONS UNDER THE COMPANIES ACT 2006

Description of the key audit matter	Our response to the risk
<p>This is a risk of non-compliance with laws and regulations. This key audit matter relates to the Parent Company only. Risk is unchanged compared to 2019.</p> <p>Royal Dutch Shell plc has \$19.2 billion of distributable profits at December 31, 2020. In 2020, Shell distributed \$7.3 billion of dividends and repurchased \$1.2 billion of shares.</p> <p>There is considerable public interest in ensuring that companies pay dividends and buy back shares out of profits available for distribution. Although Shell has reduced quarterly dividends and the share buyback programme was paused during 2020, shareholders' returns are a fundamental part of Shell's financial framework and it remains a major dividend-paying company. Given the uncertainty surrounding a prolonged period of economic crisis, volatility, weaker commodity prices and demand outlook, this remains a key matter of interest to stakeholders.</p> <p>The legal framework applicable to UK companies for determining profits available for distribution is contained in both the Companies Act 2006 and complementary technical guidance. Under this framework, distributions are made by individual companies and not by groups. The Shell Consolidated Financial Statements are therefore not relevant for the purpose of determining Shell's profits available for distribution. Whether or not a distribution may be made by Shell is determined by reference to Shell's 'relevant accounts', which are the Parent Company financial statements.</p>	<p>The procedures we performed included the following:</p> <ul style="list-style-type: none"> ■ we obtained an understanding of the procedures performed by management to monitor the profits available for distribution of the Parent Company. This included understanding the processes to monitor profits available for distribution of the subsidiary entities paying significant dividends to the Parent Company; ■ we tested management's distributable reserve controls at both the Parent Company and subsidiary entities that pay significant dividends, which are designed to ensure that there are sufficient profits available for distribution prior to a dividend being proposed and approved. Our testing included a review of management's analysis of non-distributable profits or losses. We also assessed the completeness of the non-distributable profits or losses identified; ■ we analysed transactions that impacted significantly the retained earnings of the Parent Company and subsidiary entities paying significant dividends and considered whether any of these transactions do not meet the criteria of distributable profits or losses. We considered whether operating and financial circumstances existed that could result in a dividend block within the group structure; ■ we reviewed management's analysis of profits available for distribution in the Parent Company and compared this to the expected future distributions. We also reperformed the calculation of distributable profits available for distribution of the Parent Company by reference to the relevant accounts; ■ we confirmed that, as at December 31, 2020, the Parent Company had a merger reserve of \$234 billion and that, in the event that the investment in Shell Petroleum N.V. held by RDS plc were to be impaired (see the key audit matter below), this would have no impact on Shell's distributable profits. We confirmed further that this is because, under the Companies Act 2006, any such impairments would first be charged to the income statement and then transferred to the merger reserve, as opposed to impacting distributable reserves; and ■ we satisfied ourselves that distributions made in 2020 were allowable, by reference to the most recent relevant accounts, for the purposes of making distributions under the Companies Act 2006. <p>The audit procedures were performed principally by the group engagement team and the UK component team.</p>

Key observations communicated to the Shell Audit Committee

In March 2021, we reported to the Audit Committee that:

- the procedures performed by management to monitor the profits available for distribution of the Parent Company and subsidiary entities paying significant dividends to the Parent Company were appropriate;
- the analysis performed by management to identify non-distributable profits or losses and expected future commitments or operating and financial circumstances that could result in a dividend block is appropriate; and
- we were satisfied that the profits available for distribution, by reference to the relevant accounts, were sufficient to support the distributions made by the Parent Company.

Cross-reference: See Note 23 to the Consolidated Financial Statements and Note 8 to the Parent Company Financial Statements.

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF ROYAL DUTCH SHELL PLC continued

7. OUR ASSESSMENT OF KEY AUDIT MATTERS continued

THE RECOVERABLE AMOUNT OF INVESTMENTS HELD BY THE PARENT COMPANY

Description of the key audit matter	Our response to the risk
<p>This is a forecast-based valuation. The risk is elevated compared to 2019 due to the impact of the pandemic on the Global economy and on Shell's profitability. This key audit matter relates to the Parent Company only.</p> <p>As described in Note 4 to the Parent Company Financial Statements, at December 31, 2020, RDS plc held investments in subsidiaries of \$257 billion, mainly related to its investment in Shell Petroleum N.V. (SPNV).</p> <p>The weak macro-economic environment and the impact of the pandemic have led to a shortfall of the market capitalisation of the group versus the carrying value of the investment held in SPCN of around of \$100 billion at year end. This is an indicator of impairment and management have tested SPCN for impairment as a result.</p> <p>SPCN holds directly and indirectly the entire Shell group. Therefore, both the operational performance of the group's assets and external factors have a significant impact on the estimate of the recoverable amount of SPCN.</p> <p>Accounting standards require the recoverable amount to be determined at the higher of fair value less cost of disposal and value in use (VIU). Management have estimated the recoverable amount of SPCN on the basis of an aggregation of the VIU of the group's CGUs discounted at a pre-tax nominal discount rate of 6%.</p> <p>The most significant judgement applied in determining the VIU of SPCN is the projection of cashflows from Shell's business plan. A further significant judgement applied is in the risking of the projected cashflows. In order to assess how sensitive the VIU is to fluctuations in assumptions, management performed a reverse stress test to determine the level at which an impairment would be recorded.</p>	<p>We tested the controls over the management approval of key inputs, metrics and adjustments made to Shell's Operating Plan which supports the recoverable value of the investment, including oil and gas prices, oil and gas reserves and future refining margins.</p> <p>In order to evaluate the cash flow inputs of the impairment model, we gained an understanding of the methodology behind the model and verified its mathematical accuracy and completeness.</p> <p>We assessed the conclusions reached in the asset impairment tests performed during the year and Shell's impairment assessment of the goodwill allocated at the Upstream and IG segment level and whether any contrary evidence existed from those tests that would call into question the validity of management's SPCN VIU methodology.</p> <p>We challenged the appropriateness of the extent to which the cashflows had been risked and considered the sensitivity of the impairment assessment to further risking. We reviewed management's reverse stress test, which adjusted the extent to which cashflows were risked until the headroom was removed entirely; we also evaluated corroborative and contrary evidence to assess whether this level of risking of the cashflows was within a range of reasonably possible outcomes.</p> <p>We engaged our EY valuations specialists to assist in the review and challenge of the appropriateness of the VIU approach applied by management. Our specialists applied alternative approaches to calculate the VIU of SPCN at December 31, 2020. We also carried out sensitivity analyses by applying further adjustments and risking and determined a reasonable range for the recoverable amount of SPCN. We considered whether the outcome of these analyses supported the carrying value of SPCN.</p> <p>Our valuation specialists also estimated the fair value of SPCN at December 31, 2020 on the basis of data observed in historic market transactions. This confirmed that the VIU of SPCN was higher than its fair value and that, therefore, it was appropriate to estimate the recoverable amount of SPCN at its VIU.</p> <p>The audit procedures were performed by the group engagement team and local audit teams through a combination of substantive and control procedures.</p>

Key observations communicated to the Shell Audit Committee

In March 2021, we reported to the Audit Committee that:

- we were satisfied that the overall VIU methodology was appropriately applied by management and was consistent with the impairment assessments performed at an asset level and provided a reasonable basis for estimating the VIU of SPCN;
- we did not identify any contrary evidence from the goodwill and asset impairment tests performed by management during the year and we were satisfied that the conclusions reached in those impairment tests did not contradict the results of management's SPCN impairment assessment;
- the VIU of SPCN was higher than its fair value and that, therefore, it was appropriate to estimate the recoverable amount of SPCN at its VIU;
- based on our analysis, we determined a reasonable range for the recoverable amount of SPCN and confirmed that the carrying value of the investment lies within our range; and
- we were satisfied that, whilst the recoverable amount has decreased significantly in 2020, no impairment was required.

Cross-reference: See Note 23 to the Consolidated Financial Statements and Note 4 to the Parent Company Financial Statements.

8. OTHER INFORMATION AND MATTERS ON WHICH WE ARE REQUIRED TO REPORT BY EXCEPTION

The other information comprises the information included in the Annual Report set out on pages 1 to 189 and 298 to 327 including the Strategic Report, Governance and Additional Information sections, other than the financial statements and our auditor's report thereon. The Directors are responsible for the other information contained within the Annual Report.

Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in this report, we do not express any form of assurance conclusion thereon. In the table below, we have outlined our responsibility for the other information in the Annual Report and the matters on which we are required to report by exception.

OTHER INFORMATION

Our responsibility

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of the other information, we are required to report that fact.

Our reporting

We have nothing to report in this regard.

STRATEGIC REPORT AND THE DIRECTORS' REPORT

Our responsibility

We are required to report whether, based on the work undertaken in the course of the audit:

- the information given in the strategic report and the directors' report for the financial year for which the financial statements are prepared is consistent with the financial statements; and
- the strategic report and the directors' report have been prepared in accordance with applicable legal requirements.

We are required to report by exception whether, in light of the knowledge and understanding of the Group and the Parent Company and its environment obtained in the course of the audit, we have identified material misstatements in the strategic report or the directors' report.

Our reporting

In our opinion, based on the work undertaken in the course of the audit, the information given in the strategic report and the directors' report for the financial year for which the financial statements are prepared is consistent with the financial statements and they have been prepared in accordance with applicable legal requirements.

We have nothing to report by exception.

DIRECTORS' REMUNERATION REPORT

Our responsibility

We are required to report whether the part of the Directors' Remuneration Report to be audited has been properly prepared in accordance with the Companies Act 2006.

Under the Companies Act 2006, we are also required to report by exception whether certain disclosures of directors' remuneration specified by law are not made.

Our reporting

In our opinion, the part of the Directors' Remuneration Report to be audited has been properly prepared in accordance with the Companies Act 2006.

We have nothing to report by exception.

CORPORATE GOVERNANCE STATEMENT

Our responsibility

The Listing Rules require us to review the directors' statement in relation to going concern, longer-term viability and that part of the Corporate Governance Statement relating to the group and company's compliance with the provisions of the UK Corporate Governance Code specified for our review.

Based on the work undertaken as part of our audit, we are required to consider whether each of the following elements of the Corporate Governance Statement is materially consistent with the financial statements or our knowledge obtained during the audit:

- Directors' statement with regards to the appropriateness of adopting the going concern basis of accounting and any material uncertainties identified set out on page 184;
- Directors' explanation as to its assessment of the company's prospects, the period this assessment covers and why the period is appropriate set out on page 183;
- Directors' statement on fair, balanced and understandable set out on page 189;
- Board's confirmation that it has carried out a robust assessment of the emerging and principal risks set out on page 28;
- the section of the annual report that describes the review of effectiveness of risk management and internal control systems set out on page 186; and;
- the section describing the work of the Audit Committee set out on page 145.

Our reporting

Based on the work undertaken as part of our audit, we have concluded that each of these elements of the Corporate Governance Statement is materially consistent with the financial statements or our knowledge obtained during the audit.

OTHER REPORTING

Our responsibility

Under the Companies Act 2006, we are required to report to you by exception if, in our opinion:

- adequate accounting records have not been kept by the Parent Company, or returns adequate for our audit have not been received from branches not visited by us; or
- the Parent Company financial statements and the part of the Directors' Remuneration Report to be audited are not in agreement with the accounting records and returns; or
- we have not received all the information and explanations we require for our audit.

Our reporting

We have nothing to report by exception.

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF ROYAL DUTCH SHELL PLC continued

9. RESPONSIBILITIES OF THE DIRECTORS

As explained more fully in the statement of Directors' responsibilities set out on page 22, the Directors are responsible for the preparation of the Consolidated Financial Statements and for being satisfied that they give a true and fair view, and for such internal control as the Directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Directors are responsible for assessing Shell's and the Parent Company's ability to continue as going concerns, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Directors either intend to liquidate Shell or the Parent Company or to cease operations, or have no realistic alternative but to do so.

10. OUR RESPONSIBILITIES FOR THE AUDIT OF THE FINANCIAL STATEMENTS

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISA (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

11. EXPLANATION AS TO WHAT EXTENT OUR AUDIT WAS CONSIDERED CAPABLE OF DETECTING IRREGULARITIES, INCLUDING FRAUD

Irregularities, including fraud, are instances of non-compliance with laws and regulations. We design procedures in line with our responsibilities, outlined above, to detect irregularities, including fraud.

The risk of not detecting a material misstatement due to fraud is higher than the risk of not detecting one resulting from error, as fraud may involve deliberate concealment by, for example, forgery or intentional misrepresentations, or through collusion.

The extent to which our procedures are capable of detecting irregularities, including fraud, is detailed below. However, the primary responsibility for the prevention and detection of fraud rests with both those charged with governance of the entity and management.

Our approach was as follows:

- We obtained an understanding of the legal and regulatory frameworks that are applicable to Shell and determined that the most significant are those that relate to the reporting framework (IFRS, Companies Act 2006, the UK Corporate Governance Code, the US Securities Exchange Act of 1934 and the Listing Rules of the UK Listing Authority) and the relevant tax compliance regulations in the jurisdictions in which Shell operates. In addition, we concluded that there are certain significant laws and regulations that may have an effect on the determination of the amounts and disclosures in the financial statements and those laws and regulations relating to health and safety, employee matters, environmental and bribery and corruption practices.
- We understood how Shell is complying with those frameworks by making enquiries of management, internal audit, those responsible for legal and compliance procedures and the Company Secretary. We corroborated our enquiries through our review of Board minutes, papers provided to the Audit Committee and correspondence received from regulatory bodies and noted that there was no contradictory evidence.
- We assessed the susceptibility of Shell's Consolidated Financial Statements to material misstatement, including how fraud might occur, by embedding forensic specialists into our group engagement team. Our forensic specialists worked with the group engagement team to identify the fraud risks across various parts of the business. In addition, we utilised internal and external information to perform a fraud risk assessment for each of the countries of operation. We considered the risk of fraud through management override and, in response, we incorporated data analytics across manual journal entries into our audit approach. We also considered the possibility of fraudulent or corrupt payments made through third parties and conducted detailed analytical testing on third party vendors in high risk jurisdictions. Where instances of risk behaviour patterns were identified through our data analytics, we performed additional audit procedures to address each identified risk. These procedures included the testing of transactions back to source information and were designed to provide reasonable assurance that the financial statements were free from fraud or error. We also conducted specific audit procedures in relation to the risk of bribery and corruption across various countries of operation determined on a risk-based approach.

- Based on the results of our risk assessment we designed our audit procedures to identify non-compliance with such laws and regulations identified above. Our procedures involved journal entry testing, with a focus on journals meeting our defined risk criteria based on our understanding of the business; enquiries of legal counsel, group management, internal audit and all full and specific scope management; review of the volume and nature of complaints received by the whistleblowing hotline during the year; and
- If any instances of non-compliance with laws and regulations were identified, these were communicated to the relevant local EY teams who performed sufficient and appropriate audit procedures, supplemented by audit procedures performed at the group level.

A further description of our responsibilities for the audit of the financial statements is located on the Financial Reporting Council's website at <https://www.frc.org.uk/auditorsresponsibilities>. This description forms part of our auditor's report.

12. OTHER MATTERS WE ARE REQUIRED TO ADDRESS

Following the recommendation of the Audit Committee, we were re-appointed by Royal Dutch Shell plc's Annual General Meeting (AGM) on May 19, 2020, as auditors of Royal Dutch Shell to hold office until the conclusion of the next AGM of the Company, and signed an engagement letter on July 16, 2020. Our total uninterrupted period of engagement is five years covering periods from our appointment through to the period ending December 31, 2020.

The non-audit services prohibited by the FRC's Ethical Standard were not provided to Shell or the Parent Company and we remain independent of Shell and the Parent Company in conducting the audit.

Our audit opinion is consistent with our additional report to the Audit Committee explaining the results of our audit.

13. USE OF OUR REPORT

This report is made solely to the company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the company's members as a body for our audit work for this report or for the opinions we have formed.

/s/ Allister Wilson (Senior Statutory Auditor)

ALLISTER WILSON

Senior Statutory Auditor
for and on behalf of Ernst & Young LLP
London
March 10, 2021

CONSOLIDATED FINANCIAL STATEMENTS

- 217** Consolidated Statement of Income
- 217** Consolidated Statement of Comprehensive Income
- 218** Consolidated Balance Sheet
- 219** Consolidated Statement of Changes in Equity
- 220** Consolidated Statement of Cash Flows
- 221** Notes to the Consolidated Financial Statements
- 221** Note 1 Basis of preparation
- 221** Note 2 Significant accounting policies, judgements and estimates
- 229** Note 3 Changes to IFRS not yet adopted
- 230** Note 4 Segment information
- 233** Note 5 Interest and other income
- 233** Note 6 Interest expense
- 233** Note 7 Intangible assets
- 234** Note 8 Property, plant and equipment
- 238** Note 9 Joint ventures and associates
- 239** Note 10 Investments in securities
- 239** Note 11 Trade and other receivables
- 240** Note 12 Inventories
- 240** Note 13 Cash and cash equivalents
- 241** Note 14 Debt and lease arrangements
- 244** Note 15 Trade and other payables
- 244** Note 16 Taxation
- 246** Note 17 Retirement benefits
- 250** Note 18 Decommissioning and other provisions
- 251** Note 19 Financial instruments
- 256** Note 20 Share capital
- 256** Note 21 Share-based compensation plans and shares held in trust
- 257** Note 22 Other reserves
- 259** Note 23 Dividends
- 259** Note 24 Earnings per share
- 260** Note 25 Legal proceedings and other contingencies
- 262** Note 26 Employees
- 262** Note 27 Directors and Senior Management
- 263** Note 28 Auditor's remuneration
- 263** Note 29 Emission schemes and related environmental plans
- 264** Note 30 Post-balance sheet events

CONSOLIDATED STATEMENT OF INCOME

	Notes	2020	2019	\$ million 2018
Revenue	4	180,543	344,877	388,379
Share of profit of joint ventures and associates	9	1,783	3,604	4,106
Interest and other income	5	869	3,625	4,071
Total revenue and other income		183,195	352,106	396,556
Purchases		117,093	252,983	294,399
Production and manufacturing expenses	4	24,001	26,438	26,970
Selling, distribution and administrative expenses	4	9,881	10,493	11,360
Research and development	4	907	962	986
Exploration	4	1,747	2,354	1,340
Depreciation, depletion and amortisation	4	52,444	28,701	22,135
Interest expense	6	4,089	4,690	3,745
Total expenditure		210,162	326,621	360,935
(Loss)/income before taxation		(26,967)	25,485	35,621
Taxation (credit)/charge	16	(5,433)	9,053	11,715
(Loss)/income for the period	4	(21,534)	16,432	23,906
Income attributable to non-controlling interest	4	146	590	554
(Loss)/income attributable to Royal Dutch Shell plc shareholders	4	(21,680)	15,842	23,352
Basic earnings per share (\$)	24	(2.78)	1.97	2.82
Diluted earnings per share (\$)	24	(2.78)	1.95	2.80

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

	Notes	2020	2019	\$ million 2018
(Loss)/income for the period	4	(21,534)	16,432	23,906
Other comprehensive income/(loss) net of tax				
Items that may be reclassified to income in later periods:				
Currency translation differences	22	1,179	344	(3,171)
Debt instruments remeasurements	22	23	29	(15)
Cash flow hedging (losses)/gains [A]	22	(160)	(276)	730
Net investment hedging (losses)/gains [A]	22	(423)	9	(1)
Deferred cost of hedging	22	100	66	(209)
Share of other comprehensive loss of joint ventures and associates	9	(42)	(76)	(10)
Total		677	96	(2,676)
Items that are not reclassified to income in later periods:				
Retirement benefits remeasurements		(2,702)	(2,102)	3,588
Equity instruments remeasurements		64	(30)	(153)
Share of other comprehensive income of joint ventures and associates	9	119	2	193
Total		(2,519)	(2,130)	3,628
Other comprehensive (loss)/income for the period		(1,842)	(2,034)	952
Comprehensive (loss)/income for the period		(23,376)	14,398	24,858
Comprehensive income attributable to non-controlling interest		136	625	383
Comprehensive (loss)/income attributable to Royal Dutch Shell plc shareholders		(23,512)	13,773	24,475

[A] As from 2020, 'Cash flow hedging (losses)/gains' and 'Net investment hedging (losses)/gains' have been separately disclosed. Prior period comparatives for these items have been revised to conform with current year presentation (see Note 22).

CONSOLIDATED FINANCIAL STATEMENTS continued**CONSOLIDATED BALANCE SHEET**

	Notes	Dec 31, 2020	\$ million Dec 31, 2019
Assets			
Non-current assets			
Intangible assets	7	22,822	23,486
Property, plant and equipment	8	210,847	238,349
Joint ventures and associates	9	22,451	22,808
Investments in securities	10	3,222	2,989
Deferred tax	16	16,311	10,524
Retirement benefits	17	2,474	4,717
Trade and other receivables	11	7,641	8,085
Derivative financial instruments	19	2,805	689
		288,573	311,647
Current assets			
Inventories	12	19,457	24,071
Trade and other receivables	11	33,625	43,414
Derivative financial instruments	19	5,783	7,149
Cash and cash equivalents	13	31,830	18,055
		90,695	92,689
Total assets		379,268	404,336
Liabilities			
Non-current liabilities			
Debt	14	91,115	81,360
Trade and other payables	15	2,304	2,342
Derivative financial instruments	19	420	1,209
Deferred tax	16	10,463	14,522
Retirement benefits	17	15,168	13,017
Decommissioning and other provisions	18	27,310	21,799
		146,780	134,249
Current liabilities			
Debt	14	16,899	15,064
Trade and other payables	15	41,677	49,208
Derivative financial instruments	19	5,308	5,429
Taxes payable	16	6,006	6,693
Retirement benefits	17	437	419
Decommissioning and other provisions	18	3,624	2,811
		73,951	79,624
Total liabilities		220,731	213,873
Equity			
Share capital	20	651	657
Shares held in trust		(709)	(1,063)
Other reserves	22	12,752	14,451
Retained earnings		142,616	172,431
Equity attributable to Royal Dutch Shell plc shareholders		155,310	186,476
Non-controlling interest		3,227	3,987
Total equity		158,537	190,463
Total liabilities and equity		379,268	404,336

Signed on behalf of the Board

/s/ Jessica Uhl

JESSICA UHLChief Financial Officer
March 10, 2021

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

	Equity attributable to Royal Dutch Shell plc shareholders						\$ million
	Share capital (see Note 20)	Shares held in trust	Other reserves (see Note 22)	Retained earnings	Total	Non- controlling interest	Total equity
At January 1, 2020	657	(1,063)	14,451	172,431	186,476	3,987	190,463
Comprehensive (loss)/income for the period	—	—	(1,832)	(21,397) [A]	(23,229)	136	(23,093)
Transfer from other comprehensive income	—	—	270	(270)	—	—	—
Dividends (see Note 23)	—	—	—	(7,270)	(7,270)	(311)	(7,581)
Repurchases of shares	(6)	—	6	(1,214)	(1,214)	—	(1,214)
Share-based compensation	—	354	(143)	(230)	(19)	—	(19)
Other changes in non-controlling interest	—	—	—	566	566	(585) [B]	(19)
At December 31, 2020	651	(709)	12,752	142,616	155,310	3,227	158,537
At January 1, 2019 (as previously published)	685	(1,260)	16,615	182,606	198,646	3,888	202,534
Impact of IFRS 16	—	—	—	4	4	—	4
At January 1, 2019 (as revised)	685	(1,260)	16,615	182,610	198,650	3,888	202,538
Comprehensive income/(loss) for the period	—	—	(2,069)	15,842	13,773	625	14,398
Transfer from other comprehensive income	—	—	(74)	74	—	—	—
Dividends (see Note 23)	—	—	—	(15,198)	(15,198)	(537)	(15,735)
Repurchases of shares [C]	(28)	—	28	(10,286)	(10,286)	—	(10,286)
Share-based compensation	—	197	(49)	(613)	(465)	—	(465)
Other changes in non-controlling interest	—	—	—	2	2	11	13
At December 31, 2019	657	(1,063)	14,451	172,431	186,476	3,987	190,463
At January 1, 2018	696	(917)	16,794	177,733	194,306	3,456	197,762
Comprehensive income for the period	—	—	1,123	23,352	24,475	383	24,858
Transfer from other comprehensive income	—	—	(971)	971	—	—	—
Dividends (see Note 23)	—	—	—	(15,675)	(15,675)	(586)	(16,261)
Repurchases of shares [C]	(11)	—	11	(4,519)	(4,519)	—	(4,519)
Share-based compensation	—	(343)	(342)	693	8	—	8
Other changes in non-controlling interest	—	—	—	51	51	635	686
At December 31, 2018	685	(1,260)	16,615	182,606	198,646	3,888	202,534

[A] Comprehensive loss for the period of \$21,397 million recognised in retained earnings includes a gain of \$283 million, recognised in equity, that relates to remeasurement of a share of interest in a joint venture in respect of prior years.

[B] The change is mainly related to the non-controlling interest in Shell Midstream Partners, L.P. (SHLX) following the completion of the sale of Shell's 79% interest in the Mattox Pipeline Company LLC and certain logistics assets at the Shell Norco Manufacturing Complex to SHLX.

[C] The repurchase of shares recognised through retained earnings includes the aggregate maximum consideration to which Shell was contractually bound to under the tranches of the buyback programme, plus associated stamp duty (see Note 20).

CONSOLIDATED FINANCIAL STATEMENTS continued**CONSOLIDATED STATEMENT OF CASH FLOWS**

	Notes	2020	2019	\$ million 2018
(Loss)/income before taxation for the period		(26,967)	25,485	35,621
Adjustment for:				
Interest expense (net)		3,316	3,705	2,878
Depreciation, depletion and amortisation		52,444	28,701	22,135
Exploration well write-offs	8	815	1,218	449
Net gains on sale and revaluation of non-current assets and businesses		(286)	(2,519)	(3,265)
Share of profit of joint ventures and associates		(1,783)	(3,604)	(4,106)
Dividends received from joint ventures and associates		2,591	4,139	4,903
Decrease/(increase) in inventories		4,477	(2,635)	2,823
Decrease/(increase) in current receivables		9,625	(921)	1,955
Decrease in current payables		(9,494)	(1,223)	(1,336)
Derivative financial instruments		977	(1,484)	799
Retirement benefits		568	(365)	390
Decommissioning and other provisions		1,104	(686)	(1,754)
Other	8	(28)	1,264	
Tax paid		(3,290)	(7,605)	(9,671)
Cash flow from operating activities		34,105	42,178	53,085
Capital expenditure		(16,585)	(22,971)	(23,011)
Investments in joint ventures and associates		(1,024)	(743)	(880)
Investment in equity securities		(218)	(205)	(187)
Proceeds from sale of property, plant and equipment and businesses		2,489	4,803	4,366
Proceeds from sale of joint ventures and associates		1,240	2,599	1,594
Proceeds from sale of equity securities		281	469	4,505
Interest received		532	911	823
Other investing cash inflows		3,239	2,921	1,373
Other investing cash outflows		(3,232)	(3,563)	(2,242)
Cash flow from investing activities		(13,278)	(15,779)	(13,659)
Net decrease in debt with maturity period within three months		(63)	(308)	(396)
Other debt:				
New borrowings		23,033	11,185	3,977
Repayments		(17,385)	(14,292)	(11,912)
Interest paid		(4,105)	(4,649)	(3,574)
Derivative financial instruments [A]		1,157	(48)	
Change in non-controlling interest		(42)	—	678
Cash dividends paid to:				
Royal Dutch Shell plc shareholders		(7,424) [B]	(15,198)	(15,675)
Non-controlling interest		(311)	(537)	(584)
Repurchases of shares		(1,702)	(10,188)	(3,947)
Shares held in trust: net purchases and dividends received		(382)	(1,174)	(1,115)
Cash flow from financing activities		(7,224)	(35,209)	(32,548)
Currency translation differences relating to cash and cash equivalents		172	124	(449)
Increase/(decrease) in cash and cash equivalents		13,775	(8,686)	6,429
Cash and cash equivalents at beginning of year		18,055	26,741	20,312
Cash and cash equivalents at end of year	13	31,830	18,055	26,741

[A] As from 2019, a new line item 'Derivative financial instruments' has been introduced for derivatives related to debt.

[B] Cash dividends paid represents the payment of net dividends (after deduction of withholding taxes where applicable) and payment of withholding taxes on dividends paid in the previous quarter.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

1 – BASIS OF PREPARATION

The Consolidated Financial Statements of Royal Dutch Shell plc (the "Company") and its subsidiaries (collectively referred to as "Shell") have been prepared in accordance with international accounting standards in conformity with the requirements of the UK Companies Act 2006 (the "Act"), and therefore in accordance with International Financial Reporting Standards (IFRS) adopted pursuant to Regulation (EC) No 1606/2002 as it applies in the European Union. As applied to Shell, there are no material differences from IFRS as issued by the International Accounting Standards Board (IASB); therefore, the Consolidated Financial Statements have been prepared in accordance with IFRS as issued by the IASB.

As described in the accounting policies in Note 2, the Consolidated Financial Statements have been prepared under the historical cost convention except for certain items measured at fair value. Those accounting policies have been applied consistently in all periods, except for the accounting for lease contracts following the prospective adoption of IFRS 16 Leases from January 1, 2019.

The Consolidated Financial Statements were approved and authorised for issue by the Board of Directors on March 10, 2021.

2 – SIGNIFICANT ACCOUNTING POLICIES, JUDGEMENTS AND ESTIMATES

This Note describes Shell's significant accounting policies, which are those relevant to an understanding of the Consolidated Financial Statements. It includes the measurement bases used in preparing the Consolidated Financial Statements. It allows an understanding as to how transactions, other events and conditions are reported. It also describes: (a) judgements, apart from those involving estimations, that management makes in applying the policies that have the most significant effect on the amounts recognised in the Consolidated Financial Statements; and (b) estimations, including assumptions about the future, that management makes in applying the policies. The sources of estimation uncertainty that have a significant risk of a material adjustment to the carrying amounts of assets and liabilities within the next financial year are specifically identified as a significant estimate.

The accounting policies applied are consistent with those of the previous financial year except for the adoption as from January 1, 2020 of amendments to IFRS 9 *Financial Instruments* (IFRS 9) and IFRS 7 *Financial Instruments: Disclosures* (IFRS 7), and IFRS 3 *Business Combinations* (IFRS 3).

The transition to the accounting pronouncements as listed below has no or no material impact.

IFRS 9 *Financial Instruments* and IFRS 7 *Financial Instruments: Disclosures*

Inter-Bank Offered Rate (IBOR) Reform – Phase 1

IFRS 9 and IFRS 7 contain a temporary targeted exception from applying specific hedge accounting requirements pre-IBOR reform.

By applying the exception, Shell anticipates that the interest rate benchmark on which the hedged risk is based is not altered as a result of the IBOR reform. However, any hedge ineffectiveness continues to be recorded in the income statement. The exception ceases to apply when the uncertainty arising from interest rate benchmark reform is no longer present.

IFRS 3 *Business Combinations*

The amendment to IFRS 3 resolves the difficulties that arose when an entity determined whether it acquired a business or a group of assets. Under the amended definition of a business, an acquisition qualifies as a business combination when the assets and liabilities acquired include an input and a substantive process that together significantly contribute to the ability to create outputs. The amended definition of a business is applied prospectively.

Nature of the Consolidated Financial Statements

The Consolidated Financial Statements are presented in US dollars (dollars) and comprise the financial statements of the Company and its subsidiaries, being those entities over which the Company has control, either directly or indirectly, through exposure or rights to their variable returns and the ability to affect those returns through its power over the entities. Information about subsidiaries at December 31, 2020, can be found in 'Appendix 1: Significant Subsidiaries and Other Related Undertakings'.

Subsidiaries are consolidated from the date on which control is obtained until the date that such control ceases, using consistent accounting policies. All inter-company balances and transactions, including unrealised profits arising from such transactions, are eliminated. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Non-controlling interest represents the proportion of income, other comprehensive income and net assets in subsidiaries that is not attributable to the Company's shareholders.

Climate change and energy transition

Meeting the goals of the Paris Agreement is a global and Shell target. Shell's pathway to Paris alignment is reflected in the Group's strategy and in 2020 we announced a long-term target to become a net-zero emissions energy business by 2050, in step with society.

It is important to note that the world needs to transform in a number of complex and interconnected ways. While the world has made some movement towards the goals of Paris, unfortunately, society is not yet on a path to meet Paris. Getting the energy system on a path to net-zero emissions will require coordinated action between energy providers, energy users and governments.

One of the key aspects that underpin Shell's financial statements are the oil and gas price and refining margin assumptions. These price assumptions are developed with input from our scenarios and other factors. The mid-price is our reasonable best estimate and the basis for our operating plans, outlooks and impairment testing.

Shell's operating plan and outlook (including portfolio changes) are forecasted for a 10-year period and include significant actions to reduce its greenhouse gas (GHG) emissions in its journey towards its net-zero emissions target by 2050 as outlined in this report. However, our plan and pricing assumptions do not yet reflect Shell's 2050 net-zero emissions target, because our planning timeframe is 10 years and there is significant uncertainty on how society will transition to net-zero emissions. Instead these reflect the current economic environment, the pace of the world's energy transition and Shell's reasonable expectation of how the next 10 years will evolve. As society moves towards net-zero emissions, Shell expects its operating plan, outlook and assumptions to be revised accordingly.

Long term, it is expected that the current Shell portfolio will change and evolve with the energy transition. Decision-making on the future portfolio is guided by the pace of society's progress and the aim of being in step with society as it moves towards the goal of the Paris Agreement. Shell has set out its strategy of how it will achieve its target to be a net-zero emissions energy business by 2050, in step with society's progress towards achieving net-zero emissions.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

continued

2 – SIGNIFICANT ACCOUNTING POLICIES, JUDGEMENTS AND ESTIMATES continued

Currency translation

Foreign currency transactions are translated using the exchange rate at the dates of the transactions or valuation where items are remeasured. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at quarter-end exchange rates of monetary assets and liabilities denominated in foreign currencies (including those in respect of inter-company balances, unless related to loans of a long-term investment nature) are recognised in income unless when recognised in other comprehensive income in respect of cash flow or net investment hedges. Foreign exchange gains and losses in income are presented within interest and other income or within purchases where not related to financing. Share capital issued in currencies other than the dollar is translated at the exchange rate at the date of issue.

On consolidation, assets and liabilities of non-dollar entities are translated to dollars at year-end rates of exchange, while their statements of income, other comprehensive income and cash flows are translated at quarterly average rates. The resulting translation differences are recognised as currency translation differences within other comprehensive income. Upon sale of all or part of an interest in, or upon liquidation of, an entity, the appropriate portion of cumulative currency translation differences related to that entity is generally recognised in income.

Revenue recognition

Revenue from sales of oil, natural gas, chemicals and other products is recognised at the transaction price to which Shell expects to be entitled, after deducting sales taxes, excise duties and similar levies. For contracts that contain separate performance obligations, the transaction price is allocated to those separate performance obligations by reference to their relative stand-alone selling prices.

Revenue is recognised when control of the products has been transferred to the customer. For sales by Integrated Gas and Upstream operations, this generally occurs when the product is physically transferred into a vessel, pipe or other delivery mechanism; for sales by refining operations, it is either when the product is placed onboard a vessel or offloaded from the vessel, depending on the contractually agreed terms; and for sales of oil products and chemicals, it is either at the point of delivery or the point of receipt, depending on contractual conditions.

Revenue resulting from hydrocarbon production from properties in which Shell has an interest with partners in joint arrangements is recognised on the basis of Shell's volumes lifted and sold. Revenue resulting from the production of oil and natural gas under production-sharing contracts (PSCs) is recognised for those amounts relating to Shell's cost recoveries and Shell's share of the remaining production. Gains and losses on derivative contracts and the revenue and costs associated with other contracts that are classified as held primarily for the purpose of being traded are reported on a net basis in the Consolidated Statement of Income. Purchases and sales of hydrocarbons under exchange contracts that are necessary to obtain or reposition feedstocks for refinery operations are presented net in the Consolidated Statement of Income.

Revenue resulting from arrangements that are not considered contracts with customers is presented as revenue from other sources.

Research and development

Development costs that are expected to generate probable future economic benefits are capitalised as intangible assets. All other research and development expenditure is recognised in income as incurred.

Exploration costs

Hydrocarbon exploration costs are accounted for under the successful efforts method: exploration costs are recognised in income when incurred, except that exploratory drilling costs, including in respect of the recapitalisation of the depreciation, are included in property, plant and equipment pending determination of proved reserves. Exploration costs capitalised in respect of exploration wells that are more than 12 months old are written off unless: (a) proved reserves are booked; or (b) (i) they have found commercially producible quantities of reserves and (ii) they are subject to further exploration or appraisal activity in that either drilling of additional exploratory wells is under way or firmly planned for the near future or other activities are being undertaken to sufficiently progress the assessing of reserves and the economic and operating viability of the project.

Property, plant and equipment and intangible assets

Recognition

Property, plant and equipment comprise assets owned by Shell, assets held by Shell under lease contracts, and assets operated by Shell as contractor in PSCs. They include rights and concessions in respect of properties with proved reserves ("proved properties") and with no proved reserves ("unproved properties"). Property, plant and equipment, including expenditure on major inspections, and intangible assets are initially recognised in the Consolidated Balance Sheet at cost where it is probable that they will generate future economic benefits. This includes capitalisation of decommissioning and restoration costs associated with provisions for asset retirement (see "provisions"), certain development costs (see "research and development") and the effects of associated cash flow hedges (see "financial instruments") as applicable. The accounting for exploration costs is described separately (see "exploration costs"). Intangible assets include goodwill, liquefied natural gas (LNG) off-take and sales contracts obtained through acquisition, emission certificates, software costs and trademarks. Interest is capitalised as an increase in property, plant and equipment, on major capital projects during construction.

Property, plant and equipment and intangible assets are subsequently carried at cost less accumulated depreciation, depletion and amortisation (including any impairment). Gains and losses on sale are determined by comparing the proceeds with the carrying amounts of assets sold and are recognised in income, within interest and other income.

An asset is classified as held for sale if its carrying amount will be recovered principally through sale rather than through continuing use, which is when the sale is highly probable, and it is available for immediate sale. Assets classified as held for sale are measured at the lower of the carrying amount upon classification and the fair value less costs to sell.

Depreciation, depletion and amortisation

Property, plant and equipment related to hydrocarbon production activities are in principle depreciated on a unit-of-production basis over the proved developed reserves of the field concerned, other than assets whose useful lives differ from the lifetime of the field which are depreciated applying the straight-line method. However, for certain Integrated Gas and Upstream assets, the use for this purpose of proved developed reserves, which are determined using the SEC-mandated yearly average oil and gas prices, would result in depreciation charges for these assets which do not reflect the pattern in which their future economic benefits are expected to be consumed as, for example, it may result in assets with long-term expected lives being depreciated in full within one year. Therefore, in these instances, other approaches are applied to determine the reserves base for the purpose of calculating depreciation, such as using management's expectations of future oil and gas prices rather than yearly average prices, to provide a phasing of periodic depreciation charges that more appropriately reflects the expected utilisation of the assets concerned. (See Note 8)

Rights and concessions in respect of proved properties are depleted on the unit-of-production basis over the total proved reserves of the relevant area. Where individually insignificant, unproved properties may be grouped and depreciated based on factors such as the average concession term and past experience of recognising proved reserves.

Property, plant and equipment held under lease contracts and capitalised LNG off-take and sales contracts are depreciated or amortised over the term of the respective contract. Other property, plant and equipment and intangible assets are depreciated or amortised on a straight-line basis over their estimated useful lives, except for goodwill, which is not amortised. They include refineries and chemical plants (for which the useful life is generally 20 years), retail service stations (15 years), upgraders (30 years) and major inspection costs, which are depreciated over the estimated period before the next planned major inspection (three to five years).

On classification of an asset as held for sale, depreciation ceases.

Estimates of the useful lives and residual values of property, plant and equipment and intangible assets are reviewed annually and adjusted if appropriate.

Impairment

The carrying amount of goodwill is tested for impairment annually; in addition, assets other than unproved properties (see "exploration costs") are tested for impairment whenever events or changes in circumstances indicate that the carrying amounts for those assets may not be recoverable. On classification as held for sale, the carrying amounts of property, plant and equipment and intangible assets are also reviewed. If assets are determined to be impaired, the carrying amounts of those assets are written down to their recoverable amount, which is the higher of fair value less costs of disposal (see "fair value measurements") and value in use.

Value in use is determined as the amount of estimated risk-adjusted discounted future cash flows. For this purpose, assets are grouped into cash-generating units based on separately identifiable and largely independent cash inflows. Estimates of future cash flows used in the evaluation of impairment of assets are made using management's forecasts of commodity prices, market supply and demand, potential costs associated with operational GHG emissions, mainly related to CO₂, and

forecast product and refining margins. In addition, management takes into consideration the expected useful lives of the manufacturing facilities, exploration and production assets, and expected production volumes. The latter takes into account assessments of field and reservoir performance and includes expectations about both proved reserves and volumes that are expected to constitute proved reserves in the future (unproved volumes), which are risk-weighted utilising geological, production, recovery and economic projections. Cash flow estimates are risk-adjusted to reflect local conditions as appropriate and discounted at a rate based on Shell's marginal cost of debt.

Impairments, except those related to goodwill, are reversed as applicable to the extent that the events or circumstances that triggered the original impairment have changed.

Impairment losses and reversals are reported within depreciation, depletion and amortisation.

Judgements and estimates

Proved oil and gas reserves

Unit-of-production depreciation, depletion and amortisation charges are principally measured based on management's estimates of proved developed oil and gas reserves. Also, exploration drilling costs are capitalised pending the results of further exploration or appraisal activity, which may take several years to complete and before any related proved reserves can be booked.

Proved reserves are estimated by a central group of reserves experts. The estimated proved reserves are determined by reference to available geological and engineering data and only include volumes for which access to market is assured with reasonable certainty. Yearly average oil and gas prices are applied in the determination of proved reserves. Estimates of proved reserves are inherently imprecise, require the application of judgement and are subject to regular revision, either upward or downward, based on new information such as from the drilling of additional wells, observation of long-term reservoir performance under producing conditions and changes in economic factors, including product prices, contract terms, legislation or development plans.

Changes to estimates of proved developed reserves affect prospectively the amounts of depreciation, depletion and amortisation charged and, consequently, the carrying amounts of exploration and production assets. Generally, in the normal course of business the diversity of the asset portfolio will limit the net effect of such revisions. The outcome of, or assessment of plans for, exploration or appraisal activity may result in the related capitalised exploration drilling costs being recognised in income in that period.

Judgement is involved in determining when to use an alternative reserves base in order to appropriately reflect the expected utilisation of the assets concerned (see "depreciation, depletion and amortisation").

Information about the carrying amounts of exploration and production assets and the amounts charged to income, including depreciation, depletion and amortisation and the quantitative impact of the use of an alternative reserves base, is presented in Note 8.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

continued

2 – SIGNIFICANT ACCOUNTING POLICIES, JUDGEMENTS AND ESTIMATES

continued

Judgements and estimates

Impairment

For the purposes of determining whether impairment of assets has occurred, and the extent of any impairment loss or its reversal, the key assumptions management uses in estimating risk-adjusted future cash flows for value in use measures are future oil and gas prices and refining margins. In addition, management uses other assumptions such as potential costs associated with operational GHG emissions and expected production volumes appropriate to the local circumstances and environment. These assumptions and the judgements of management that are based on them are subject to change as new information becomes available. Changes in assumptions could affect the carrying amounts of assets, and any impairment losses and reversals will affect income. Changes in economic conditions can affect the rate used to discount future cash flow estimates or the risk-adjustment in the future cash flows.

Expected production volumes, which comprise proved reserves and unproved volumes, are used for impairment testing because management believes this to be the most appropriate indicator of expected future cash flows. As discussed in "Proved oil and gas reserves" above, reserves estimates are inherently imprecise. Furthermore, projections about unproved volumes are based on information that is necessarily less robust than that available for mature reservoirs.

Estimation is involved with respect to the expected life of refineries and chemicals sites, and also including management's view on the future development of refining margins.

The determination of cash-generating units requires judgement. Changes in this determination could impact the calculation of value in use and therefore the conclusion on the recoverability of assets' carrying amounts when performing an impairment test.

Judgement, which is subject to change as new information becomes available, can be required in determining when an asset is classified as held for sale. A change in that judgement could result in impairment charges affecting income, depending on whether classification requires a write-down of the asset to its fair value less costs to sell.

In assessing the value in use, the estimated risk adjusted future cash flows are discounted to their present value using a pre-tax discount rate that reflects Shell's marginal cost of debt, current market assessments of the time value of money and residual risks (e.g. normal operational and other generic uncertainties). The discount rate applied does not reflect risks for which future cash flow estimates have been adjusted.

Significant estimates

Future commodity price assumptions used in the impairment testing in Integrated Gas and Upstream, presented in Note 8, tend to be stable because management does not consider short-term increases or decreases in prices as being indicative of long-term levels, but they are nonetheless subject to change.

Until 2019 management's estimate of longer-term refining margins used in the impairment testing in Oil Products was based on the reversion to mean methodology, unless a fundamental shift in markets had been identified, over the life of the refineries. Under this approach, it was assumed that refining margins would revert to historical averages over time. As from 2020, a different price methodology applies, based on Shell management's understanding and interpretation of demand and supply fundamentals in the near term and taking into account various other factors such as industry rationalisation and energy transition in the long term.

Future commodity prices and refining margins used in impairment testing provide a source of estimation uncertainty as referred to in paragraph 125 of IAS 1 *Presentation of Financial Statements* (IAS 1.125).

Information about the carrying amounts of assets and impairments and their sensitivity to changes in significant estimates are presented in Notes 7 and 8.

Leases (from January 1, 2019)

A contract, or part of a contract, that conveys the right to control the use of an identified asset for a period of time in exchange for payments to be made to the owners (lessors) is accounted for as a lease. Contracts are assessed to determine whether a contract is, or contains, a lease at the inception of a contract or when the terms and conditions of a contract are significantly changed. The lease term is the non-cancellable period of a lease, together with contractual options to extend or to terminate the lease early, where it is reasonably certain that an extension option will be exercised or a termination option will not be exercised.

At the commencement of a lease contract, a right-of-use asset and a corresponding lease liability are recognised, unless the lease term is 12 months or less. The commencement date of a lease is the date on which the underlying asset is made available for use. The lease liability is measured at an amount equal to the present value of the lease payments during the lease term that are not paid at that date. The lease liability includes contingent rentals and variable lease payments that depend on an index, rate, or where they are fixed payments in substance. The lease liability is remeasured when the contractual cash flows of variable lease payments change due to a change in an index or rate when the lease term changes following a reassessment.

Lease payments are discounted using the interest rate implicit in the lease. If that rate is not readily available, the incremental borrowing rate is applied. The incremental borrowing rate reflects the rate of interest that the lessee would have to pay to borrow over a similar term, with a similar security, the funds necessary to obtain an asset of a similar nature and value to the right-of-use asset in a similar economic environment.

In general, a corresponding right-of-use asset is recognised for an amount equal to each lease liability, adjusted by the amount of any pre-paid lease payment relating to the specific lease contract. The depreciation on right-of-use assets is recognised in income unless capitalised as exploration drilling cost (see "exploration cost") or capitalised when the right-of-use asset is used to construct another asset.

Where Shell is the lessor in a lease arrangement at inception, the lease arrangement will be classified as a finance lease or an operating lease. Classification is based on the extent to which the risks and rewards incidental to ownership of the underlying asset lie with the lessor or the lessee.

Where Shell, usually in its capacity as operator, has entered into a lease contract on behalf of a joint arrangement, a lease liability is recognised to the extent that Shell has primary responsibility for the lease liability. A finance sub-lease is subsequently recognised if the related right-of-use asset is subleased to the joint arrangement. This is usually the case when the joint arrangement has the right to direct the use and obtains substantially all of the economic benefits from using the asset.

Impairment of the right-of-use asset

Right-of-use assets are subject to existing impairment requirements as set out in "property, plant and equipment" (see Note 8).

Judgements and estimates

A lease term includes optional lease periods where it is reasonably certain Shell will exercise the option to extend or not to exercise the option to terminate the lease. Determination of the lease term is subject to judgement and has an impact on the measurement of the lease liability and related right-of-use asset. When assessing the lease term at the commencement date, Shell takes into consideration the broader economics of the contract. Reassessment of the lease term is performed upon changes in circumstances that may affect the probability that an option to extend or to terminate the lease will be exercised.

Where the rate implicit in the lease is not readily available, an incremental borrowing rate is applied. This incremental borrowing rate reflects the rate of interest that the lessee would have to pay to borrow over a similar term, with a similar security, the funds necessary to obtain an asset of a similar nature and value to the right-of-use asset in a similar economic environment. Determination of the incremental borrowing rate requires estimation.

Leases (prior to January 1, 2019)

Agreements under which payments are made to owners in return for the right to use an asset for a period are accounted for as leases. Leases that transfer substantially all the risks and rewards of ownership are recognised at the commencement of the lease term as finance leases within property, plant and equipment and debt at the fair value of the leased asset or, if lower, at the present value of the minimum lease payments. Finance lease payments are apportioned between interest expense and repayments of debt. All other leases are classified as operating leases and the cost is recognised in income on a straight-line basis, except where capitalised as exploration drilling costs (see "exploration costs").

Joint arrangements and associates

Arrangements under which Shell has contractually agreed to share control (see "Nature of the Consolidated Financial Statements" for the definition of control) with another party or parties are joint ventures where the parties have rights to the net assets of the arrangement, or joint operations where the parties have rights to the assets and obligations for the liabilities relating to the arrangement. Investments in entities over which Shell has the right to exercise significant influence but neither control nor joint control are classified as associates. Information about incorporated joint arrangements and associates at December 31, 2020, can be found in "Appendix 1: Significant Subsidiaries and Other Related Undertakings".

Investments in joint ventures and associates are accounted for using the equity method, under which the investment is initially recognised at cost and subsequently adjusted for the Shell share of post-acquisition income

less dividends received and the Shell share of other comprehensive income and other movements in equity, together with any loans of a long-term investment nature. Where necessary, adjustments are made to the financial statements of joint ventures and associates to bring the accounting policies used into line with those of Shell. In an exchange of assets and liabilities for an interest in a joint venture, the non-Shell share of any excess of the fair value of the assets and liabilities transferred over the pre-exchange carrying amounts is recognised in income. Unrealised gains on other transactions between Shell and its joint ventures and associates are eliminated to the extent of Shell's interest in them; unrealised losses are treated similarly but may also result in an assessment of whether the asset transferred is impaired.

Shell recognises its assets and liabilities relating to its interests in joint operations, including its share of assets held jointly and liabilities incurred jointly with other partners.

Inventories

Inventories are stated at cost or net realisable value, whichever is lower. Cost comprises direct purchase costs (including transportation), and associated costs incurred in bringing inventories to their present condition and location, and is determined using the first-in, first-out (FIFO) method for oil, gas and chemicals and by the weighted average cost method for materials.

Taxation

The charge for current tax is calculated based on the income reported by the Company and its subsidiaries, as adjusted for items that are non-taxable or disallowed and using rates that have been enacted or substantively enacted by the balance sheet date.

Deferred tax is determined, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the Consolidated Balance Sheet and on unused tax losses and credits carried forward.

Deferred tax assets and liabilities are calculated using the enacted or substantively enacted rates that are expected to apply when an asset is realised or a liability is settled. They are not recognised where they arise on the initial recognition of goodwill or of an asset or liability in a transaction (other than in a business combination) that, at the time of the transaction, affects neither accounting nor taxable profit, or in respect of taxable temporary differences associated with subsidiaries, joint ventures and associates where the reversal of the respective temporary difference can be controlled by Shell and it is probable that it will not reverse in the foreseeable future.

Deferred tax assets are recognised to the extent that it is probable that future taxable profits will be available against which the deductible temporary differences, unused tax losses and credits carried forward can be utilised.

Income tax receivables and payables as well as deferred tax assets and liabilities include provisions for uncertain income tax positions/treatments.

Income taxes are recognised in income except when they relate to items recognised in other comprehensive income, in which case the tax is recognised in other comprehensive income. Income tax assets and liabilities are presented separately in the Consolidated Balance Sheet except where there is a right of offset within fiscal jurisdictions and an intention to settle such balances on a net basis.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

continued

2 – SIGNIFICANT ACCOUNTING POLICIES, JUDGEMENTS AND ESTIMATES continued

Judgements and estimates

Tax liabilities are recognised when it is considered probable that there will be a future outflow of funds to a taxing authority. In such cases, provision is made for the amount that is expected to be settled, where this can be reasonably estimated. Provisions for uncertain income tax positions/treatments are measured at the most likely amount or the expected value, whichever method is more appropriate. Generally, uncertain tax treatments are assessed on an individual basis, except where they are expected to be settled collectively. It is assumed that taxing authorities will examine positions taken if they have the right to do so and that they have full knowledge of the relevant information. A change in estimate of the likelihood of a future outflow and/or in the expected amount to be settled would be recognised in income in the period in which the change occurs. This requires the application of judgement as to the ultimate outcome, which can change over time depending on facts and circumstances. Judgements mainly relate to transfer pricing, including inter-company financing, interpretation of PSCs, expenditure deductible for tax purposes and taxation arising on disposal.

Deferred tax assets are recognised only to the extent it is considered probable that those assets will be recoverable. This involves an assessment of when those assets are likely to reverse, and a judgement as to whether or not there will be sufficient taxable profits available to offset the assets when they do reverse. This requires assumptions regarding future profitability and is therefore inherently uncertain. To the extent assumptions regarding future profitability change, there can be an increase or decrease in the amounts recognised in respect of deferred tax assets as well as in the amounts recognised in income in the period in which the change occurs.

Taxation information, including charges and deferred tax assets and liabilities, is presented in Note 16. Income taxes include taxes at higher rates levied on income from certain Integrated Gas and Upstream activities.

Retirement benefits

Benefits in the form of retirement pensions and health care and life insurance are provided to certain employees and retirees under defined benefit and defined contribution plans.

Obligations under defined benefit plans are calculated annually by independent actuaries using the projected unit credit method, which takes into account employees' years of service and, for pensions, average or final pensionable remuneration, and are discounted to their present value using interest rates of high-quality corporate bonds denominated in the currency in which the benefits will be paid and of a duration consistent with the plan obligations. Where plans are funded, payments are made to independently managed trusts; assets held by those trusts are measured at fair value. Defined benefit plan surpluses are recognised as assets to the extent that they are considered recoverable, which is generally by way of a refund or lower future employer contributions.

The amounts recognised in income in respect of defined benefit plans mainly comprise service cost and net interest. Service cost comprises principally the increase in the present value of the obligation for benefits resulting from employee service during the period (current service cost) and also amounts relating to past service and settlements or amendments of plans. Plan amendments are changes to benefits and are generally recognised when all legal and regulatory approvals have been received and the effects have been communicated to members. Net interest is

calculated using the net defined benefit liability or asset matched against the discount rate yield curve at the beginning of each year for each plan. Remeasurements of the net defined benefit liability or asset resulting from actuarial gains and losses, and the return on plan assets excluding the amount recognised in income, are recognised in other comprehensive income.

For defined contribution plans, pension expense represents the amount of employer contributions payable for the period.

Significant judgements and estimates

Defined benefit obligations and plan assets, and the resulting liabilities and assets that are recognised, require significant estimation as these are subject to volatility as (actuarial) assumptions regarding future outcomes and market values change. Substantial judgement is required in determining the actuarial assumptions, which vary for the different plans to reflect local conditions but are determined under a common process in consultation with independent actuaries. The assumptions applied in respect of each plan are reviewed annually and adjusted where necessary to reflect changes in experience and actuarial recommendations.

Actuarial assumptions applied in determining defined benefit obligations provide a source of estimation uncertainty as referred to in IAS 1.125.

Information about the amounts reported in respect of defined benefit pension plans, assumptions applicable to the principal plans and their sensitivity to changes in significant estimates are presented in Note 17.

Provisions

Provisions are recognised at the balance sheet date at management's best estimate of the expenditure required to settle the present obligation. Non-current amounts are discounted at a rate intended to reflect the time value of money. The carrying amounts of provisions and the discount rate applied are regularly reviewed and adjusted for new facts or changes in law, technology or financial markets.

Provisions for decommissioning and restoration costs, which arise principally in connection with hydrocarbon production facilities, oil products manufacturing facilities and pipelines, are measured on the basis of current requirements, technology and price levels; the present value is calculated using amounts discounted over the useful economic life of the assets. The liability is recognised (together with a corresponding amount as part of the related property, plant and equipment) once a legal or constructive obligation arises to dismantle an item of property, plant and equipment and to restore the site on which it is located and when a reasonable estimate can be made. The effects of changes resulting from revisions to the timing or the amount of the original estimate of the provision are reflected on a prospective basis, generally by adjustment to the carrying amount of the related property, plant and equipment. However, where there is no related asset, or the change reduces the carrying amount to nil, the effect, or the amount in excess of the reduction in the related asset to nil, is recognised in income.

Shell reviews its refinery and chemical sites on a regular basis to determine whether any changes in assumptions, including expected life, trigger the need to recognise a provision for decommissioning and restoration.

Redundancy provisions are recognised when a detailed formal plan identifies the business or part of the business concerned, the location and number of employees affected, a detailed estimate of the associated cost and an appropriate timeline, and the employees affected have been notified of the plan's main features.

An onerous contract provision is recognised when the unavoidable cost of meeting the obligations under the contract exceed the economic benefits expected to be received under it. The unavoidable cost under a contract is the lower of the cost of fulfilling the contract and any compensation or penalties arising from failure to fulfil it. The cost of fulfilling a contract comprises the costs that relate directly to the contract. Before an onerous provision is recognised Shell first recognises any impairment loss that has occurred on assets dedicated to that contract.

Other provisions are recognised in income in the period in which an obligation arises and the amount can be reasonably estimated. Provisions are measured based on current legal requirements and existing technology where applicable. Recognition of any joint and several liability is based on management's best estimate of the final pro rata share of the liability. Provisions are determined independently of expected insurance recoveries. Recoveries are recognised when virtually certain of realisation.

Estimates

Estimates of provisions for future decommissioning and restoration costs are recognised and based on current legal and constructive requirements, technology and price levels. Because actual cash outflows can differ from estimates due to changes in laws, regulations, public expectations, technology, prices and conditions, and can take place many years in the future, the carrying amounts of provisions are regularly reviewed and adjusted to take account of such changes.

Significant estimate

The discount rate applied to reflect the time value of money in the carrying amount of provisions requires estimation. The discount rate applied is reviewed regularly and adjusted following changes in market rates.

The discount rate applied to determine the carrying amount of provisions provides a source of estimation uncertainty as referred to in IAS 1.125.

Information about decommissioning and restoration provisions and their sensitivity to changes in estimates are presented in Note 18.

Financial instruments

Financial assets and liabilities are presented separately in the Consolidated Balance Sheet except where there is a legally enforceable right of offset and Shell has the intention to settle on a net basis or realise the asset and settle the liability simultaneously.

Financial Assets

Financial assets are classified at initial recognition and subsequently measured at amortised cost, fair value through other comprehensive income or fair value through profit or loss. The classification of financial assets is determined by the contractual cash flows and where applicable the business model for managing the financial assets.

Debt instruments are measured at amortised cost, if the objective of the business model is to hold the financial asset in order to collect contractual cash flows and the contractual terms give rise to cash flows that are solely payments of principal and interest. It is initially recognised at fair value plus or minus transaction costs that are directly attributable to the acquisition or issue of the financial asset. Subsequently the financial asset is measured using the effective interest method less any impairment. Gains and losses are recognised in profit or loss when the asset is derecognised, modified or impaired.

All equity instruments and other debt instruments are recognised at fair value. For equity instruments, on initial recognition, an irrevocable election (on an instrument-by-instrument basis) can be made to designate these as at fair value through other comprehensive income instead of fair value through profit or loss. Dividends received on equity instruments are recognised as other income in profit or loss when the right of payment has been established, except when Shell benefits from such proceeds as a recovery of part of the cost of the financial asset, in which case, such gains are recorded in other comprehensive income.

Investments in securities

Investments in securities ("securities") comprise equity and debt securities. Equity securities are carried at fair value. Generally, unrealised holding gains and losses are recognised in other comprehensive income. On sale, net gains and losses previously accumulated in other comprehensive income are transferred to retained earnings. Debt securities are generally carried at fair value with unrealised holding gains and losses recognised in other comprehensive income. On sale, net gains and losses previously accumulated in other comprehensive income are recognised in income.

Impairment of financial assets

The expected credit loss model is applied for recognition and measurement of impairments in financial assets measured at amortised cost or at fair value through other comprehensive income. The expected credit loss model is also applied for financial guarantee contracts to which IFRS 9 applies and which are not accounted for at fair value through profit or loss. The loss allowance for the financial asset is measured at an amount equal to the 12-month expected credit losses. If the credit risk on the financial asset has increased significantly since initial recognition, the loss allowance for the financial asset is measured at an amount equal to the lifetime expected credit losses. Changes in loss allowances are recognised in profit or loss. For trade receivables, a simplified impairment approach is applied recognising expected lifetime losses from initial recognition.

Cash and cash equivalents

Cash and cash equivalents comprise cash at bank and in hand, including offsetting bank overdrafts, short-term bank deposits, money market funds, reverse repos and similar instruments that generally have a maturity of three months or less at the date of purchase.

Financial Liabilities

Financial liabilities are measured at amortised cost, unless they are required to be measured at fair value through profit or loss, such as instruments held for trading, or Shell has opted to measure them at fair value through profit or loss. Debt and trade payables are recognised initially at fair value based on amounts exchanged, net of transaction costs, and subsequently at amortised cost except for fixed rate debt subject to fair value hedging which is remeasured for the hedged risk (see below). Interest expense on debt is accounted for using the effective interest method, and other than interest capitalised, is recognised in income. For financial liabilities that are measured under the fair value option, the change in the fair value related to own credit risk is recognised in other comprehensive income. The remaining fair value change is recognised at fair value through profit or loss.

Derivative contracts and hedges

Derivative contracts are used in the management of interest rate risk, foreign exchange risk, commodity price risk, and foreign currency cash balances. Derivatives that are not closely related to the host contract in terms of economic characteristics and risks and the host contract of which is not a financial asset are separated from their host contract and recognised at fair value with the associated gains and losses recognised in income.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

continued

2 – SIGNIFICANT ACCOUNTING POLICIES, JUDGEMENTS AND ESTIMATES continued

Contracts to buy or sell a non-financial item that can be settled net in cash are accounted for as financial instruments, with the exception of those contracts that were entered into and continue to be held for the purpose of the receipt or delivery of a non-financial item in accordance with Shell's expected purchase, sale or usage requirements. Gains or losses arising from changes in the fair value of derivatives that are not designated as effective hedging instruments are recognised in income.

Certain derivative contracts qualify and are designated either: as a fair value hedge of the change in fair value of a recognised asset or liability or an unrecognised firm commitment; or as a cash flow hedge for the change in cash flows to be received or paid relating to a recognised asset or liability or a highly probable forecast transaction; or as a net investment hedge of the change in foreign exchange rates associated with net investments in foreign operations with a different functional currency than Shell's functional currency.

A change in the fair value of a hedging instrument designated as a fair value hedge is recognised in income, together with the consequential adjustment to the carrying amount of the hedged item. The effective portion of a change in fair value of a derivative contract designated as a cash flow hedge is recognised in other comprehensive income until the hedged transaction occurs; any ineffective portion is recognised in income. Where the hedged item is a non-financial asset or liability, the amount in accumulated other comprehensive income is transferred to the initial carrying amount of the asset or liability (reclassified to the balance sheet); a net investment hedge is accounted for similarly to a cash flow hedge. Gains or losses on the hedging instrument relating to the effective portion of the hedge are recognised in other comprehensive income while any gains or losses relating to the ineffective portion are recognised in the income statements. On disposal of the foreign operation, the cumulative value of any such gains or losses recorded in other comprehensive income is reclassified to the income statement.

The effective portion of a change due to retranslation at quarter-end exchange rates in the carrying amount of debt and the principal amount of derivative contracts used to hedge net investments in foreign operations is recognised in other comprehensive income until the related investment is sold or liquidated; any ineffective portion is recognised in income.

All relationships between hedging instruments and hedged items are documented, as well as risk management objectives and strategies for undertaking hedge transactions. The effectiveness of hedges is also continually assessed and hedge accounting is discontinued when there is a change in the risk management strategy.

Unless designated as hedging instruments, contracts to sell or purchase non-financial items that can be settled net as if the contracts were financial instruments and that do not meet expected own use requirements (typically, forward sale and purchase contracts for commodities in trading operations), and contracts that are or contain written options, are recognised at fair value; associated gains and losses are recognised in income.

Derivatives that are held primarily for the purpose of trading are presented as current in the Consolidated Balance Sheet.

Fair value measurements

Fair value measurements are estimates of the amounts for which assets or liabilities could be transferred at the measurement date, based on the assumption that such transfers take place between participants in principal markets and, where applicable, taking highest and best use into account.

Estimates

Where available, fair value measurements are derived from prices quoted in active markets for identical assets or liabilities. In the absence of such information, other observable inputs are used to estimate fair value. Inputs derived from external sources are corroborated or otherwise verified, as appropriate. In the absence of publicly available information, fair value is determined using estimation techniques that take into account market perspectives relevant to the asset or liability, in as far as they can reasonably be ascertained, based on predominantly unobservable inputs. For derivative contracts where publicly available information is not available, fair value estimations are generally determined using models and other valuation methods, the key inputs for which include future prices, volatility, price correlation, counterparty credit risk and market liquidity, as appropriate; for other assets and liabilities, fair value estimations are generally based on the net present value of expected future cash flows.

Share-based compensation plans

The fair value of share-based compensation expense arising from the Performance Share Plan (PSP) and the Long-term Incentive Plan (LTIP) – Shell's main equity-settled plans – is estimated using a Monte Carlo option pricing model and is recognised in income from the date of grant over the vesting period with a corresponding increase directly in equity. The model projects and averages the results for a range of potential outcomes for the vesting conditions, the principal assumptions for which are the share price volatility and dividend yields for Shell and four of its main competitors over the last three years and the last 10 years.

Shares held in trust

Shares in the Company, which are held by employee share ownership trusts and trust-like entities, are not included in assets but are reflected at cost as a deduction from equity as shares held in trust.

Acquisitions and sales of interests in a business

Assets acquired and liabilities assumed when control is obtained over a business, and when an interest or an additional interest is acquired in a joint operation which is a business, are recognised at their fair value at the date of the acquisition; the amount of the purchase consideration above this value is recognised as goodwill. When control is obtained, any non-controlling interest is recognised as the proportionate share of the identifiable net assets. The acquisition of a non-controlling interest in a subsidiary and the sale of an interest while retaining control are accounted for as transactions within equity. The difference between the purchase consideration or sale proceeds after tax and the relevant proportion of the non-controlling interest, measured by reference to the carrying amount of the interest's net assets at the date of acquisition or sale, is recognised in retained earnings as a movement in equity attributable to Royal Dutch Shell plc shareholders.

Environmental schemes and related environmental plans

Emission trading schemes

Emission certificates acquired for compliance purposes are initially recognised at cost and classified under intangible assets. In the schemes where a cap is set for emissions, the associated emission certificates granted are recognised at cost, which may be zero. Emission certificates held for trading purposes are recognised at cost or net realisable value, whichever is lower, and classified under inventory. An emission liability is recognised under other liabilities when actual emissions occur that give rise to an obligation. To the extent the liability is covered by emission certificates held for compliance purposes, the liability is measured with reference to the value of these emission certificates held and for the

remaining uncovered portion at fair market value. The associated expense is presented under "production and manufacturing expenses". Both the emission certificates and the emission liability are derecognised upon settling the liability with the respective regulator.

Biofuels certificates

Self-generated biofuel certificates are recognised at nil value, as they primarily offset the obligation. Biofuel certificates acquired that are held for compliance purposes are recognised at cost under intangible assets. A biofuel liability is recognised under other liabilities when the number of biofuel certificates available from own activities is less than required. To the extent covered by biofuel certificates held for compliance purposes, the liability is measured with reference to the value of these certificates held and for the remaining uncovered portion at market value. Biofuel certificates and the biofuel liability are both derecognised upon settling the liability with the respective regulator.

Renewable power schemes

Renewable power certificates acquired for compliance purposes are recognised at cost as an intangible asset. Self-generated renewable power certificates are generally transferred to the customer upon sales of electricity. A renewable power liability is recognised under other liabilities when electricity sales take place that give rise to an obligation to retire renewable power certificates. The associated cost is recognised in "Purchases" in the income statement. If the obligation relates to power consumed in business operations, it is presented in other liabilities with cost reflected in "Production and manufacturing expenses". To the extent covered by renewable power certificates held for compliance purposes, the liability is measured with reference to the value of these renewable power certificates and for the remaining uncovered portion at market value. Renewable power certificates and the renewable power liability are derecognised upon settling the liability with the respective regulator.

Consolidated Statement of Income presentation

Purchases reflect all costs related to the acquisition of inventories and the effects of the changes therein, and include associated costs incurred in conversion into finished or intermediate products. Production and manufacturing expenses are the costs of operating, maintaining and managing production and manufacturing assets. Selling, distribution and administrative expenses include direct and indirect costs of marketing and selling products.

3 – CHANGES TO IFRS NOT YET ADOPTED

Inter-Bank Offered Rate (IBOR) Reform – Phase 2

Amendments to IFRS 9 *Financial Instruments* (IFRS 9), IFRS 7 *Financial Instruments: Disclosures* (IFRS 7) and IFRS 16 *Leases* (IFRS 16) were issued in August 2020 that complement those amendments issued in 2019 (IBOR Reform – Phase 1) and focus on the effects of IBOR reform on a company's financial statements that arise when, for example, an IBOR used to calculate interest on a financial asset is replaced with an alternative benchmark rate.

In Phase 2 the IASB amended requirements relating to: changes in the basis for determining contractual cash flows of financial assets, financial liabilities and lease liabilities; hedge accounting; and disclosures. These amendments apply only to changes required by the IBOR reform to financial instruments and hedging relationships.

The amendments are effective for periods beginning on or after January 1, 2021 and are to be applied retrospectively. Early application is permitted.

Shell's fixed-rate debt hedged to floating rate will be affected by the market-wide replacement of London Inter-Bank Offered Rate (LIBOR) by alternative risk-free reference rates, most significantly by reform of dollar LIBOR.

The majority of Shell's debt-related interest rate and currency swaps were designated in fair value hedge relationships at December 31, 2020.

The notional amount of hedging instruments designated in hedge relationships affected by the reform, at December 31, 2020, was \$23,010 million. Furthermore, Shell has one floating rate note of \$500 million tied to LIBOR, maturing in 2023, which will be affected.

A Group-wide project is in progress to manage the transition to alternative benchmark rates disclosures.

UK-adopted international accounting standards

On December 31, 2020 at 11pm BST, legislation made under the European Union (Withdrawal) Act 2018 brought into UK law IFRS adopted pursuant to Regulation (EC) No 1606/2002 as it applies in the European Union (EU) (previously referred to as "IFRS as adopted by the EU") to provide continuity. These standards are referred to as UK-adopted international accounting standards.

For reporting periods beginning on or after January 1, 2021, Shell's filing of the Annual Report to the Registrar of Companies for England and Wales ("Companies House") and other UK regulatory filings will be prepared in accordance with these UK-adopted international accounting standards.

The IFRS endorsement powers for the UK have been transferred from the European Commission to the Secretary of State for Business, Energy and Industrial Strategy (BEIS).

There are currently no material differences between the UK-adopted international accounting standards and IFRS adopted pursuant to Regulation (EC) No 1606/2002 as it applies in the EU. But if divergence occurs between the two accounting frameworks this may result in the need to report against both accounting frameworks to meet the UK and Dutch reporting requirements. However, if the EU determines that UK-adopted international accounting standards are equivalent to IFRS adopted pursuant to Regulation (EC) No 1606/2002 as it applies in the EU, any divergence between the two accounting frameworks would have no impact on Shell's future reporting. The EU has not yet accepted the UK-adopted international accounting standards at the time of publishing this Report.

It is expected that in the short term there will be no material differences between IFRS as issued by the IASB, UK-adopted international accounting standards and IFRS adopted pursuant to Regulation (EC) No 1606/2002 as it applies in the EU.

IFRS 17 Insurance contracts (IFRS 17)

IFRS 17 was issued in 2017, and is required to be adopted for annual reporting periods beginning on or after January 1, 2023. The IFRS 17 model combines a current balance sheet measurement of insurance contracts with recognition of profit over the period that services are provided. The general model in the standard requires insurance contract liabilities to be measured using probability-weighted current estimates of future cash flows, an adjustment for risk, and a contractual service margin representing the profit expected from fulfilling the contracts. Effects of changes in the estimates of future cash flows and the risk adjustment relating to future services are recognised over the period services are provided rather than immediately in profit or loss. Shell is in the process of evaluating the initial impact of this standard.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

continued

4 – SEGMENT INFORMATION

General information

Shell is an international energy company engaged in the principal aspects of the oil and gas industry and reports its business through segments. With effect from 2020, Shell's reporting segments consist of Integrated Gas, Upstream, Oil Products, Chemicals and Corporate, reflecting the way Shell reviews and assesses its performance. The Oil Products and Chemicals businesses were previously reported under the Downstream segment. Oil sands mining activities, previously included in the Upstream segment, are reported under Oil Products. Comparative information has been reclassified.

The Integrated Gas segment manages liquefied natural gas (LNG) activities and the conversion of natural gas into gas-to-liquids (GTL) fuels and other products, as well as the New Energies portfolio. It includes natural gas and liquids exploration and extraction, and the operation of the upstream and midstream infrastructure necessary to deliver gas and liquids to market. It markets and trades natural gas, LNG, electricity and carbon-emission rights, and also markets and sells LNG as a fuel for heavy-duty vehicles and marine vessels.

The Upstream segment explores for and extracts crude oil, natural gas and natural gas liquids. It also markets and transports oil and gas, and operates the infrastructure necessary to deliver them to market.

The Oil Products segment comprises the Refining and Trading, and Marketing classes of business. The Refining and Trading class of business turns crude oil and other feedstocks into a range of oil products which are moved and marketed around the world for domestic, industrial and transport use. With effect from 2020, this class of business includes the oil sands mining activities which were previously reported under the

Upstream segment. The Marketing class of business includes the Retail, Lubricants, Business-to-Business (B2B), Pipelines and Biofuels businesses.

The Chemicals segment operates manufacturing plants and its own marketing network.

The Corporate segment covers the non-operating activities supporting Shell, comprising Shell's holdings and treasury organisation, its self-insurance activities and its headquarters and central functions.

Basis of Segmental Reporting

Sales between segments are based on prices generally equivalent to commercially available prices. Third-party revenue and non-current assets information by geographical area are based on the country of operation of the Group subsidiaries that report this information. Separate disclosure is provided for the UK as this is the Company's country of domicile.

Segment earnings are presented on a current cost of supplies basis (CCS earnings). On this basis, the purchase price of volumes sold during the period is based on the current cost of supplies during the same period after making allowance for the tax effect. CCS earnings therefore exclude the effect of changes in the oil price on inventory carrying amounts. CCS earnings attributable to RDS plc shareholders is the earnings measure used by the Chief Executive Officer for the purposes of making decisions about allocating resources and assessing performance.

Finance expense and income related to core financing activities, as well as related taxes, are included in the Corporate segment earnings rather than in the earnings of the business segments.

Information by segment on a current cost of supplies basis is as follows:

2020

	Integrated Gas	Upstream	Oil Products	Chemicals	Corporate	\$ million Total
Revenue:						
Third-party	33,287	6,767	128,717	11,721	51	180,543 [A] [B]
Inter-segment	3,410	21,564	6,213	2,850	–	34,037
Share of profit/(loss) of joint ventures and associates (CCS basis)	562	(7)	988	567	(268)	1,842
Interest and other income, of which:	14	542	(93)	–	406	869
Interest income	6	56	28	–	589	679
Net gains on sale and revaluation of non-current assets and businesses	218	55	(9)	(2)	24	286
Other	(210)	431	(112)	2	(207)	(96)
Third-party and inter-segment purchases (CCS basis)	21,112	4,505	113,177	9,969	8	148,771
Production and manufacturing expenses	5,723	10,521	5,942	1,787	28	24,001
Selling, distribution and administrative expenses	729	(23)	7,360	1,339	476	9,881
Research and development expenses	103	486	209	109	–	907
Exploration expenses	611	1,136	–	–	–	1,747
Depreciation, depletion and amortisation charge, of which:	17,704	23,119	10,473	1,116	32	52,444
Impairment losses	12,221	8,697	6,531	5	9	27,463 [C]
Interest expense	76	374	56	3	3,580	4,089
Taxation (credit)/charge (CCS basis)	(2,507)	(467)	(898)	7	(983)	(4,848)
CCS earnings	(6,278)	(10,785)	(494)	808	(2,952)	(19,701)

[A] Includes \$10,008 million of revenue from sources other than from contracts with customers, which mainly comprises the impact of fair value accounting of commodity derivatives. This amount includes both the reversal of prior gains of \$1,136 million related to sales contracts and prior losses of \$539 million related to purchase contracts that were previously recognised and where physical settlement has taken place during 2020.

[B] With effect from 2020, additional contracts are classified as held for trading purposes and consequently revenue is reported on a net rather than gross basis. The effect on revenue for the full year was a reduction of \$46,289 million.

[C] Impairment losses comprise Property, plant and equipment (\$26,676 million) and Intangible assets (\$787 million).

2019

	Integrated Gas	Upstream [A]	Oil Products [A]	Chemicals [A]	Corporate	\$ million Total
Revenue:						
Third-party	41,322	9,482	280,460	13,568	45	344,877 [B]
Inter-segment	4,280	35,735	7,819	3,917	—	51,751
Share of profit/(loss) of joint ventures and associates (CCS basis)	1,791	379	1,179	546	(307)	3,588
Interest and other income, of which:	263	2,180	273	(7)	916	3,625
Interest income	—	—	—	—	899	899
Net gains on sale and revaluation of non-current assets and businesses	282	1,888	305	(8)	52	2,519
Other	(19)	292	(32)	1	(35)	207
Third-party and inter-segment purchases (CCS basis)	23,498	6,982	262,004	13,039	(6)	305,517
Production and manufacturing expenses	5,768	11,102	7,536	1,995	37	26,438
Selling, distribution and administrative expenses	716	29	7,976	1,323	449	10,493
Research and development expenses	181	450	219	112	—	962
Exploration expenses	281	2,073	—	—	—	2,354
Depreciation, depletion and amortisation charge, of which:	6,238	16,881	4,461	1,074	47	28,701
Impairment losses	579	2,576	622	5	—	3,782 [C]
Impairment reversals	—	—	(190)	—	—	(190)[D]
Interest expense	104	526	77	5	3,978	4,690
Taxation charge/(credit) (CCS basis)	2,242	5,878	1,319	(2)	(578)	8,859
CCS earnings	8,628	3,855	6,139	478	(3,273)	15,827

[A] Revised to conform with reporting segment changes applicable from 2020.

[B] Includes \$3,760 million of revenue from sources other than from contracts with customers, which mainly comprises the impact of fair value accounting of commodity derivatives.

[C] Impairment losses comprise Property, plant and equipment (\$3,639 million) and Intangible assets (\$143 million).

[D] See Note 8.

2018

	Integrated Gas	Upstream [A]	Oil Products [A]	Chemicals [A]	Corporate	\$ million Total
Revenue:						
Third-party	43,764	9,459	316,409	18,704	43	388,379 [B]
Inter-segment	5,031	37,125	10,613	4,864	—	57,633
Share of profit/(loss) of joint ventures and associates (CCS basis)	2,273	285	1,101	684	(222)	4,121
Interest and other income, of which:	2,230	605	393	(53)	896	4,071
Interest income	—	—	—	—	772	772
Net gains on sale and revaluation of non-current assets and businesses	2,231	717	350	(53)	20	3,265
Other	(1)	(112)	43	—	104	34
Third-party and inter-segment purchases (CCS basis)	27,775	5,948	300,417	17,332	1	351,473
Production and manufacturing expenses	5,370	11,169	8,226	2,362	(157)	26,970
Selling, distribution and administrative expenses	458	29	9,183	1,130	560	11,360
Research and development expenses	186	493	205	102	—	986
Exploration expenses	208	1,132	—	—	—	1,340
Depreciation, depletion and amortisation charge, of which:	4,850	12,871	3,165	1,034	215	22,135
Impairment losses	200	1,065	346	78	7	1,696 [C]
Impairment reversals	—	(1,265)	—	—	—	(1,265)[D]
Interest expense	212	586	84	16	2,847	3,745
Taxation charge/(credit) (CCS basis)	2,795	8,756	1,211	339	(1,270)	11,831
CCS earnings	11,444	6,490	6,025	1,884	(1,479)	24,364

[A] Revised to conform with reporting segment changes applicable from 2020.

[B] Includes \$3,348 million of revenue from sources other than from contracts with customers, which mainly comprises the impact of fair value accounting of commodity derivatives.

[C] Impairment losses comprise Property, plant and equipment (\$1,515 million) and Intangible assets (\$181 million).

[D] See Note 8.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

continued

4 – SEGMENT INFORMATION

Reconciliation of CCS earnings to income for the period

	2020	2019	2018
(Loss)/income attributable to Royal Dutch Shell plc shareholders	(21,680)	15,842	23,352
Income attributable to non-controlling interest	146	590	554
(Loss)/income for the period	(21,534)	16,432	23,906
Current cost of supplies adjustment:			
Purchases	2,359	(784)	559
Taxation	(585)	194	(116)
Share of profit of joint ventures and associates	59	(15)	15
Current cost of supplies adjustment	1,833	(605)	458
Of which:			
Attributable to Royal Dutch Shell plc shareholders	1,759	(572)	481
Attributable to non-controlling interest	74	(33)	(23)
CCS earnings	(19,701)	15,827	24,364
Of which:			
CCS earnings attributable to Royal Dutch Shell plc shareholders	(19,921)	15,270	23,833
CCS earnings attributable to non-controlling interest	220	557	531

Information by geographical area is as follows:

2020

	Europe	Asia, Oceania, Africa	USA	Other Americas	\$ million Total
Third-party revenue, by origin	50,138 [A]	65,139	50,856	14,410	180,543
Intangible assets, property, plant and equipment, joint ventures and associates at December 31	38,785 [B]	104,450	62,976	49,909	256,120

[A] Includes \$12,958 million that originated from the UK.

[B] Includes \$23,302 million located in the UK.

2019

	Europe	Asia, Oceania, Africa	USA	Other Americas	\$ million Total
Third-party revenue, by origin	98,455 [A]	139,916	83,212	23,294	344,877
Intangible assets, property, plant and equipment, joint ventures and associates at December 31	43,262 [B]	119,732	67,105	54,544	284,643

[A] Includes \$41,094 million that originated from the UK.

[B] Includes \$24,696 million located in the UK.

2018

	Europe	Asia, Oceania, Africa	USA	Other Americas	\$ million Total
Third-party revenue, by origin	118,960 [A]	153,716	89,876	25,827	388,379
Intangible assets, property, plant and equipment, joint ventures and associates at December 31	38,617 [B]	117,127	59,625	56,721	272,090

[A] Includes \$54,659 million that originated from the UK.

[B] Includes \$21,863 million located in the UK.

5 – INTEREST AND OTHER INCOME

	\$ million		
	2020	2019	2018
Interest income	679	899	772
Dividend income (from investments in equity securities)	22	23	104
Net gains on sale and revaluation of non-current assets and businesses	286	2,519	3,265
Net foreign exchange (losses)/gains on financing activities	(391)	5	(174)
Other	273	179	104
Total	869	3,625	4,071

In 2020, 'Other' income mainly related to amounts recognised in respect of sublease income from partners in joint operations.

In 2019, net gains on sale of non-current assets and businesses arose mainly in respect of gains on the sale of Integrated Gas assets in Australia, Upstream assets in the USA and Denmark, as well as Oil Products assets in Saudi Arabia and China.

In 2018, net gains on sale of non-current assets and businesses arose mainly in respect of gains on the sale of Integrated Gas assets in Thailand, Malaysia, Oman and New Zealand, as well as Upstream assets in Iraq and Malaysia and an Oil Products divestment in Argentina, partly offset by a charge related to the disposal of our Upstream assets in Ireland.

6 – INTEREST EXPENSE

	\$ million		
	2020	2019	2018
Interest incurred and similar charges	4,359 [A]	4,592 [A]	3,550
Less: interest capitalised	(799)	(752)	(876)
Other net losses on fair value and cash flow hedges of debt	32	132	169
Accretion expense	497	718	902
Total	4,089	4,690	3,745

[A] Includes \$2,185 million (2019: \$2,186 million) of interest expense related to leases, of which \$1,031 million (2019: \$1,137 million) related to those leases which before January 1, 2019 were classified as operating leases.

The rate applied in determining the amount of interest capitalised in 2020 was 4.5% (2019: 4.5%; 2018: 4.0%).

7 – INTANGIBLE ASSETS

2020

	Goodwill	LNG off-take and sales contracts	Software	Other	Total
Cost					
At January 1	14,973	10,211	2,958	3,908	32,050
Additions	247	–	133	1,448	1,828
Sales, retirements and other movements	(64)	(181)	(77)	(637)	(959)
Currency translation differences	57	–	100	94	251
At December 31	15,213	10,030	3,114	4,813	33,170
Depreciation, depletion and amortisation, including impairments					
At January 1	768	4,014	2,524	1,258	8,564
Charge for the year [A]	276	835	156	695	1,962
Sales, retirements and other movements	–	(181)	(129)	9	(301)
Currency translation differences	18	–	76	29	123
At December 31	1,062	4,668	2,627	1,991	10,348
Carrying amount at December 31	14,151	5,362	487	2,822 [B]	22,822

[A] Includes \$787 million related to impairments, of which \$472 million in 'Other' related to Integrated Gas. (See Note 8)

[B] Includes \$1,013 million related to emission certificates held for compliance purposes. (See Note 29)

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS continued

7 – INTANGIBLE ASSETS continued

2019

	Goodwill	LNG off-take and sales contracts	Software	Other	\$ million Total
Cost					
At January 1	14,338	10,365	2,910	3,482	31,095
Additions	674	–	137	449	1,260
Sales, retirements and other movements	(46)	(154)	(100)	(22)	(322)
Currency translation differences	7	–	11	(1)	17
At December 31	14,973	10,211	2,958	3,908	32,050
Depreciation, depletion and amortisation, including impairments					
At January 1	622	3,293	2,425	1,169	7,509
Charge for the year [A]	135	876	176	178	1,365
Sales, retirements and other movements	(1)	(155)	(87)	(85)	(328)
Currency translation differences	12	–	10	(4)	18
At December 31	768	4,014	2,524	1,258	8,564
Carrying amount at December 31	14,205	6,197	434	2,650	23,486

[A] Includes \$143 million related to impairments.

Goodwill at December 31, 2020, principally related to the acquisition of BG Group plc in 2016, allocated to Integrated Gas (\$4,800 million) and Upstream (\$5,946 million) at the operating segment level, and to Pennzoil-Quaker State Company (\$1,609 million), a lubricants business in the Oil Products segment based largely in North America.

8 – PROPERTY, PLANT AND EQUIPMENT

2020

	Exploration and production	Manufacturing, supply and distribution	Other	\$ million Total
	Exploration and evaluation	Production		
Cost				
At January 1	18,596	286,666	104,817	29,081 439,160
Additions	1,728	9,659	6,287	3,460 21,134
Sales, retirements and other movements	(5,928)	600	(5,510)	(1,109) (11,947)
Currency translation differences	92	3,632	2,282	970 6,976
At December 31	14,488	300,557	107,876	32,402 455,323
Depreciation, depletion and amortisation, including impairments				
At January 1	4,010	136,300	48,872	11,629 200,811
Charge for the year [A]	3,336	34,209	11,680	1,693 50,918
Sales, retirements and other movements	(2,148)	(5,075)	(4,129)	(1,091) (12,443)
Currency translation differences	64	2,805	1,819	502 5,190
At December 31	5,262	168,239	58,242	12,733 244,476
Carrying amount at December 31	9,226	132,318	49,634	19,669 210,847

[A] Includes \$26,676 million relating to impairment losses (see table 'Impairments' below).

	Exploration and production		Manufacturing, supply and distribution	Other	Total
	Exploration and evaluation	Production			
Cost					
At January 1	21,181	285,252	97,694	26,268	430,395
Additions	2,659	11,374	10,945	3,145	28,123
Sales, retirements and other movements	(5,442)	(11,253)	(3,683)	(456)	(20,834)
Currency translation differences	198	1,293	(139)	124	1,476
At December 31	18,596	286,666	104,817	29,081	439,160
Depreciation, depletion and amortisation, including impairments					
At January 1	3,287	131,692	46,218	10,465	191,662
Charge for the year	1,096	19,346	5,742	1,573	27,757
Sales, retirements and other movements	(440)	(15,567)	(2,981)	(437)	(19,425)
Currency translation differences	67	829	(107)	28	817
At December 31	4,010	136,300	48,872	11,629	200,811
Carrying amount at December 31	14,586	150,366	55,945	17,452	238,349

Sales, retirements and other movements in 2020 includes to sales of the Appalachia shale gas position and the Martinez refinery, both in the USA.

The carrying amount of property, plant and equipment at December 31, 2020, included \$31,611 million (2019: \$27,779 million) of assets under construction. This amount excludes exploration and evaluation assets. The carrying amount at December 31, 2020, included \$1,159 million of assets classified as held for sale (2019: \$1,401 million).

The carrying amount of exploration and production assets at December 31, 2020, included rights and concessions in respect of proved and unproved properties of \$11,485 million (2019: \$14,355 million). Exploration and evaluation assets principally comprise rights and concessions in respect of unproved properties and capitalised exploration drilling costs.

The carrying amount of assets at December 31, 2020, for which an alternative reserves base was applied in the calculation of the depreciation charge (see Note 2), was \$1,707 million (2019: \$173 million). If no alternative reserves base had been used, the pre-tax depreciation charge for the year ended December 31, 2020, would have been \$1,012 million higher (2019: \$77 million, 2018: \$1,003 million).

Contractual commitments for the purchase and lease of property, plant and equipment at December 31, 2020, amounted to \$5,699 million (2019: \$4,599 million (as revised)).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS continued

8 – PROPERTY, PLANT AND EQUIPMENT continued**Right-of-use assets**

Within property, plant and equipment the following amounts relate to leases:

2020

					\$ million	
		Exploration and production		Manufacturing, supply and distribution		
		Exploration and evaluation	Production		Other	Total
Cost						
At January 1		5	15,213	13,574	5,759	34,551
Additions		–	502	1,570	1,580	3,652
Sales, retirements and other movements		–	(1,370)	(675)	(75)	(2,120)
Currency translation differences		–	95	57	120	272
At December 31		5	14,440	14,526	7,384	36,355
Depreciation, depletion and amortisation, including impairments						
At January 1		–	5,761	2,936	1,164	9,861
Charge for the year		–	1,898	2,675	760	5,333
Sales, retirements and other movements		–	(712)	(627)	(158)	(1,497)
Currency translation differences		–	50	29	27	106
At December 31		–	6,997	5,013	1,793	13,803
Carrying amount at December 31		5	7,443	9,513	5,591	22,552

2019

					\$ million	
		Exploration and production		Manufacturing, supply and distribution		
		Exploration and evaluation	Production		Other	Total
Cost						
At January 1		–	16,379	10,718	5,017	32,114
Additions		5	664	3,124	917	4,710
Sales, retirements and other movements		–	(1,867)	(268)	(157)	(2,292)
Currency translation differences		–	37	–	(18)	19
At December 31		5	15,213	13,574	5,759	34,551
Depreciation, depletion and amortisation, including impairments						
At January 1		–	5,209	1,110	589	6,908
Charge for the year		–	1,632	1,855	703	4,190
Sales, retirements and other movements		–	(1,091)	(30)	(128)	(1,249)
Currency translation differences		–	11	1	–	12
At December 31		–	5,761	2,936	1,164	9,861
Carrying amount at December 31		5	9,452	10,638	4,595	24,690

Impairments

		\$ million		
		2020	2019	2018
Impairment losses [A]				
Exploration and production		20,155	2,983	1,066
Manufacturing, supply and distribution		6,490	654	441
Other		31	2	8
Total		26,676	3,639	1,515
Impairment reversals [A]				
Exploration and production		–	–	1,265
Manufacturing, supply and distribution		–	190	–
Total		–	190	1,265

[A] See Note 4.

Impairment losses in 2020 were mainly triggered by Shell's revision of the mid- and long-term commodity price and refining margin outlook reflecting the expected effects of the macroeconomic environment and the COVID-19 pandemic as well as energy market demand and supply fundamentals. The impairment losses for exploration and production assets related primarily to Integrated Gas (\$11,539 million), including the Queensland Curtis LNG and Prelude floating LNG operations, and Upstream (\$8,629 million), including assets in the Gulf of Mexico, unconventional assets in North America, offshore assets in Brazil and Europe and a project in Nigeria (OPL 245). The impairment losses for manufacturing, supply and distribution related primarily to Oil Products (\$6,493 million), including assets in Europe and the shutdown of the Convent refinery in the USA.

Impairment losses in 2019 were mainly triggered by the revision to Shell's long-term oil and gas price outlook and change to future capital expenditure plans. The impairment losses related primarily to Upstream shale and deep-water properties in North and South America, in Integrated Gas to properties in Australia and in Oil Products to the refining portfolio. Impairment losses in 2018 were mainly in Upstream, and principally related to the disposal of Shell's interests in Norway and Ireland and related to assets in the Gulf of Mexico. Impairment reversals in 2018 were mainly related to assets in North America.

For impairment testing purposes, the respective carrying amounts of property, plant and equipment and intangible assets were compared with their value in use. Cash flow projections used in the determination of value in use were made using management's forecasts of commodity prices, market supply and demand, potential costs associated with operational GHG emissions, product margins including forecast refining margins and expected production volumes (see Note 2). These cash flows were adjusted for the risks specific to the assets, and therefore these risks were not included in the determination of the discount rate applied. The nominal pre-tax rate applied in 2020 was 6% (2019: 6%; 2018: 6%).

Oil and gas price assumptions applied for impairment testing are reviewed and, where necessary, adjusted on a periodic basis. Reviews include comparison with available market data and forecasts that reflect developments in demand such as global economic growth, technology efficiency, policy measures and, in supply, consideration of investment and resource potential, cost of development of new supply, and behaviour of major resource holders. The near-term commodity price assumptions applied in impairment testing in 2020 were as follows:

Commodity price assumptions [A]

	2021	2022	2023	2024
Brent crude oil (\$/b)	40	50	60	63
Henry Hub natural gas (\$/MMBtu)	2.50	2.50	2.75	3.03

[A] Money of the day.

For periods after 2024, the real-terms long-term price assumptions applied were \$60 per barrel (/b) (2019: \$60/b) for Brent crude oil and \$3.00 per million British thermal units (/MMBtu) (2019: \$3.00/MMBtu) for Henry Hub natural gas, both at real-terms 2020.

Until 2019 management's estimate of longer-term refining margins in Oil Products was based on the reversion to mean methodology, unless a fundamental shift in markets had been identified, over the life of the refineries. Under this approach, it was assumed that refining margins will revert to historical averages over time. As from 2020, a different price methodology has been applied, based on management's understanding and interpretation of demand and supply fundamentals in the near term and taking into account various other factors such as industry rationalisation and energy transition in the long term. This resulted in a downward revision of average long-term refining margins by around 30% from previous assumptions applied.

Some 53% of the Group's combined "Property, plant and equipment", "Investments in Joint Ventures and Associates" and "Intangible assets" were tested for impairment in 2020. Of the assets tested, some 56% were subject to either partial or full impairments. At December 31, 2020, the recoverable amounts principally determined through value in use of assets subject to impairment were \$17.2 billion for Integrated Gas, \$39.1 billion for Upstream and \$1.8 billion for Oil Products respectively.

The main sensitivities in relation to impairment are the commodity price assumptions in Integrated Gas and Upstream and refining margins in Oil Products. A change of -10% or +10% of the commodity price assumptions would ceteris paribus result in some \$6.0-\$8.0 billion impairment or of some \$6.0-\$9.0 billion impairment reversal respectively in Integrated Gas and Upstream. A change of -10% or +10% in long-term refining margins would ceteris paribus result in some \$1.5-\$2.5 billion impairment or some \$1.7-\$2.7 billion impairment reversal respectively in Oil Products.

Capitalised exploration drilling costs

	\$ million		
	2020	2019	2018
At January 1	5,668	6,629	6,981
Additions pending determination of proved reserves	1,016	2,036	2,588
Amounts charged to expense	(815)	(1,218)	(449)
Reclassifications to productive wells on determination of proved reserves	(1,385)	(1,655)	(2,461)
Other movements [A]	(830)	(124)	(30)
At December 31	3,654	5,668	6,629

[A] Includes \$750 million impairment of capitalised exploration drilling costs.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

continued

8 – PROPERTY, PLANT AND EQUIPMENT continued

	Projects		Wells	
	Number	\$ million	Number	\$ million
Between 1 and 5 years	33	1,666	80	1,275
Between 6 and 10 years	12	975	47	1,309
Between 11 and 15 years	7	213	21	217
Between 16 and 20 years	–	–	3	53
Total	52	2,854	151	2,854

Exploration drilling costs capitalised for periods greater than one year at December 31, 2020, analysed according to the most recent year of activity, are presented in the table above. These comprise \$82 million relating to two projects where drilling activities were under way or firmly planned for the future, and \$2,772 million relating to 50 projects awaiting development concepts.

9 – JOINT VENTURES AND ASSOCIATES

Shell share of comprehensive income of joint ventures and associates

	2020			2019			\$ million 2018		
	Joint ventures	Associates	Total	Joint ventures	Associates	Total	Joint ventures	Associates	Total
Income for the period	629 [A]	1,154	1,783	1,121	2,483	3,604	1,307	2,799	4,106
Other comprehensive income/(loss) for the period	76	1	77	(82)	8	(74)	172	11	183
Comprehensive income for the period	705	1,155	1,860	1,039	2,491	3,530	1,479	2,810	4,289

[A] Includes \$599 million impairment losses recognised in share of profit of joint ventures and associates.

Carrying amount of interests in joint ventures and associates

	Dec 31, 2020			Dec 31, 2019			\$ million
	Joint ventures	Associates	Total	Joint ventures	Associates	Total	
Net assets	14,406	8,045	22,451	13,426	9,382	22,808	

Transactions with joint ventures and associates

	2020			2019			\$ million 2018		
	Joint ventures	Associates	Total	Joint ventures	Associates	Total	2020	2019	2018
Sales and charges to joint ventures and associates				5,426		7,748		8,270	
Purchases and charges from joint ventures and associates				8,262		11,581 [A]		13,758 [A]	

[A] As revised, following the reassessment of contractual relationships, by \$2,008 million (2019) and \$2,546 million (2018).

These transactions principally comprise sales and purchases of goods and services in the ordinary course of business. Related balances outstanding at December 31, 2020, and 2019, are presented in Notes 11 and 15.

Other arrangements in respect of joint ventures and associates

	Dec 31, 2020			Dec 31, 2019			\$ million
	Commitments to make purchases from joint ventures and associates [A]	Commitments to provide debt or equity funding to joint ventures and associates	Total	Commitments to make purchases from joint ventures and associates [A]	Commitments to provide debt or equity funding to joint ventures and associates	Total	
Commitments to make purchases from joint ventures and associates [A]				1,674		2,177	
Commitments to provide debt or equity funding to joint ventures and associates				900		897	

[A] Commitments to make purchases from joint ventures and associates mainly relate to contracts associated with LNG processing fees and transportation capacity. Shell has other purchase obligations related to joint ventures and associates that are not fixed or determinable and are principally intended to be resold in a short period of time through sales agreements with third parties. These include long-term LNG and natural gas purchase commitments and commitments to purchase refined products or crude oil at market prices.

10 – INVESTMENTS IN SECURITIES

Investments in securities

	\$ million	
	Dec 31, 2020	Dec 31, 2019
Equity securities:	1,396	1,437
Equity securities at fair value through other comprehensive income	1,396	1,437
Debt securities:	1,826	1,552
Debt securities at amortised cost	12	11
Debt securities at fair value through other comprehensive income	1,165	1,086
Debt securities at fair value through profit or loss	649	455
Total	3,222	2,989
At fair value		
Measured by reference to prices in active markets for identical assets	1,637	1,669
Measured by reference to other observable inputs	68	56
Measured using predominantly unobservable inputs	1,505	1,253
Total	3,210	2,978
At cost	12	11
Total	3,222	2,989

Equity securities at December 31, 2020, principally comprised interests below 5% in various investments. Debt securities principally comprised a portfolio required to be held by the Company's internal insurance entities as security for their activities.

Investments in securities measured using predominantly unobservable inputs [A]

	\$ million	
	2020	2019
At January 1	1,253	1,193
Gains/(losses) recognised in other comprehensive income	45	(42)
Purchases	329	340
Sales	(60)	(237)
Other movements	(62)	(1)
At December 31	1,505	1,253

[A] Based on expected dividend flows, adjusted for country and other risks as appropriate and discounted to their present value.

11 – TRADE AND OTHER RECEIVABLES

	Dec 31, 2020		Dec 31, 2019	
	Current	Non-current	Current	Non-current
Trade receivables	21,781	–	30,216	–
Lease receivables	186	1,380	213	1,528
Other receivables	7,251	4,109	7,791	4,039
Amounts due from joint ventures and associates	726	829	912	1,078
Prepayments and deferred charges	3,681	1,323	4,282	1,440
Total	33,625	7,641	43,414	8,085

The fair value of financial assets included above approximates the carrying amount and was determined from predominantly unobservable inputs.

Other receivables at December 31, 2020, include receivables from certain governments in their capacity as joint arrangement partners of \$1,357 million (2019: \$1,209 million), after provisions for impairments, that are overdue in part or in full. Recoverability and timing thereof are subject to uncertainty, however, the ultimate risk of default on the carrying amount is considered to be low. Other receivables also include income tax and other tax receivables (see Note 16).

Provisions for impairments deducted from trade and other receivables amounted to \$968 million at December 31, 2020 (2019: \$649 million).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

continued

11 – TRADE AND OTHER RECEIVABLES continued

Allowance for expected credit losses – trade receivables

Shell uses a provision matrix to calculate expected credit losses (ECLs) for trade receivables. The provision matrix is initially based on Shell's historical observed default rates. Shell calculates the ECL to adjust the historical credit loss experienced with forward-looking information. The ECL at December 31, 2020 is \$112 million (2019: \$83 million), which represents 0.27%-0.51% (2019: 0.08%-0.27%) of all trade receivables. The increase compared with prior year is mainly due to changes in the macroeconomic environment and the COVID-19 pandemic.

A loss allowance provision of \$349 million (2019: \$193 million) was established, in addition to all other impairments to trade receivables as at December 31, 2020, that are outside of the provision matrix calculations.

Lease receivables

Lease contracts where Shell is the lessor are classified as finance leases or operating leases. Receivables for lease contracts classified as finance leases are as follows:

	\$ million	
	Dec 31, 2020	Dec 31, 2019
Less than one year	262	305
Between 1 and 5 years	859	953
5 years and later	852	1,019
Total undiscounted lease payments receivable	1,973	2,277
Unearned finance income	407	536
Net investment in leases	1,566	1,741

In addition at December 31, 2020, Shell is entitled to contractual payments under operating leases of \$248 million (2019: \$344 million).

12 – INVENTORIES

	\$ million	
	Dec 31, 2020	Dec 31, 2019
Oil, gas and chemicals	16,949	21,653 [A]
Other including materials	2,508	2,418 [A]
Total	19,457	24,071

[A] As revised, following the reclassification of non-physical trading inventories of \$1,001 million from 'Oil, gas and chemicals' to 'Other including materials'.

Inventories at December 31, 2020, include write-downs to net realisable value of \$239 million (2019: \$546 million).

13 – CASH AND CASH EQUIVALENTS

	\$ million	
	Dec 31, 2020	Dec 31, 2019
Cash	4,831	4,168
Short-term bank deposits	2,220	2,665
Money market funds, reverse repos and other cash equivalents	24,779	11,222
Total	31,830	18,055

Included in cash and cash equivalents at December 31, 2020, were amounts totalling \$65 million (2019: \$431 million) subject to currency controls or other legal restrictions. Money market funds and reverse repos used in cash management provided higher yields compared with other cash equivalents available in 2020. Information about credit risk is presented in Note 19.

14 – DEBT AND LEASE ARRANGEMENTS

Debt

	Dec 31, 2020			\$ million		
	Debt (excluding lease liabilities)	Lease liabilities	Total	Debt (excluding lease liabilities)	Lease liabilities	Total
Short-term debt	7,535	–	7,535	3,962	–	3,962
Long-term debt due within 1 year	5,221	4,143	9,364	6,146	4,956	11,102
Current debt	12,756	4,143	16,899	10,108	4,956	15,064
Non-current debt	66,838	24,277	91,115	55,779	25,581	81,360
Total	79,594	28,420	108,014	65,887	30,537	96,424

Net debt

	\$ million				
	Asset/(liability)				
	Current debt	Non-current debt	Derivative financial instruments	Cash and cash equivalents (see Note 13)	Net debt
At January 1, 2020	(15,064)	(81,360)	(724)	18,055	(79,093)
Cash flow	7,536	(13,121)	(1,157)	13,603	6,861
Lease additions	(870)	(2,268)			(3,138)
Other movements	(8,380)	8,354	524	–	498
Currency translation differences and foreign exchange gains/(losses)	(121)	(2,720)	2,155	172	(514)
At December 31, 2020	(16,899)	(91,115)	798	31,830	(75,386)
At January 1, 2019	(13,046)	(79,815)	(1,345)	26,741	(67,465)
Cash flow	10,333	(7,269)	351	(8,810)	(5,395)
Lease additions	(971)	(3,547)			(4,518)
Other movements	(11,453)	9,179	453	–	(1,821)
Currency translation differences and foreign exchange gains/(losses)	73	92	(183)	124	106
At December 31, 2019	(15,064)	(81,360)	(724)	18,055	(79,093)

Management's priorities for applying Shell's cash are first the reduction of net debt to \$65 billion and, on achieving this milestone, distribution of a total of 20%–30% of cash flow from operations to shareholders. Remaining cash will be allocated to disciplined and measured capital expenditure growth and further debt reduction.

Gearing

	\$ million, except where indicated	
	Dec 31, 2020	Dec 31, 2019
Net debt	75,386	79,093
Total equity	158,537	190,463
Total capital	233,923	269,556
Gearing	32.2%	29.3%

Gearing is a measure of Shell's capital structure and is defined as net debt (total debt less cash and cash equivalents) as a percentage of total capital (net debt plus total equity).

Shell has access to international debt capital markets via two commercial paper (CP) programmes, a Euro medium-term note (EMTN) programme and a US universal shelf (US shelf) registration. Issuances under the CP programmes are supported by a committed credit facility and cash.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

continued

14 – DEBT AND LEASE ARRANGEMENTS continued

Borrowing facilities and amounts undrawn

	Facility		\$ million	
	Dec 31, 2020	Dec 31, 2019	Dec 31, 2020	Dec 31, 2019
CP programmes	20,000	20,000	13,254	16,610
EMTN programme	unlimited	unlimited	N/A	N/A
US shelf registration	–	unlimited	N/A	N/A
Committed credit facilities	22,651	10,000	22,651	10,000

Under the CP programmes, Shell can issue debt of up to \$10 billion with maturities not exceeding 270 days and \$10 billion with maturities not exceeding 397 days.

The EMTN programme is updated each year, most recently in August 2020. In 2020, debt issued under this programme amounted to \$6,734 million (2019: \$3,322 million).

The US shelf registration provides Shell with the flexibility to issue debt securities, ordinary shares, preferred shares and warrants. The registration is updated every three years. The US shelf registration expired in December 2020. Concurrent with the filing of our Annual Report on Form 20-F with the Securities and Exchange Commission (SEC) on March 11, 2021, a new US shelf registration statement will be filed with the SEC and be effective upon filing. During 2020, debt totalling \$6,250 million (2019: \$4,000 million) was issued under the registration.

On December 13, 2019, Shell entered into \$10 billion revolving credit facilities, which in anticipation of the LIBOR reform (see Notes 2 and 3), were linked to the new Secured Overnight Financing Rate (SOFR). Under the terms of the facilities, the LIBOR interest rate was replaced by SOFR on the first anniversary of the signing date of these revolving credit facilities. The committed credit facilities are available at pre-agreed margins, with \$2 billion expiring in 2021 and \$8 billion expiring in 2025. Each facility includes a remaining one-year extension option at the discretion of each lender. The terms and availability are not conditional on Shell's financial ratios nor its financial credit ratings. The interest and fees paid on both facilities are linked to Shell's progress towards reaching its short-term Net Carbon Footprint intensity target. In April 2020, Shell entered into a dual currency \$7,200 million and €4,432 million revolving credit facility expiring in April 2021, with two 6 month extension options at the discretion of Shell. The extension options have not been exercised, and the facility will expire in April 2021.

In addition, other subsidiaries have access to undrawn short-term bank facilities totalling \$3,115 million at December 31, 2020 (2019: \$2,784 million).

The following tables compare contractual cash flows for debt excluding lease liabilities at December 31 with the carrying amount in the Consolidated Balance Sheet. Contractual amounts reflect the effects of changes in foreign exchange rates; differences from carrying amounts reflect the effects of discounting, premiums and, where fair value hedge accounting is applied, fair value adjustments. Interest is estimated assuming interest rates applicable to variable rate debt remain constant and there is no change in aggregate principal amounts of debt other than repayment at scheduled maturity, as reflected in the table.

2020

	Contractual payments							\$ million	
	Less than 1 year	Between 1 and 2 years	Between 2 and 3 years	Between 3 and 4 years	Between 4 and 5 years	5 years and later	Total	Difference from carrying amount	Carrying amount
Commercial paper	6,746	–	–	–	–	–	6,746	(15)	6,731
Bonds	5,080	4,720	5,408	4,633	8,043	41,853	69,737	1,308	71,045
Bank and other borrowings	944	162	33	215	47	417	1,818	–	1,818
Total (excluding interest)	12,770	4,882	5,441	4,848	8,090	42,270	78,301	1,293	79,594
Interest	1,834	1,707	1,630	1,527	1,412	15,985	24,095		

2019

\$ million

	Contractual payments							Difference from carrying amount	Carrying amount
	Less than 1 year	Between 1 and 2 years	Between 2 and 3 years	Between 3 and 4 years	Between 4 and 5 years	5 years and later	Total		
Commercial paper	3,390	—	—	—	—	—	3,390	(38)	3,352
Bonds	5,900	4,971	4,392	4,326	2,091	38,323	60,003	694	60,697
Bank and other borrowings	859	425	56	71	15	412	1,838	—	1,838
Total (excluding interest)	10,149	5,396	4,448	4,397	2,106	38,735	65,231	656	65,887
Interest	1,665	1,559	1,430	1,357	1,263	14,618	21,892		

Interest rate swaps have been entered into against certain fixed rate debt affecting the effective interest rate on these balances (see Note 19). The fair value of debt excluding lease liabilities at December 31, 2020, was \$88,294 million (2019: \$71,163 million), mainly determined from the prices quoted for those securities.

Lease arrangements

Lease liabilities are secured on the leased assets. Shell has lease contracts in Integrated Gas and Upstream, principally for floating production storage and offloading units, subsea equipment, power generation, for drilling and ancillary equipment, service vessels, LNG vessels and land and buildings; in Oil Products, principally for tankers, storage capacity and retail sites; in Chemicals, principally for plant pipeline and machinery and in Corporate, principally for land and buildings.

Lease expenses not included in the measurement of lease liability

	\$ million	
	2020	2019
Expense relating to short-term leases	1,156	834
Expense relating to variable lease payments not included in the lease liabilities	1,209	1,091

The total cash outflow in respect of leases representing repayment of principal and payment of interest in 2020 was \$6,891 million (2019: \$7,866 million), recognised in the Consolidated Statement of Cash Flows from financing activities.

The future lease payments under lease contracts and the carrying amounts at December 31, by payment date are as follows:

2020

\$ million

	Contractual lease payments	Interest	Lease liabilities
Less than 1 year	6,059	1,916	4,143
Between 1 and 5 years	16,681	5,617	11,064
5 years and later	19,999	6,786	13,213
Total	42,739 [A]	14,319	28,420

[A] Future cash outflows in respect of leases may differ from lease liabilities recognised due to future decisions that may be taken by Shell in respect of the use of leased assets. These decisions may result in variable lease payments being made. In addition, Shell may reconsider whether it will exercise extension options or termination options, where future reconsideration is not reflected in the lease liabilities. There is no exposure to these potential additional payments in excess of the recognised lease liabilities until these decisions have been taken by Shell.

2019

\$ million

	Contractual lease payments	Interest	Lease liabilities
Less than 1 year	7,337	2,381	4,956
Between 1 and 5 years	17,435	6,141	11,294
5 years and later	21,340	7,053	14,287
Total	46,112	15,575	30,537

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

continued

15 – TRADE AND OTHER PAYABLES

	Dec 31, 2020		\$ million	
	Current	Non-current	Current	Non-current
Trade payables	22,664	–	29,497	–
Other payables [A]	6,941	1,843	6,356	2,060
Amounts due to joint ventures and associates	3,281	39	3,312	40
Accruals and deferred income	8,791	422	10,043	242
Total	41,677	2,304	49,208	2,342

[A] Includes obligations under environmental schemes for compliance purposes of \$2,053 million as at December 31, 2020. (See Note 29)

The fair value of financial liabilities included above approximates the carrying amount and was determined from predominantly unobservable inputs.

Other payables include amounts due to joint arrangement partners and in respect of other project-related items.

Information about offsetting, collateral and liquidity risk is presented in Note 19.

16 – TAXATION

Taxation charge

	\$ million		
	2020	2019	2018
Current tax:			
Charge in respect of current period	3,272	7,597	10,415
Adjustments in respect of prior periods	(56)	(1)	60
Total	3,216	7,596	10,475
Deferred tax:			
Relating to the origination and reversal of temporary differences, tax losses and credits	(9,063)	1,377	1,438
Relating to changes in tax rates and legislation	(16)	(67)	(157)
Adjustments in respect of prior periods	430	147	(41)
Total	(8,649)	1,457	1,240
Total taxation (credit)/charge	(5,433)	9,053	11,715

Adjustments in respect of prior periods relate to events in the current period and reflect the effects of changes in rules, facts or other factors compared with those used in establishing the current tax position or deferred tax balance in prior periods.

Reconciliation of applicable tax charge at statutory tax rates to taxation charge

	\$ million		
	2020	2019	2018
(Loss)/income before taxation	(26,967)	25,485	35,621
Less: share of profit of joint ventures and associates	(1,783)	(3,604)	(4,106)
(Loss)/income before taxation and share of profit of joint ventures and associates	(28,750)	21,881	31,515
Applicable tax (credit)/charge at standard statutory tax rates	(8,330)	7,214	11,641
Adjustments in respect of prior periods	374	146	19
Tax effects of:			
Derecognition/(recognition) of deferred tax assets	1,458	846	(381)
Expenses not deductible for tax purposes	1,239	1,493	1,176
Incentives for investment and development	(557)	(757)	(557)
Exchange rate differences	339	(34)	623
Disposals	(34)	(235)	(524)
Changes in tax rates and legislation	(16)	(67)	(157)
Income/(loss) not subject to tax at standard statutory rates	6	159	(286)
Other reconciling items	88	288	161
Taxation (credit)/charge	(5,433)	9,053	11,715

The weighted average of statutory tax rates was 29% in 2020 (2019: 33%; 2018: 37%). The loss before taxation was significantly impacted by asset impairments which occurred in jurisdictions subject to relatively lower tax rates, resulting in a lower weighted average statutory tax rate as compared with 2019.

Taxes payable

	\$ million	
	Dec 31, 2020	Dec 31, 2019
Income taxes	3,111	3,478
Sales taxes, excise duties and similar levies	2,895	3,215
Total	6,006	6,693

Included in other receivables at December 31, 2020 was income tax receivable of \$1,293 million (2019: \$1,328 million) (see Note 11).

2020 – Deferred tax

	\$ million				
	Decommissioning and other provisions	Property, plant and equipment	Tax losses and credits carried forward	Retirement benefits	Other
Deferred tax asset					
At January 1, 2020	5,380	3,014	11,629	3,660	4,361
Credit/(charge) to income	1,057	1,975	685	(250)	605
Currency translation differences	140	163	286	122	58
Other	(10)	80	(104)	242	60
At December 31, 2020	6,567	5,232	12,496	3,774	5,084
Deferred tax liability					
At January 1, 2020		(28,040)		(1,093)	(2,909)
Credit to income		4,355		4	218
Currency translation differences		(143)		(2)	(39)
Other		27		418	(101)
At December 31, 2020		(23,801)		(673)	(2,831)
Net deferred tax asset at December 31, 2020					5,848
Deferred tax asset/liability as presented in the balance sheet at December 31, 2020					
Deferred tax asset					16,311
Deferred tax liability					(10,463)

2019 – Deferred tax

	\$ million				
	Decommissioning and other provisions	Property, plant and equipment	Tax losses and credits carried forward	Retirement benefits	Other
Deferred tax asset					
At January 1, 2019	5,859	3,718	12,167	3,310	4,276
Credit/(charge) to income	15	(521)	(647)	(76)	10
Currency translation differences	56	6	57	(8)	(2)
Other	(550)	(189)	52	434	77
At December 31, 2019	5,380	3,014	11,629	3,660	4,361
Deferred tax liability					
At January 1, 2019		(27,627)		(1,674)	(2,769)
(Charge)/credit to income		(227)		46	(57)
Currency translation differences		(129)		(6)	(5)
Other		(57)		541	(78)
At December 31, 2019		(28,040)		(1,093)	(2,909)
Net deferred tax liability at December 31, 2019					(3,998)
Deferred tax asset/liability as presented in the balance sheet at December 31, 2019					
Deferred tax asset					10,524
Deferred tax liability					(14,522)

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

continued

16 – TAXATION continued

The presentation in the balance sheet takes into consideration the offsetting of deferred tax assets and deferred tax liabilities within the same tax jurisdiction, where this is permitted. The overall deferred tax position in a particular tax jurisdiction determines if a deferred tax balance related to that jurisdiction is presented within deferred tax assets or deferred tax liabilities.

Other movements in deferred tax assets and liabilities principally relate to acquisitions, sales of non-current assets and businesses, and amounts recognised in other comprehensive income.

The deferred tax category 'Other' primarily includes deferred tax positions in respect of leases, financial assets and liabilities, inventories, intangible assets and investments in subsidiaries, joint ventures and associates.

Deferred tax assets of \$16,311 million (2019: \$10,524 million) are recognised only to the extent it is considered probable that those assets will be recoverable. This involves an assessment of when those assets are likely to be recovered, and a judgement as to whether or not there will be sufficient taxable profits available to offset the assets. It is considered probable based on business forecasts that such taxable profits will be available. For Oil Products additional judgement is required; in some European jurisdictions the assessment of forecasted taxable profits resulting in deferred tax asset recognition of \$778 million (2019: \$1,194 million) extends for an additional 10 years beyond Shell's regular 10 years planning horizon. In those situations, additional risking has been applied to the forecast of taxable profits.

The amount of deferred tax assets which are dependent on future taxable profits not arising from the reversal of existing deferred tax liabilities, and which relate to tax jurisdictions where Shell has suffered a loss in the current or preceding year, was \$12,759 million at December 31, 2020 (2019: \$8,773 million). The increase of the amount compared with 2019 is primarily due to the reduction in deferred tax liabilities or increase in deferred tax assets resulting from impairments recorded in 2020, as well as a greater number of entities having incurred a loss in 2020.

Unrecognised taxable temporary differences associated with undistributed retained earnings of investments in subsidiaries, joint ventures and associates amounted to \$6,705 million at December 31, 2020 (2019: \$6,356 million). These retained earnings are subject to withholding tax upon distribution.

Unrecognised deductible temporary differences, unused tax losses and credits carried forward amounted to \$42,836 million at December 31, 2020 (2019: \$33,068 million), including amounts of \$31,873 million (2019: \$24,295 million) that are subject to time limits for utilisation of five years or later, or are not time limited.

Furthermore, there are unrecognised losses for Petroleum Resource Rent Tax (PRRT) in Australia, amounting to \$39,402 million as at the end of the most recent PRRT fiscal year, June 30, 2020 (June 30, 2019: \$36,905 million). Based on business forecasts at existing commodity price levels, and the annual augmentation of the unused PRRT losses, this amount is expected to increase in the near future.

17 – RETIREMENT BENEFITS

Retirement benefits are provided through a number of funded and unfunded defined benefit plans and defined contribution plans, the most significant of which are in the Netherlands, UK and USA. Benefits comprise principally pensions; retirement health care and life insurance are also provided in certain countries.

Financial position

	\$ million	
	Dec 31, 2020	Dec 31, 2019
Obligations	(115,792)	(103,545)
Plan assets	102,678	94,826
Asset ceilings	(17)	
Deficit	(13,131)	(8,719)
Retirement benefits in the Consolidated Balance Sheet:		
Non-current assets	2,474	4,717
Non-current liabilities	(15,168)	(13,017)
Current liabilities	(437)	(419)
Total	(13,131)	(8,719)

Retirement benefit expense

	\$ million		
	2020	2019	2018
Defined benefit plans:			
Interest expense on obligations	1,828	2,364	2,282
Interest income on plan assets	(1,657)	(2,253)	(2,087)
Current service cost, net of plan participants' contributions	1,431	1,188	1,494
Other	(174)	26	(221)
Total	1,428	1,325	1,468
Defined contribution plans	423	428	410
Total retirement benefit expense	1,851	1,753	1,878

Retirement benefit expense is presented principally within production and manufacturing expenses and selling, distribution and administrative expenses in the Consolidated Statement of Income. Interest income on plan assets is calculated using the same rate as that applied to the related defined benefit obligations for each plan to determine interest expense.

Remeasurements

	\$ million		
	2020	2019	2018
Actuarial (losses)/gains on obligations:			
Due to changes in financial assumptions [A]	(10,150)	(11,711)	8,186
Due to experience adjustments [B]	804	232	(268)
Due to changes in demographic assumptions [C]	1,375	(75)	(459)
Total	(7,971)	(11,554)	7,459
Return on plan assets in excess/(shortage) of interest income	4,509	8,460	(2,312)
Other movements	7	(12)	66
Total remeasurements	(3,455)	(3,106)	5,213

[A] Mainly relates to changes in the discount rate assumptions.

[B] Experience adjustments arise from differences between the actuarial assumptions made in respect of the year and actual outcomes.

[C] Mainly relates to updates in mortality assumptions.

Defined benefit plan obligations

	\$ million, except where indicated	
	2020	2019
At January 1	103,545	91,856
Current service cost	1,435	1,186
Interest expense	1,828	2,364
Actuarial losses	7,971	11,554
Benefit payments	(4,059)	(3,961)
Other movements	(444)	194
Currency translation differences	5,516	352
At December 31	115,792	103,545
Comprising:		
Funded pension plans	105,338	93,727
Weighted average duration	18 years	17 years
Unfunded pension plans	5,086	4,793
Weighted average duration	13 years	13 years
Unfunded OPEB plans [A]	5,368	5,025
Weighted average duration	15 years	14 years

[A] Mainly related to post-retirement medical benefits in the USA.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

continued

17 – RETIREMENT BENEFITS continued

Defined benefit plan assets

	\$ million, except where indicated	
	2020	2019
At January 1	94,826	85,803
Return on plan assets in excess of interest income	4,509	8,460
Interest income	1,657	2,253
Employer contributions	614	1,462
Plan participants' contributions	42	42
Benefit payments	(3,843)	(3,741)
Other movements	(281)	160
Currency translation differences	5,154	387
At December 31	102,678	94,826
Comprising:		
Quoted in active markets:		
Equities	25%	26%
Debt securities	52%	51%
Real estate	0%	1%
Other:		
Equities	8%	8%
Debt securities	5%	4%
Real estate	6%	6%
Investment funds	3%	3%
Cash	1%	1%

Employer contributions to defined benefit pension plans are based on actuarial valuations in accordance with local regulations and are estimated to be \$1.6 billion in 2021.

Characteristics of significant defined benefit and defined contribution plans and regulatory framework

The Netherlands

The principal defined benefit pension plan in the Netherlands is a funded career-averaged pension arrangement with retired employees drawing benefits as an annuity. The duration of the related Dutch defined benefit obligation is 19 years (2019: 19 years). Whilst the plan was closed to employees hired or rehired after July 1, 2013, it currently remains open for ongoing accrual for existing active members. 31% (2019: 34%) of the overall defined benefit liability in the Netherlands relates to active members. From July 1, 2013 onwards new employees in the Netherlands are entitled to membership of a defined contribution pension plan.

In line with Dutch regulations, the defined benefit pension plan has a joint Trustee Board with trustee representatives nominated by the company, the Central Staff Council and retired members. The defined benefit pension plan also has an Accountability Council comprised of members nominated by the company, the Central Staff Council and retired members. Furthermore, there is a Supervisory Committee which includes external experts from the pension industry to oversee management, compliance and operations of the fund. The defined contribution pension plan has a one-tier Trustee Board with an independent chairperson, and trustee representatives nominated by the company and the Central Staff Council (currently no retired members in the fund to act as trustee) as well as two executive board members. The defined contribution fund also has an Accountability Council comprised of members nominated by the company and the Central Staff Council.

The Dutch government is currently drafting a new regulatory framework for pensions in the Netherlands. The government aims to complete development of new regulations by January 2022 with subsequent implementation by January 2026. It is expected that these regulatory changes will have an impact on both the defined benefit pension plan and the defined contribution pension plan with anticipated changes currently being discussed with the Central Staff Council.

UK

The principal defined benefit pension plan in the UK is a funded final salary pension arrangement with retired employees mainly drawing benefits as an annuity with the option to take a portion as a lump sum. The duration of the related UK defined benefit obligation is 19 years (2019: 18 years). Whilst the plan was closed to employees hired or rehired on or after March 1, 2013, it currently remains open for ongoing accrual for existing active members. 21% (2019: 21%) of the overall defined liability in the UK relates to active members. From March 1, 2013 onwards new employees in the UK are entitled to membership of a defined contribution pension plan.

In line with UK regulations, the defined benefit pension plan is governed by a corporate trustee whose board is comprised of four trustee directors nominated by the company including the chair and four member-nominated trustee directors. The defined contribution pension plan is governed by a corporate trustee whose board is comprised of three company nominated directors including the chair and two member-nominated trustee directors. The trustees are responsible for administering the plans in line with the Trust Deed and Regulations, including setting the investment strategy for the pension plans' assets and paying member benefits, and are required to act in the best interests of the members of the pension plans.

USA

The principal defined benefit pension plan in the USA is a funded average final pay pension plan. At retirement, all retirees can choose to draw their benefit as an annuity, whereas some also have the choice to take their benefit as a lump sum. The duration of the related US defined benefit obligation is 13 years (2019: 13 years). In addition, the company provides a defined contribution plan. Each of these plans is subject to the provisions of the Employee Retirement Income Security Act (ERISA). 25% (2019: 31%) of the overall defined liability of the funded defined benefit plan in the USA relates to active members.

Both the defined benefit pension plan and the defined contribution pension plan are governed by trustees who are appointed by the Plan Sponsor and are named fiduciaries with respect to the plans. The trustees are generally responsible for investment-related matters, appointing the Plan Administrator, maintaining general oversight and deciding appeals of participants.

The company also sponsors "other post-retirement employee benefit" (OPEB) plans in the USA that provide medical, dental, and vision benefits as well as life insurance benefits to eligible retired employees. The plans are unfunded, and the company and retirees share the costs. The plan that provides post-retirement medical benefits is closed to employees hired or rehired on or after January 1, 2017. Certain life insurance benefits are paid by the company.

Significant funding requirements:

- Additional contributions to the Dutch defined benefit pension plan would be required if the 12-month rolling average local funding percentage falls below 105% for six months or more. At the most recent (2020) funding valuation the local funding percentage was above this level;
- There are no set minimum statutory funding requirements for the UK plans. A professional qualified independent actuary, appointed by the trustee board, undertakes a local funding valuation typically every three years. The most recent completed funding valuation for the principal defined benefit plan was undertaken as at December 31, 2017. A funding valuation as at December 31, 2020 is currently under way. The most recent completed funding valuation (2017) revealed a funding ratio of 108% and the resulting Schedule of Contributions was for no Sponsor contribution (except for salary sacrifice contributions); and
- Under the Pension Protection Act, US pension plans are subject to minimum required contribution levels based on the funding position. No contributions are required based on the most recent funding valuation.

Associated risks to which retirement benefits are exposed

There are inherent risks associated with defined benefit pension and OPEB plans. These risks are related to various assumptions made on valuation of the liabilities and the cash funding requirement of the underlying plans. Volatility in capital markets or government policies, and the resulting consequences for investment performance, interest and inflation rates, as well as changes in assumptions for mortality, retirement age or pensionable remuneration at retirement, could result in significant changes to the funding level of future liabilities, and in case of a shortfall, there could be a requirement to make substantial cash contributions (depending on the applicable local regulations).

These inherent risks are managed by a pension forum, chaired by the Chief Financial Officer, which oversees Shell's pension strategy, policy and operations. The forum is supported by a risk committee in reviewing the results of the assurance process with respect to the pension risk.

Investment strategies

Long-term investment strategies of plans are generally determined by the relevant pension plan trustees using a structured asset/liability modelling approach to define the asset mix that best meets the objectives of optimising returns within agreed risk levels while maintaining adequate funding levels.

Principal and actuarial assumptions

The principal assumptions applied in determining the present value of defined benefit obligations and their bases were as follows:

- rates of increase in pensionable remuneration, pensions in payment and health-care costs: historical experience and management's long-term expectation;
- discount rates: prevailing long-term AA corporate bond yields, chosen to match the currency and duration of the relevant obligation; and
- mortality rates: published standard mortality tables for the individual countries concerned adjusted for Shell experience where statistically significant.

The weighted averages for those assumptions and related sensitivity information at December 31 are presented below. Sensitivity information indicates by how much the defined benefit obligations would increase or decrease if a given assumption were to increase or decrease with no change in other assumptions.

\$ million, except where indicated
Effect of using alternative assumptions

	Assumptions used at nominal rates		Range of assumptions	Increase/(decrease) in defined benefit obligations			
	December 31, 2020 [A]	December 31, 2019					
				December 31, 2020	December 31, 2019		
Rate of increase in pensionable remuneration	3.8%	4.1%	-1% to +1%	(1,780) to 1,948	(1,975) to 2,266		
Rate of increase in pensions in payment	1.6%	1.6%	-1% to +1%	(10,937) to 13,523	(9,541) to 11,757		
Rate of increase in health-care costs [B]	6.0%	6.1%	-1% to +1%	(605) to 751	(546) to 675		
Discount rate for pension plans	1.5%	2.1%	-1% to +1%	21,463 to (16,382)	18,431 to (14,155)		
Discount rate for health-care plans [B]	2.6%	3.2%	-1% to +1%	791 to (624)	704 to (558)		
Expected age at death for persons aged 60:							
Men	87 years	87 years	-1 year to +1 year	(2,022) to 2,112	(1,717) to 1,782		
Women	88 years	89 years	-1 year to +1 year	(1,985) to 2,070	(1,631) to 1,694		

[A] The weighted average inflation rate used in the calculation of the defined benefit obligation is 1.7%.

[B] Mainly related to post-retirement medical benefits in the USA.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS continued

18 – DECOMMISSIONING AND OTHER PROVISIONS

	Decommissioning and restoration	Legal	Environmental	Redundancy	Other	\$ million
At January 1, 2020						
Current	755	626	263	295	872	2,811
Non-current	18,264	1,185	934	220	1,196	21,799
	19,019	1,811	1,197	515	2,068	24,610
Additions	1,697 [A]	502	199	986	2,386	5,770
Amounts charged against provisions	(433)	(522)	(138)	(375)	(388)	(1,856)
Accretion expense	448	17	21	1	10	497
Disposals	(154)	–	(7)	–	(18)	(179)
Remeasurements and other movements	2,090	(59)	(73)	(241)	(265)	1,452
Currency translation differences	508	1	26	52	53	640
	4,156	(61)	28	423	1,778	6,324
At December 31, 2020						
Current	900	521	273	673	1,257	3,624
Non-current	22,275	1,229	952	265	2,589	27,310
	23,175	1,750	1,225	938	3,846	30,934
At January 1, 2019						
Current	876	213	264	441	1,547	3,341
Non-current	17,057	1,247	1,074	280	1,528	21,186
	17,933	1,460	1,338	721	3,075	24,527
Additions	625	585	229	290	535	2,264
Amounts charged against provisions	(797)	(216)	(223)	(304)	(562)	(2,102)
Accretion expense	644	28	16	3	25	716
Disposals	(1,238)	–	(8)	–	(14)	(1,260)
Remeasurements and other movements	1,696	(45)	(155)	(192)	(988)	316
Currency translation differences	156	(1)	–	(3)	(3)	149
	1,086	351	(141)	(206)	(1,007)	83
At December 31, 2019						
Current	755	626	263	295	872	2,811
Non-current	18,264	1,185	934	220	1,196	21,799
	19,019	1,811	1,197	515	2,068	24,610

[A] Includes \$798 million additions for the recognition of decommissioning and restoration provisions in Integrated Gas and Upstream and \$899 million for the recognition of decommissioning and restoration provisions for manufacturing facilities in Oil Products.

The amount and timing of settlement in respect of these provisions are uncertain and dependent on various factors that are not always within management's control. Reviews of estimated future decommissioning and restoration costs and the discount rate applied are carried out regularly. The discount rate applied at December 31, 2020 was 1.75% (2019: 3%). This decrease resulted from the significant decrease in capital markets rates in 2020. An increase of 0.5% or a decrease of 0.5% in the discount rate could result in a decrease of \$1.7 billion or an increase of \$2.2 billion of decommissioning and restoration provisions, respectively. Such increase/decrease will be reflected in the carrying amount of the related asset. Where applicable that carrying amount is tested for impairment.

In 2020, there was an increase of \$3,999 million (2019: \$2,241 million) in the decommissioning and restoration provision as a result of the change in the discount rate, partly offset by a decrease in the provision resulting from changes in cost estimates of \$1,909 million (2019: \$545 million), reported within remeasurements and other movements.

Of the decommissioning and restoration provision at December 31, 2020, an estimated \$3,921 million is expected to be utilised within one to five years, \$2,206 million within six to 10 years, and the remainder in later periods.

Other provisions include amounts recognised in respect of onerous contracts (\$1,739 million) and employee benefits. At December 31, 2020, the onerous contract provision includes onerous contracts that relate to Lake Charles terminals and the closure of the Convent refinery, both in the USA.

19 – FINANCIAL INSTRUMENTS

Financial instruments in the Consolidated Balance Sheet include investments in securities (see Note 10), cash and cash equivalents (see Note 13), debt (see Note 14) and derivative contracts.

Risks

In the normal course of business, financial instruments of various kinds are used for the purposes of managing exposure to interest rate, foreign exchange and commodity price movements.

Treasury standards are applicable to all subsidiaries and each subsidiary is required to adopt a treasury policy consistent with these standards.

These policies cover: financing structure; interest rate and foreign exchange risk management; insurance; counterparty risk management; and use of derivative contracts. Wherever possible, treasury operations are carried out through specialist regional organisations without removing from each subsidiary the responsibility to formulate and implement appropriate treasury policies.

Apart from forward foreign exchange contracts to meet known commitments, the use of derivative contracts by most subsidiaries is not permitted by their treasury policy.

Other than in exceptional cases, the use of external derivative contracts is confined to specialist trading and central treasury organisations that have appropriate skills, experience, supervision, control and reporting systems.

Shell's operations expose it to market, credit and liquidity risk, as described below.

Market risk

Market risk is the possibility that changes in interest rates, foreign exchange rates or the prices of crude oil, natural gas, LNG, refined products, chemical feedstocks, power and carbon-emission rights will adversely affect the value of assets, liabilities or expected future cash flows.

Interest rate risk

Most debt is raised from central borrowing programmes. Shell's policy continues to be to have debt principally denominated in dollars and to maintain a largely floating interest rate exposure profile; however, Shell has issued a significant amount of fixed rate debt in recent years, taking advantage of historically low interest rates available in debt markets. As a result, the majority of the debt portfolio at December 31, 2020, is at fixed rates and this reduces Shell's adverse exposure to rising floating dollar interest rates (see Notes 2 and 3).

The financing of most subsidiaries is structured on a floating-rate basis, and any further interest rate risk management is only applied under exceptional circumstances.

On the basis of the floating-rate net cash position at December 31, 2020 (both issued and hedged), and assuming other factors (principally foreign exchange rates and commodity prices) remained constant and that no further interest rate management action was taken, an increase in interest rates of 1% would have increased 2020 income before taxation by \$62 million (2019: \$98 million decrease, based on the floating rate net debt position at December 31, 2019).

The carrying amounts and maturities of debt and borrowing facilities are presented in Note 14. Interest expense is presented in Note 6.

Foreign exchange risk

Many of the markets in which Shell operates are priced, directly or indirectly, in dollars. As a result, the functional currency of most Integrated Gas and Upstream entities and those with significant cross-border business is the dollar. For Oil Products and Chemicals entities, the functional currency is typically the local currency. Consequently, Shell is exposed to varying levels of foreign exchange risk when an entity enters into transactions that are not denominated in its functional currency, when foreign currency monetary assets and liabilities are translated at the balance sheet date and as a result of holding net investments in operations that are not dollar-functional. Each entity is required to adopt treasury policies that are designed to measure and manage its foreign exchange exposures by reference to its functional currency.

Foreign exchange gains and losses arise in the normal course of business from the recognition of receivables and payables and other monetary items in currencies other than an entity's functional currency. Foreign exchange risk may also arise in connection with capital expenditure. For major projects, an assessment is made at the final investment decision stage whether to hedge any resulting exposure.

Assuming other factors (principally interest rates and commodity prices) remained constant and that no further foreign exchange risk management action were taken, a 10% appreciation against the dollar at December 31 of the main currencies to which Shell is exposed would have the following effects:

10% appreciation against the dollar of:	\$ million			
	Increase/(decrease) in income before taxation		Increase in net assets	
	2020	2019	2020	2019
Euro	(263)	36	451	1,227
Malaysian ringgit	255	243	270	290
Australian dollar	179	(55)	598	835
Sterling	(166)	(58)	328	581
Canadian dollar	1	(97)	1,299	1,380

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

continued

19 – FINANCIAL INSTRUMENTS continued

The above sensitivity information was calculated by reference to carrying amounts of assets and liabilities at December 31 only. The effect on income before taxation arises in connection with monetary balances denominated in currencies other than an entity's functional currency; the effect on net assets arises principally from the translation of assets and liabilities of entities that are not dollar-functional.

Foreign exchange gains and losses included in income are presented in Note 5.

Commodity price risk

Certain subsidiaries have a mandate to trade crude oil, natural gas, LNG, refined products, chemical feedstocks, power and carbon-emission rights, and to use commodity derivative contracts (forwards, futures, swaps and options) as a means of managing price and timing risks arising from this trading activity. In effecting these transactions, the entities concerned operate within procedures and policies designed to ensure that risks, including those relating to the default of counterparties, are managed within authorised limits.

Value-at-risk (VAR) techniques based on variance/covariance or Monte Carlo simulation models are used to make a statistical assessment of the market risk arising from possible future changes in market values over a 1-day holding period and within a 95% confidence level. The calculation of potential changes in fair value takes into account positions, the history of price movements and the correlation of these price movements. Models are regularly reviewed against actual fair value movements to ensure integrity is maintained. The VAR year-end positions in respect of commodities traded in active markets, which are presented in the table below, are calculated on a diversified basis in order to reflect the effect of offsetting risk within combined portfolios.

Value-at-risk (pre-tax)

	\$ million	
	December 31, 2020	December 31, 2019
Global oil	24	22
North America gas and power	14	12
Europe gas and power	11	5
Carbon-emission rights	7	4

Credit risk

Policies are in place to ensure that sales of products are made to customers with appropriate creditworthiness. These policies include detailed credit analysis and monitoring of trading partners against counterparty credit limits. Credit information is regularly shared between business and finance functions, with dedicated teams in place to quickly identify and respond to cases of credit deterioration. Mitigation measures are defined and implemented for higher-risk business partners and customers, and include shortened payment terms, collateral or other security posting and vigorous collections. In addition, policies limit the amount of credit exposure to any individual financial institution. There are no material concentrations of credit risk, with individual customers or geographically, and there has been no significant level of counterparty default in recent years.

Surplus cash is invested in a range of short-dated, secure and liquid instruments including short-term bank deposits, money market funds, reverse repos and similar instruments. The portfolio of these investments is diversified to avoid concentrating risk in any one instrument, country or counterparty. Management monitors the investments regularly and adjusts the investment portfolio in light of new market information where necessary to ensure credit risk is effectively diversified.

In commodity trading, counterparty credit risk is managed within a framework of credit limits with utilisation being regularly reviewed. Credit risk exposure is monitored and the acceptable level of credit exposure is determined by a credit committee. Credit checks are performed by a department independent of traders, and are undertaken before contractual commitment. Where appropriate, netting arrangements, credit insurance, prepayments and collateral are used to manage specific risks.

Shell routinely enters into offsetting, master netting and similar arrangements with trading and other counterparties to manage credit risk. Where there is a legally enforceable right of offset under such arrangements and Shell has the intention to settle on a net basis or realise the asset and settle the liability simultaneously, the net asset or liability is recognised in the Consolidated Balance Sheet, otherwise assets and liabilities are presented gross. These amounts, as presented net and gross within trade and other receivables, trade and other payables and derivative financial instruments in the Consolidated Balance Sheet at December 31, were as follows:

2020

	Gross amounts before offset	Amounts offset	Amounts not offset			\$ million
			Net amounts as presented	Cash collateral received/pledged	Other offsetting instruments	
Assets:						
Within trade receivables	10,658	6,470	4,188	14	79	4,095
Within derivative financial instruments	12,798	6,125	6,673	1,573	1,750	3,350
Liabilities:						
Within trade payables	10,580	6,467	4,113	1	79	4,033
Within derivative financial instruments	10,502	5,893	4,609	797	1,761	2,051

2019

	Gross amounts before offset	Amounts offset	Net amounts as presented	Amounts offset		Net amounts
				Cash collateral received/pledged	Other offsetting instruments	
Assets:						
Within trade receivables	13,821	8,975	4,846	54	101	4,691
Within derivative financial instruments	12,995	7,310	5,685	531	2,262	2,892
Liabilities:						
Within trade payables	13,335	9,029	4,306	11	101	4,194
Within derivative financial instruments	12,355	7,253	5,102	706	2,262	2,134

Amounts not offset principally relate to contracts where the intention to settle on a net basis was not clearly established at December 31.

The carrying amount of financial assets pledged as collateral for liabilities or contingent liabilities at December 31, 2020, presented within trade and other receivables, was \$1,909 million (2019: \$1,948 million). The carrying amount of collateral held at December 31, 2020, presented within trade and other payables, was \$1,675 million (2019: \$718 million). Collateral mainly relates to initial margins held with commodity exchanges and over-the-counter counterparty variation margins. Some derivative contracts are fully cash collateralised, thereby eliminating both counterparty risk and the Group's own non-performance risk.

Liquidity risk

Liquidity risk is the risk that suitable sources of funding for Shell's business activities may not be available. Management believes that it has access to sufficient debt funding sources (capital markets) and to undrawn committed borrowing facilities to meet foreseeable requirements. Information about borrowing facilities is presented in Note 14.

Derivative contracts and hedges

Derivative contracts are used principally as hedging instruments, however, because hedge accounting is not always applied, movements in the carrying amounts of derivative contracts that are recognised in income are not always matched in the same period by the recognition of the income effects of the related hedged items.

Carrying amounts, maturities and hedges

The carrying amounts of derivative contracts at December 31, designated and not designated as hedging instruments for hedge accounting purposes, were as follows:

2020

	Assets			Liabilities			\$ million
	Designated	Not designated	Total	Designated	Not designated	Total	
Interest rate swaps	451	—	451	26	22	48	403
Forward foreign exchange contracts	—	276	276	—	651	651	(375)
Currency swaps and options	1,890	13	1,903	280	63	343	1,560
Commodity derivatives	—	5,534	5,534	92	4,565	4,657	877
Other contracts	—	424	424	—	29	29	395
Total	2,341	6,247	8,588	398	5,330	5,728	2,860

2019

	Assets			Liabilities			\$ million
	Designated	Not designated	Total	Designated	Not designated	Total	
Interest rate swaps	227	8	235	34	24	58	177
Forward foreign exchange contracts	7	236	243	2	309	311	(68)
Currency swaps and options	90	15	105	932	56	988	(883)
Commodity derivatives	—	6,914	6,914	—	5,281	5,281	1,633
Other contracts	—	341	341	—	—	—	341
Total	324	7,514	7,838	968	5,670	6,638	1,200

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

continued

19 – FINANCIAL INSTRUMENTS continued

Net gains before tax on derivative contracts, excluding realised commodity contracts and those accounted for as hedges, were \$1,676 million in 2020 (2019: \$2,004 million losses; 2018: \$1,818 million losses). The International Financial Reporting Interpretation Committee (IFRIC) guidance concerning the physical settlement of a contract to buy or sell a non-financial item has been applied prospectively as from 2020. The result of this decision is that \$597 million of prior gains that would have previously reversed at the time of trade delivery, have been excluded from the amount disclosed in 2020.

Certain contracts, mainly to hedge price risk relating to forecast commodity transactions, were designated in cash flow hedging relationships and are presented after the offset of related margin balances with exchanges. Contracts to hedge foreign exchange risks were also designated in cash flow hedging relationships and the net carrying amount of these contracts at December 31, 2020, was an asset of \$556 million (2019: \$167 million liability). See Note 22 for the accumulated balance recognised within other comprehensive income.

Certain interest rate and currency swaps were designated in fair value hedges, principally in respect of debt for which the net carrying amount of the related derivative contracts, net of accrued interest, at December 31, 2020, was an asset of \$1,422 million (2019: \$518 million liability).

In 2020, €3 billion of debt instruments were designated as hedges of net investments in foreign operations, relating to the foreign exchange risk arising between certain intermediate holding companies and their subsidiaries. See Note 22 for the accumulated balance recognised within other comprehensive income.

In the course of trading operations, certain contracts are entered into for delivery of commodities that are accounted for as derivatives. The resulting price exposures are managed by entering into related derivative contracts. These contracts are managed on a fair value basis and the maximum exposure to liquidity risk is the undiscounted fair value of derivative liabilities.

For a minority of commodity derivatives contracts, carrying amounts cannot be derived from quoted market prices or other observable inputs, in which case fair value is estimated using valuation techniques such as Black-Scholes, option spread models and extrapolation using quoted spreads with assumptions developed internally based on observable market activity.

Other contracts include certain contracts that are held to sell or purchase commodities and others containing embedded derivatives, which are required to be recognised at fair value because of pricing or delivery conditions, even though they were entered into to meet operational requirements. These contracts are expected to mature in 2021-2025, with certain contracts having early termination rights (for either party). Valuations are derived from quoted market prices.

The contractual maturities of derivative liabilities at December 31 compare with their carrying amounts in the Consolidated Balance Sheet as follows:

2020

	Contractual maturities							Difference from carrying amount [A]	Carrying amount	\$ million
	Less than 1 year	Between 1 and 2 years	Between 2 and 3 years	Between 3 and 4 years	Between 4 and 5 years	5 years and later	Total			
Interest rate swaps	12	10	9	7	5	6	49	(1)	48	
Forward foreign exchange contracts	504	56	22	38	–	–	620	31	651	
Currency swaps and options	174	13	28	–	159	–	374	(31)	343	
Commodity derivatives	2,990	743	265	174	115	391	4,678	(21)	4,657	
Other contracts	15	15	–	–	–	–	30	(1)	29	
Total	3,695	837	324	219	279	397	5,751	(23)	5,728	

[A] Mainly related to the effect of discounting.

2019

	Contractual maturities							Difference from carrying amount [A]	Carrying amount	\$ million
	Less than 1 year	Between 1 and 2 years	Between 2 and 3 years	Between 3 and 4 years	Between 4 and 5 years	5 years and later	Total			
Interest rate swaps	35	8	4	4	5	4	60	(2)	58	
Forward foreign exchange contracts	214	40	8	–	118	–	380	(69)	311	
Currency swaps and options	255	475	444	201	204	1,777	3,356	(2,368)	988	
Commodity derivatives	3,472	756	349	189	123	511	5,400	(119)	5,281	
Other contracts	–	–	–	–	–	–	–	–	–	
Total	3,976	1,279	805	394	450	2,292	9,196	(2,558)	6,638	

[A] Mainly related to the effect of discounting.

Fair value measurements

The net carrying amounts of derivative contracts held at December 31, categorised according to the predominant source and nature of inputs used in determining the fair value of each contract, were as follows:

2020

		\$ million		
	Prices in active markets for identical assets/liabilities	Other observable inputs	Unobservable inputs	Total
Interest rate swaps	—	403	—	403
Forward foreign exchange contracts	—	(375)	—	(375)
Currency swaps and options	—	1,560	—	1,560
Commodity derivatives	37	(237)	1,077	877
Other contracts	20	375	—	395
Total	57	1,726	1,077	2,860

2019

		\$ million		
	Prices in active markets for identical assets/liabilities	Other observable inputs	Unobservable inputs	Total
Interest rate swaps	—	177	—	177
Forward foreign exchange contracts	—	(68)	—	(68)
Currency swaps and options	—	(883)	—	(883)
Commodity derivatives	(6)	895	744	1,633
Other contracts	27	304	10	341
Total	21	425	754	1,200

Net carrying amounts of derivative contracts measured using predominantly unobservable inputs

	\$ million	
	2020	2019
At January 1	754	(27)
Net gains recognised in revenue	564	1,085
Purchases	217	453
Sales	(450)	(633)
Settlements	(9)	—
Recategorisations (net)	(12)	(125)
Currency translation differences	13	1
At December 31	1,077	754

Included in net gains recognised in revenue in 2020 were unrealised net gains totalling \$743 million relating to assets and liabilities held at December 31, 2020 (2019: \$612 million gains).

Unrecognised day one gains or losses

Certain long-term commodity purchase contracts extend to periods where observable pricing data are limited and so their value may include estimates for a portion of the value. Where this is more than an insignificant part of the overall contract valuation, any gains or losses will be deferred. Valuation techniques are further described in Note 2. The unrecognised gains on these derivative contracts at December 31, 2020 were as follows:

	\$ million	
	2020	2019
At January 1	929	388
Movements	39	541
At December 31	968	929

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

continued

20 – SHARE CAPITAL

Issued and fully paid ordinary shares of €0.07 each [A]

	Number of shares		Nominal value (\$ million)		
	A	B	A	B	Total
At January 1, 2020	4,151,787,517	3,729,407,107	349	308	657
Repurchases of shares	(50,548,018)	(23,223,271)	(4)	(2)	(6)
At December 31, 2020	4,101,239,499	3,706,183,836	345	306	651
At January 1, 2019	4,471,889,296	3,745,486,731	376	309	685
Repurchases of shares	(320,101,779)	(16,079,624)	(27)	(1)	(28)
At December 31, 2019	4,151,787,517	3,729,407,107	349	308	657

[A] Share capital at December 31, 2020, and 2019, also included 50,000 issued and fully paid sterling deferred shares of £1 each.

At the Company's Annual General Meeting (AGM) on May 19, 2020, the Board was authorised to allot ordinary shares in the Company, and to grant rights to subscribe for or to convert any security into ordinary shares in the Company, up to an aggregate nominal amount of €182.7 million (representing 2,611 million ordinary shares of €0.07 each), and to list such shares or rights on any stock exchange. This authority expires at the earlier of the close of business on August 19, 2021, and the end of the AGM to be held in 2021, unless previously renewed, revoked or varied by the Company in a general meeting.

At the May 19, 2020 AGM, shareholders granted the Company the authority to repurchase up to 783 million ordinary shares (excluding any treasury shares), renewing the authority granted by the shareholders at previous AGMs. The authority will expire at the earlier of the close of business on August 19, 2021, and the end of the AGM of the Company to be held in 2021. Ordinary shares purchased by the Company pursuant to this authority will either be cancelled or held in treasury. Treasury shares are shares in the Company which are owned by the Company itself. The minimum price, exclusive of expenses, which may be paid for an ordinary share is €0.07. The maximum price, exclusive of expenses, which may be paid for an ordinary share is the higher of: (i) an amount equal to 5% above the average market value for an ordinary share for the five business days immediately preceding the date of the purchase; and (ii) the higher of the price of the last independent trade and the highest current independent bid on the trading venues where the purchase is carried out.

On March 23, 2020, in light of the economic and oil price environment, the Board decided not to continue with the next tranche of the share buyback programme following the completion of the tranche announced on January 30, 2020.

21 – SHARE-BASED COMPENSATION PLANS AND SHARES HELD IN TRUST

Share-based compensation expense

	\$ million		
	2020	2019	2018
Equity-settled [A]	359	537	531
Total	359	537	531

[A] On an incidental basis awards may be cash-settled, where an equity settlement is not possible under local regulations.

The principal share-based employee compensation plans are the PSP and LTIP. Awards of shares and American Depository Shares (ADS) of the Company under the PSP and LTIP are granted upon certain conditions to eligible employees. The actual amount of shares that may vest ranges from 0% to 200% of the awards, depending on the outcomes of prescribed performance conditions over a three-year period beginning on January 1 of the award year. Shares and ADSs vest for nil consideration.

Share awards under the PSP and LTIP

	Number of A shares (million)	Number of B shares (million)	Number of A ADSs (million)	Weighted Average remaining contractual life (years)
At January 1, 2020	29	10	8	1.0
Granted	10	4	3	
Vested	(9)	(4)	(3)	
Forfeited	(1)	—	—	
At December 31, 2020	29	10	8	1.0
At January 1, 2019	30	12	8	1.0
Granted	11	3	3	
Vested	(11)	(5)	(3)	
Forfeited	(1)	—	—	
At December 31, 2019	29	10	8	1.0

Other plans offer eligible employees opportunities to acquire shares and ADSs of the Company or receive cash benefits measured by reference to the Company's share price.

Shell employee share ownership trusts and trust-like entities purchase the Company's shares in the open market to meet delivery commitments under employee share plans. At December 31, 2020, they held 14.3 million A shares (2019: 17.4 million), 5.2 million B shares (2019: 6.5 million) and 5.1 million A ADSs (2019: 5.3 million).

22 – OTHER RESERVES

Other reserves attributable to Royal Dutch Shell plc shareholders

	Merger reserve	Share premium reserve	Capital redemption reserve	Share plan reserve	Accumulated other comprehensive income	\$ million
At January 1, 2020	37,298	154	123	1,049	(24,173)	14,451
Other comprehensive loss attributable to Royal Dutch Shell plc shareholders	—	—	—	—	(1,832)	(1,832)
Transfer from other comprehensive income	—	—	—	—	270	270
Repurchases of shares	—	—	6	—	—	6
Share-based compensation	—	—	—	(143)	—	(143)
At December 31, 2020	37,298	154	129	906	(25,735)	12,752
At January 1, 2019	37,298	154	95	1,098	(22,030)	16,615
Other comprehensive loss attributable to Royal Dutch Shell plc shareholders	—	—	—	—	(2,069)	(2,069)
Transfer from other comprehensive income	—	—	—	—	(74)	(74)
Repurchases of shares	—	—	28	—	—	28
Share-based compensation	—	—	—	(49)	—	(49)
At December 31, 2019	37,298	154	123	1,049	(24,173)	14,451
At January 1, 2018	37,298	154	84	1,440	(22,182)	16,794
Other comprehensive income attributable to Royal Dutch Shell plc shareholders	—	—	—	—	1,123	1,123
Transfer from other comprehensive income	—	—	—	—	(971)	(971)
Repurchases of shares	—	—	11	—	—	11
Share-based compensation	—	—	—	(342)	—	(342)
At December 31, 2018	37,298	154	95	1,098	(22,030)	16,615

The merger reserve and share premium reserve were established as a consequence of the Company becoming the single parent company of Royal Dutch Petroleum Company and The "Shell" Transport and Trading Company, plc, now The Shell Transport and Trading Company Limited, in 2005. The merger reserve increased in 2016 following the issuance of shares for the acquisition of BG Group plc. The capital redemption reserve was established in connection with repurchases of shares of Royal Dutch Shell plc. The share plan reserve is in respect of equity-settled share-based compensation plans.

The capital redemption reserve was established in connection with repurchases of shares of the Company.

The share plan reserve is in respect of equity-settled share-based compensation plans (see Note 21). The movement comprises the net of the charge for the year and the release as a result of vested awards and is after deduction of tax of \$4 million in 2020 (2019: \$45 million; 2018: \$71 million).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS continued

22 – OTHER RESERVES continued

Accumulated other comprehensive income comprises the following:

Accumulated other comprehensive income attributable to Royal Dutch Shell plc shareholders

\$ million

	Currency translation differences [A]	Equity instruments	Debt instruments	Cash flow hedging (losses)/ gains [A]	Net investment hedging (losses)/ gains [A]	Deferred cost of hedging	Retirement benefits remeasurements	Total
At January 1, 2020	(9,415)	793	8	(233)	(2,016)	(287)	(13,023)	(24,173)
Recognised in other comprehensive income	1,204	68	31	(9)	(423)	17	(3,455)	(2,567)
Reclassified to income	(28)	–	(8)	(173)	–	94	–	(115)
Reclassified to the balance sheet	–	–	–	16	–	–	–	16
Reclassified to retained earnings	–	169	–	–	–	–	101	270
Tax on amounts recognised/reclassified	3	(4)	–	6	(11)	753	747	
Total, net of tax	1,179	233	23	(160)	(423)	100	(2,601)	(1,649)
Share of joint ventures and associates	51	118	–	(92)	–	–	–	77
Other comprehensive income/(loss) for the period	1,230	351	23	(252)	(423)	100	(2,601)	(1,572)
Less: non-controlling interest	10	–	–	–	–	–	–	10
Attributable to Royal Dutch Shell plc shareholders	1,240	351	23	(252)	(423)	100	(2,601)	(1,562)
At December 31, 2020	(8,175)	1,144	31	(485)	(2,439)	(187)	(15,624)	(25,735)
At January 1, 2019	(9,722)	906	(21)	117	(2,025)	(353)	(10,932)	(22,030)
Recognised in other comprehensive income	302	(17)	24	(592)	13	9	(3,106)	(3,367)
Reclassified to income	38	–	5	268	–	86	–	397
Reclassified to the balance sheet	–	–	–	11	–	–	–	11
Reclassified to retained earnings	–	(85)	–	–	–	–	11	(74)
Tax on amounts recognised/reclassified	4	(13)	–	37	(4)	(29)	1,004	999
Total, net of tax	344	(115)	29	(276)	9	66	(2,091)	(2,034)
Share of joint ventures and associates	(2)	2	–	(74)	–	–	–	(74)
Other comprehensive loss for the period	342	(113)	29	(350)	9	66	(2,091)	(2,108)
Less: non-controlling interest	(35)	–	–	–	–	–	–	(35)
Attributable to Royal Dutch Shell plc shareholders	307	(113)	29	(350)	9	66	(2,091)	(2,143)
At December 31, 2019	(9,415)	793	8	(233)	(2,016)	(287)	(13,023)	(24,173)
At January 1, 2018	(6,711)	1,975	(6)	(627)	(2,024)	(144)	(14,645)	(22,182)
Recognised in other comprehensive income	(3,793)	(147)	(15)	50	(1)	(362)	5,213	945
Reclassified to income	651	–	–	722	–	95	–	1,468
Reclassified to the balance sheet	–	–	–	(30)	–	–	–	(30)
Reclassified to retained earnings	–	(1,108)	–	–	–	–	137	(971)
Tax on amounts recognised/reclassified	(29)	(6)	–	(12)	–	58	(1,625)	(1,614)
Total, net of tax	(3,171)	(1,261)	(15)	730	(1)	(209)	3,725	(202)
Share of joint ventures and associates	(25)	193	–	14	–	–	1	183
Other comprehensive loss/income for the period	(3,196)	(1,068)	(15)	744	(1)	(209)	3,726	(19)
Less: non-controlling interest	185	(1)	–	–	–	–	(13)	171
Attributable to Royal Dutch Shell plc shareholders	(3,011)	(1,069)	(15)	744	(1)	(209)	3,713	152
At December 31, 2018	(9,722)	906	(21)	117	(2,025)	(353)	(10,932)	(22,030)

[A] As from 2020, 'Net investment hedging (losses)/gains' are presented separately. Prior to 2020, these were aggregated within 'Currency translation differences' and 'Cash flow hedging (losses)/gains'. Prior period comparatives for these categories have been revised to conform with current year presentation.

23 – DIVIDENDS

Interim dividends

	\$ per share			\$ million		
	2020	2019	2018	2020	2019	2018
A shares:						
Cash:						
March	0.47	0.47	0.47	1,862	2,100	2,176
June	0.16	0.47	0.47	653	2,062	2,140
September	0.16	0.47	0.47	654	2,007	2,165
December	0.1665	0.47	0.47	691	1,978	2,124
Total – A shares	0.9565	1.88	1.88	3,860	8,147	8,605
B shares:						
Cash:						
March	0.47	0.47	0.47	1,620	1,775	1,794
June	0.16	0.47	0.47	586	1,762	1,746
September	0.16	0.47	0.47	582	1,765	1,784
December	0.1665	0.47	0.47	622	1,749	1,746
Total – B shares	0.9565	1.88	1.88	3,410	7,051	7,070
Total				7,270	15,198	15,675

In addition, on February 4, 2021, the Directors announced a further interim dividend in respect of 2020 of \$0.1665 per A share and \$0.1665 per B share. The total dividend is estimated to be \$1,300 million and is payable on March 29, 2021, to shareholders on the register at February 19, 2021.

Dividends on A shares are by default paid in euros, although holders may elect to receive dividends in US dollars or in sterling. Dividends on B shares are by default paid in sterling, although holders may elect to receive dividends in US dollars or in euros. Dividends on ADSs are paid in dollars.

24 – EARNINGS PER SHARE

	2020	2019	2018
(Loss)/income attributable to Royal Dutch Shell plc shareholders (\$ million)	(21,680)	15,842	23,352
Weighted average number of A and B shares used as the basis for determining:			
Basic earnings per share (million of shares)	7,795.6	8,058.3	8,282.8
Diluted earnings per share (million of shares)	7,795.6	8,112.5	8,348.7

Basic earnings per share are calculated by dividing the income attributable to Royal Dutch Shell plc shareholders for the year by the weighted average number of A and B shares outstanding during the year. The weighted average number of shares outstanding excludes shares held in trust.

Diluted earnings per share are based on the same income/(loss) figures. The weighted average number of shares outstanding during the year is increased by dilutive shares related to share-based compensation plans. If the inclusion of potentially issuable shares could decrease diluted loss per share, the potentially issuable shares are excluded from the weighted average number of shares outstanding used to calculate diluted earnings per share. The number of potentially issuable shares that has been excluded from the calculation for 2020 is 36.0 million shares.

Earnings per share are identical for A and B shares.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

continued

25 – LEGAL PROCEEDINGS AND OTHER CONTINGENCIES

General

In the ordinary course of business, Shell subsidiaries are subject to a number of contingencies arising from litigation and claims brought by governmental authorities, including tax authorities, and private parties. The operations and earnings of Shell subsidiaries continue, from time to time, to be affected to varying degrees by political, legislative, fiscal and regulatory developments, including those relating to the protection of the environment and indigenous groups in the countries in which they operate. The industries in which Shell subsidiaries are engaged are also subject to physical risks of various types.

The amounts claimed in relation to such events and, if such claims against Shell were successful, the costs of implementing the remedies sought in the various cases could be substantial. Based on information available to date and taking into account that in some cases it is not practicable to estimate the possible magnitude or timing of any resultant payments, management believes that the foregoing are not expected to have a material adverse impact on Shell's Consolidated Financial Statements. However, there remains a high degree of uncertainty around these contingencies, as well as their potential effect on future operations, earnings, cash flows and Shell's financial condition.

In certain divestment transactions, liabilities related to decommissioning and restoration are de-recognised upon transfer of these obligations to the buyer. For certain of these obligations Shell has issued guarantees to third parties and continues to be liable in case the primary obligor is not able to meet its obligation. These potential obligations arising from issuance of these guarantees are assessed to be remote.

Decommissioning and restoration of manufacturing facilities

Industry practice has been not to recognise decommissioning and restoration provisions associated with manufacturing facilities in Oil Products and Chemicals. This was on the basis that these assets were considered to have indefinite lives and, therefore, that it was considered remote that an outflow of economic benefits would be required.

In 2020, the changed macroeconomic fundamentals were considered, together with Shell's plans to rationalise the Group's manufacturing portfolio. It was also reconsidered whether it remained appropriate not to recognise decommissioning and restoration provisions for manufacturing facilities.

It was concluded that the assumption of indefinite lives for manufacturing facilities is no longer appropriate, and the need for either recognition of decommissioning and restoration provisions or contingent liability disclosure was reviewed. In 2020, provisions have been recognised for certain shorter-lived manufacturing facilities (See Note 18). For the remaining longer-lived facilities, where decommissioning would generally be more than 50 years away, it was concluded that, while there is a present obligation that has arisen from past events, the amount of the obligation cannot be measured with sufficient reliability. This conclusion was reached on the basis that the settlement dates are indeterminate; and that other estimates, such as extremely long-term discount rates for which there is no observable measure, are not reliable. Consequently, a decommissioning and restoration obligation exists that cannot be recognised or quantified and that is disclosed as a contingent liability.

Pesticide litigation

Shell Oil Company (SOC), along with another agricultural chemical pesticide manufacturer and several distributors, has been sued by public and quasi-public water purveyors, water storage districts, and private landowners alleging responsibility for groundwater contamination caused by applications of chemical pesticides. There are approximately 60 such cases currently pending. These suits assert various theories of strict liability and negligence, and seek to recover actual damages, including drinking well treatment and remediation costs. Most assert claims for punitive damages. While the Company continues to vigorously defend these lawsuits, a new environmental regulatory standard became effective in the State of California, where a majority of the suits are pending. Effective January 2018, the new standard requires public water systems state-wide to perform quarterly or monthly sampling of their drinking water sources for a chemical contained in certain pesticides. Water systems deemed out of compliance with the five parts per trillion regulatory standard must take corrective action to resolve the exceedance or take the potable water source out of service. In response to this new regulatory standard, the Company is monitoring the sampling results to determine the number of wells potentially impacted. Based on the claims asserted and SOC's track record, with regard to amounts paid to resolve varying claims, management does not expect the outcome of these lawsuits pending at December 31, 2020, to have a material adverse impact on Shell. However, there remains a high degree of uncertainty regarding the potential outcome of some of these pending lawsuits, as well as their potential effect on future operations, earnings, cash flows and Shell's financial condition.

Climate change litigation

In the USA, 18 lawsuits have been filed by several municipalities and/or states against oil and gas companies, including Royal Dutch Shell plc. The plaintiffs seek damages for a variety of claims including harm to their public and private infrastructure from rising sea levels and other alleged impacts of climate change caused by the defendants' fossil fuel products. A similar suit has been filed by a crab-fishing industry group claiming harm to their fisheries as a result of alleged ocean-related impacts of climate change. In the Netherlands a case has been filed against Shell by a group of environmental non-governmental organisations (eNGOs) and individual claimants seeking a court order that emission levels from Shell's activities and sold energy products are unlawful and that by 2030 it should reduce those emissions by least (net) 45%, alternatively 35% or 25% (as compared with 2019 levels). Management believes the outcome of these matters should be resolved in a manner favourable to Shell, but there remains a high degree of uncertainty regarding the ultimate outcome of these lawsuits, as well as their potential effect on future operations, earnings, cash flows and Shell's financial condition.

Brazil tax

Pursuant to Law 7183/2015 issued by the State of Rio de Janeiro (RJ State) and effective March 2016, a value-added levy has been imposed on oil extraction in the RJ State. The Company understands that the obligations arising from this law are not legally sustainable and Shell obtained favourable injunctions suspending the enforcement of the law in two separate lawsuits, one filed to cover year 2016 and the other covering year 2017 onwards. The injunctions remain in effect and Shell received favourable decisions on the subject matter from the RJ State Court. The RJ State has appealed against both decisions and one is pending

confirmation by the State Court while the other is pending final decisions by the Brazilian Superior and Supreme Courts. In addition, and as this is an industry-wide issue, the Brazilian Association of Oil and Gas Exploration and Production Companies, of which Shell is a member, filed a suit in February 2016 before the Brazilian Supreme Court, challenging the constitutionality of the law. This matter is currently pending with the Supreme Court. Should Shell be required to pay such a levy, it could result in a potential total liability of approximately \$5,473 million as of end 2020.

Louisiana coast litigation

The State of Louisiana and multiple local governments have initiated 43 lawsuits against 200 oil and gas companies, claiming either current or historical oil and gas operations caused or contributed to contamination, land loss and the erosion of the Louisiana coastline. Shell entities are named in 14 of the suits. Although the State and local parishes fail to claim specified amounts, these claims represent potentially material matters. The cases are of first impression, arise out of an untested 1980 Louisiana statute and represent a novel attempt to render illegal operations that federal and state agencies permitted and authorised at the time. Management believes the outcome of these matters should ultimately be resolved in a manner favourable to Shell; there remains a high degree of uncertainty, however, concerning the scope of the claims and the ultimate outcomes, as well as their potential effects on future operations, earnings, cash flows, reputation and Shell's financial condition.

NAM (Groningen gas field) litigation

Since 1963 NAM – a joint venture between Shell and ExxonMobil (50%–50%) – has been producing gas from the Groningen field, the largest gas field in Western Europe. After smaller tremors in the 1990s and the late 2000s, an earthquake measuring 3.6 on the Richter scale occurred in 2012, causing damage to properties in the affected area, and the area continues to experience tremor/earthquake-type events. NAM has received more than 100,000 claims for physical damage to property – the majority of which have been successfully settled. The Dutch State has taken over the damage-claim-handling from NAM for all claim categories (physical damage to property, housing value loss, emotional damages and loss of living enjoyment) while NAM remains financially responsible. NAM still faces claims in civil litigation from claimants who elect not to use the government arrangement or from claims pre-dating the governmental arrangements. These claims include, but are not limited to:

- housing claims where NAM was found liable for value loss;
- emotional damages and loss of living enjoyment ~5,000 claimants; and
- other civil litigation matters.

There remains a high degree of uncertainty concerning the ultimate outcomes and their potential effects on future operations, earnings, cash flows, reputation and Shell's financial condition.

Nigerian litigation

Shell subsidiaries and associates operating in Nigeria are parties to various environmental and contractual disputes brought in the courts of Nigeria, England and the Netherlands. These disputes are at different stages in litigation, including at the appellate stage, where judgements have been rendered against Shell entities. If taken at face value, the aggregate amount of these judgements could be seen as material. Management, however, believes that the outcomes of these matters will ultimately be resolved in a manner favourable to Shell. However, there remains a high degree of uncertainty regarding these cases, as well as their potential effect on future operations, earnings, cash flows and Shell's financial condition.

OPL 245

Authorities are investigating Shell Nigeria Exploration and Production Company Ltd.'s (SNEPCO's) investment in Nigerian oil block OPL 245 and the 2011 settlement of litigation pertaining to that block with regard to potential anti-bribery and anti-corruption laws.

On January 27, 2017, the Nigeria Federal High Court issued an Interim Order of Attachment for Oil Prospecting Licence 245 (OPL 245), pending the conclusion of the investigation. SNEPCO applied for and was granted a discharge of this order on constitutional and procedural grounds. Also in Nigeria, in March 2017 criminal charges alleging official corruption and conspiracy to commit official corruption were filed against SNEPCO, one current Shell employee and third parties including ENI SpA and one of its subsidiaries. Those proceedings are ongoing. In January 2020, criminal charges alleging disobeying direction of law were filed in Nigeria against Shell Nigeria Ultra Deep Ltd., SNEPCO, and third parties including Nigeria Agip Exploration Limited (NAE). Those proceedings are ongoing. In March 2017, parties alleging to be shareholders of Malabu Oil and Gas Company Ltd. (Malabu) filed two actions to challenge the 2011 settlement and the award of OPL 245 to SNEPCO and an ENI SpA subsidiary by the Federal Government of Nigeria. Those proceedings are also ongoing. On May 8, 2018, Human Environmental Development Agenda (HEDA) sought permission from the Federal High Court of Nigeria to apply for an order to direct the Attorney General of the Federation to revoke OPL 245 on grounds that the entire Malabu transaction in relation to the OPL is unconstitutional, illegal and void as it was obtained through fraudulent and corrupt practice. On October 4, 2018, SNEPCO was joined as a defendant in the HEDA action. Those proceedings are ongoing. On July 3, 2019, the Nigerian Federal High Court upheld objections from SNEPCO and NAE and struck the lawsuit filed by HEDA. The suit was struck because of the statute of limitations and the determination by the court that it lacked jurisdiction to hear the matter. HEDA has appealed the judgement.

On December 12, 2018, the Federal Republic of Nigeria (FRN) issued a claim form in the UK against Shell and six of its subsidiaries, ENI SpA and two of its subsidiaries, Malabu as well as two other entities for the amount of \$1,092 million plus damages for having participated in a fraudulent and corrupt scheme leading to the acquisition by Shell and ENI corporate defendants in 2011 of OPL 245. The Shell entities were served with proceedings in April and May 2019, following which they, and other defendants, challenged the jurisdiction of the English courts. Following a hearing in April 2020, the English High Court rendered judgement in May 2020, dismissing the claims in England and refusing the FRN's request for permission to appeal. In September 2020, the UK Court of Appeal also refused the FRN's permission to appeal, meaning the case is now concluded.

On February 14, 2017, Royal Dutch Shell plc received a notice of request for indictment from the Milan public prosecutor with respect to this matter. On December 20, 2017, Royal Dutch Shell plc and four former Shell employees including one former executive were remanded to trial in Milan. On May 14, 2018, a trial commenced in the Court of Milan. The FRN was admitted as a civil claimant by a court decision on July 20, 2018. On September 18, 2018, Shell was joined to the proceedings as the civilly responsible party for the damages caused by the alleged illegal acts of the four former Shell employees. Three other Shell entities (Shell UK Ltd, Shell Petroleum Development Company of Nigeria Ltd. and Shell Exploration and Production Africa Ltd.) also joined the proceedings as responsabile civile for their respective former employees at that phase of the proceedings. The trial is ongoing with closing arguments completed in January and rebuttals scheduled for February. Based on Shell's review of the Milan public prosecutor's file and the information and facts currently available to Shell, management does not believe there is a basis to convict Shell or the four former Shell employees.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS continued

25 – LEGAL PROCEEDINGS AND OTHER CONTINGENCIES continued

On September 20, 2018, a guilty judgement was filed by the Milan Judge of the Preliminary Hearing in a separate OPL 245 fast-track trial of two individuals, neither of whom worked for or on behalf of Shell. That decision is under appeal. Separate OPL 245 pre-trial criminal proceedings are pending against another individual who also did not work for or on behalf of Shell.

In February 2019, we were informed by the Dutch Public Prosecutor's Office (DPP) that they were nearing the conclusion of their investigation and preparing to prosecute Royal Dutch Shell plc for criminal charges directly or indirectly related to the 2011 settlement of disputes over OPL 245 in Nigeria. On October 2, 2019, the US Department of Justice (DOJ) informed Shell that it was closing its inquiry into Shell in relation to OPL 245. We understand that the decision was based on the facts available to the DOJ, including ongoing legal proceedings in Europe. On April 22, 2020, the United States Securities and Exchange Commission notified us that it had also closed its inquiry into Shell in relation to OPL 245. There remains a high degree of uncertainty around the OPL 245 matters and contingencies discussed above, as well as their potential effect on future operations, earnings, cash flows and Shell's financial condition. Accordingly, at this time, it is not practicable to estimate the magnitude and timing of any possible obligations or payments. Any violation of anti-bribery, anti-corruption or anti-money laundering legislation could have a material adverse effect on Royal Dutch Shell plc's earnings, cash flows and financial condition.

26 – EMPLOYEES

Employee costs

	\$ million		
	2020	2019	2018
Remuneration	9,128	10,075	10,167
Social security contributions	793	844	810
Retirement benefits [see Note 17]	1,851	1,753	1,878
Share-based compensation [see Note 21]	359	537	531
Total [A]	12,131	13,209	13,386

[A] Excludes employees seconded to joint ventures and associates.

Average employee numbers

	Thousand		
	2020	2019	2018
Integrated Gas	11	10	9
Upstream [A]	14	14	14
Oil Products [A]	34	32	35
Chemicals [A]	2	4	4
Corporate [B]	25	23	20
Total [C]	86	83	82

[A] Due to the resegmentations. (See Note 4)

[B] Includes all employees working in business service centres irrespective of the segment they support.

[C] Excludes employees seconded to joint ventures and associates (2020: 2,000 employees; 2019: 3,000 employees; 2018: 3,000 employees).

27 – DIRECTORS AND SENIOR MANAGEMENT

Remuneration of Directors of the Company

	\$ million		
	2020	2019	2018
Emoluments	6	8	12
Value of released awards under long-term incentive plans	6	12	20
Employer contributions to pension plans	1	1	1

Emoluments comprise salaries and fees, annual bonuses (for the period for which performance is assessed) and other benefits. The value of released awards under long-term incentive plans for the period is in respect of the performance period ending in that year. In 2020 retirement benefits were accrued in respect of qualifying services under defined benefit plans by two Directors.

Further information on the remuneration of the Directors can be found in the Directors' Remuneration Report on pages 153-156.

Directors and Senior Management expense

	\$ million		
	2020	2019	2018
Short-term benefits	14	18	26
Retirement benefits	3	3	3
Share-based compensation	17	15	14
Termination and related amounts	2	2	–
Total	36	38	43

Directors and Senior Management comprise members of the Executive Committee and the Non-executive Directors of the Company.

Short-term benefits comprise salaries and fees, annual bonuses delivered in cash and shares (for the period for which performance is assessed), other benefits and employer social security contributions.

28 – AUDITOR'S REMUNERATION

	\$ million		
	2020	2019	2018
Fees in respect of the audit of the Consolidated and Parent Company Financial Statements, including audit of consolidation returns	36	32	31
Other audit fees, principally in respect of audits of accounts of subsidiaries	17	18	16
Total audit fees	53	50	47
Audit-related fees	3	4	5
Fees in respect of other non-audit services [A]	2	–	1
Total	58	54	53

[A] Various services that were classified as 'Audit-related' in the past are classified as 'Other non-audit services' under the revised UK auditor rules that apply since March 15, 2020.

In addition, the auditor provided audit services to retirement benefit plans for employees of subsidiaries. Remuneration paid by those benefit plans amounted to \$1 million in 2020 (2019: \$1 million; 2018: \$1 million).

29 – EMISSION SCHEMES AND RELATED ENVIRONMENTAL PLANS**Emission trading schemes**

Generally, emission trading schemes (ETS) are mandated governmental schemes to control emission levels and enhance clean energy transition, allowing for the trading of emission certificates. In most ETS, governments set an emission cap for one or more sectors. Generally, entities in scope of the scheme are allowed to buy emission certificates to cover shortages or sell surplus emission certificates. In certain countries emissions are priced through a carbon tax. For Shell, the most significant carbon pricing mechanisms are established in the EU, Canada, Singapore and the USA.

Biofuel schemes

Biofuel schemes are mandated schemes that set binding national targets on the share of renewables in fuel consumption or measures on reducing GHG emissions by fuel suppliers. Biofuels are blended with existing fuels such as gasoline and diesel to reduce net emissions. The share of biofuel in the total sales mix of fuel is used to comply with regulatory requirements. This can be achieved by biofuel production through 'selfblending' in jurisdictions that grant the biofuel certificates at blending stage or through purchase of renewable, certified feedstock like ethanol used subsequently in the manufacturing process.

Renewable power schemes

Renewable power schemes create a financial incentive to consume power that is sourced from renewable origins or requires that a minimum percentage of power sold meets the green definition of the relevant standard. These regulations are typically accompanied by schemes supporting investments in the renewable technology. Renewable power schemes generally use certificates to monitor compliance, where renewable power credits are granted for each MWh of energy generated that meets the predefined renewable criteria. Shell's compliance obligation under renewable power schemes comes primarily from energy supply and results from regulations applying in Europe, North America and Australia.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

continued

29 – EMISSION SCHEMES AND RELATED ENVIRONMENTAL PLANS

continued

2020

				\$ million
	ETS and related schemes	Biofuels	Renewable power	Total
Emission and related cost recognised in the Income Statement	150 [A]	1,137 [B]	364	1,651
Purchased certificates presented under intangible assets	157	780	76	1,013
Obligation at the end of the period presented under other liabilities	(154) [C]	(1,603)	(296)	(2,053)
Of which:				
Short term	(154)	(1,549)	(290)	(1,993)
Long term	–	(54)	(6)	(60)
Net asset/(liability) at the end of the period	3	(823)	(220)	(1,040)

[A] Includes cost of emission certificates that were allocated free of charge, with an equivalent fair value at grant date of \$377 million.

[B] Represents the cost of biofuel certificates required in addition to own blending activities performed.

[C] Includes emission certificates that were allocated free of charge with a carrying amount of zero and an equivalent fair value at grant date of \$398 million.

Emission certificates acquired that are held for compliance purposes are recognised at cost under intangible assets. In addition, a portfolio of emission certificates is held for trading purposes and classified under inventory (see Notes 2 and Note 12).

Cost recognised in the Consolidated Statement of Income represents the compliance cost associated with emissions or with products sold during the year. The liability at year-end represents the compliance cost recognised over current and past compliance periods to the extent not settled to date. Liabilities are settled in line with compliance periods, which depend on the scheme and may not coincide with the calendar year.

Due to the increasing importance of emission schemes and related environmental plans, this Note is newly included in 2020 and comparatives are not provided. The figures present compliance schemes only, excluding voluntary activities.

30 – POST-BALANCE SHEET EVENTS

A restructuring plan named Reshape was announced in the third quarter 2020. Under Reshape, between 7,000 and 9,000 job reductions are expected by the end of 2022, including around 1,500 people who have already elected to take selective voluntary severance in 2020. In January 2021 the impact of Reshape was communicated to employees, establishing for some employees, a constructive obligation that satisfies the IFRS criteria for recognising a provision. This represents a non-adjusting post-balance sheet event under IFRS. The costs for this phase of the plan, and where the IFRS recognition criteria have been satisfied, are in the range of \$650 million to \$850 million (Shell share pre-tax) and will be recognised in the first quarter of 2021. Further redundancy costs will be recognised once the IFRS recognition criteria are met during 2021 and 2022.

On February 17, 2021, an agreement was reached with publicly listed Canadian energy company Crescent Point Energy Corp. to sell the Duvernay shale light oil position in Alberta, Canada, for a total consideration of \$707 million (C\$900 million). The transaction has an effective date of January 1, 2021. The consideration is comprised of \$550 million in cash and 50 million shares (valued at \$157 million) in Crescent Point Energy common stock (TSX: CPG). Subject to regulatory approvals, the transaction is expected to close in April 2021.

On March 9, 2021, we announced that Shell Egypt and one of its affiliates have signed an agreement with a consortium made up of subsidiaries of Cheiron Petroleum Corporation and Cairn Energy plc to acquire Shell's upstream assets in Egypt's Western Desert for a base consideration of \$646 million and additional payments of up to \$280 million between 2021 and 2024, contingent on the oil price and the results of further exploration. The transaction is subject to government and regulatory approvals and is expected to complete in the second half of 2021.

SUPPLEMENTARY INFORMATION – OIL AND GAS (UNAUDITED)

ABOUT THIS SECTION

The purpose of this section is to comply with the requirements of the Financial Accounting Standards Board (FASB) "Extractive Activities – Oil and Gas (Topic 932)". Extractive activities for this purpose include exploration and production activities to extract oil, condensates, natural gas liquids, oil sands and natural gas from their natural reservoirs.

In Shell, extractive activities, or oil and gas exploration and production activities, are undertaken within the Upstream segment, Integrated Gas segment and Oil Products segment (oil sands). Shell's extractive activities do not represent the full extent of the Upstream, Integrated Gas and Oil Products activities and exclude downstream GTL, some LNG activities, Marketing business in Oil Products, Power and New Energies, trading and optimisation, as well as other non-extractive activities. The information in this "extractive activities" section is therefore not suitable for modelling Shell's integrated businesses for which we refer to the segment information. Full segment information to the Consolidated Financial Statements is available on pages 230-232.

The information set out on pages 265-282 is referred to as "unaudited" as a means of clarifying that it is not covered by the audit opinion of the independent registered public accounting firm that has audited and reported on the Consolidated Financial Statements.

PROVED RESERVES

Proved reserves estimates are calculated pursuant to the US Securities and Exchange Commission (SEC) Rules and the FASB's Topic 932. Proved reserves can be either developed or undeveloped. The definitions used are in accordance with the SEC Rule 4-10 (a) of Regulation S-X. We include proved reserves associated with future production that will be consumed in operations.

Proved reserves shown are net of any quantities of crude oil or natural gas that are expected to be (or could be) taken as royalties in kind. Proved reserves outside North America include quantities that will be settled as royalties in cash. Proved reserves include certain quantities of crude oil or natural gas that will be produced under arrangements that involve Shell subsidiaries, joint ventures and associates in risks and rewards but do not transfer title of the product to those entities.

Subsidiaries' proved reserves at December 31, 2020, were divided into 85% developed and 15% undeveloped on a barrel of oil equivalent basis. For the Shell share of joint ventures and associates, the proved reserves at December 31, 2020, were divided into 88% developed and 12% undeveloped on a barrel of oil equivalent basis.

Proved reserves are recognised under various forms of contractual agreements. Shell's proved reserves volumes at December 31, 2020, present in agreements such as production-sharing contracts (PSC), tax/variable royalty contracts or other forms of economic entitlement contracts, where the Shell share of reserves can vary with commodity prices, were 2,044 million barrels of crude oil and natural gas liquids, and 12,133 thousand million standard cubic feet (scf) of natural gas.

Proved reserves cannot be measured exactly because estimation of reserves involves subjective judgement (see "Risk factors" on page 31 and our "Proved reserves assurance process" below). These estimates remain subject to revision and are unaudited supplementary information.

PROVED RESERVES ASSURANCE PROCESS

A central group of reserves experts, who on average have around 25 years' experience in the oil and gas industry, undertake the primary assurance of the proved reserves bookings. This group of experts is part of the Resources Assurance and Reporting (RAR) organisation within Shell. A Vice President with 35 years' experience in the oil and gas industry currently heads the RAR organisation. He is a member of the Society of

Petroleum Engineers, Society of Petroleum Evaluation Engineers and holds a BA in mathematics from Oxford University and an MEng in Petroleum Engineering from Heriot-Watt University. The RAR organisation reports directly to an Executive Vice President of Finance, who is a member of the Upstream Reserves Committee (URC). The URC is a multidisciplinary committee consisting of senior representatives from the Finance, Legal, Projects & Technology and Upstream organisations. The URC reviews and endorses all major (larger than 20 million barrels of oil equivalent) proved reserves bookings and de-bookings and endorses the total aggregated proved reserves. Final approval of all proved reserves bookings remains with Shell's Executive Committee, and all proved reserves bookings are reviewed by Shell's Audit Committee. The Internal Audit function also provides secondary assurance through audits of the control framework.

CRUDE OIL, NATURAL GAS LIQUIDS, SYNTHETIC CRUDE OIL AND BITUMEN

Shell subsidiaries' proved reserves of crude oil, natural gas liquids (NGLs), synthetic crude oil and bitumen at the end of the year; their share of the proved reserves of joint ventures and associates at the end of the year; and the changes in such reserves during the year are set out on pages 266-268. Significant changes in these proved reserves are discussed below, where "revisions and reclassifications" are changes based on new information that resulted from development drilling, production history, and changes in economic factors.

PROVED RESERVES 2020–2019

Shell subsidiaries

Asia

The net increase of 181 million barrels in revisions and reclassifications was mainly in Kazakhstan and Oman.

USA

The net decrease of 116 million barrels in revisions and reclassifications of which half was mainly in Permian and Belridge Light Oil.

Canada

The net increase of 55 million barrels in revisions and reclassifications was mainly in Jackpine Mine and Muskeg River mine.

South America

The net decrease of 82 million barrels in revisions and reclassifications was mainly in Brazil.

PROVED RESERVES 2019–2018

Shell subsidiaries

Europe

The net decrease of 65 million barrels in sales and purchases resulted from divestments carried out in Denmark.

Asia

The net increase of 226 million barrels in revisions and reclassifications was mainly in Oman and Kazakhstan.

USA

The increase of 86 million barrels in revisions and reclassifications mainly resulted from field performance studies and development activities in the Permian Basin and in the Mars and Ursa fields in the Gulf of Mexico. The increase of 74 million barrels in extensions and discoveries was in the Permian Basin and PowerNap.

South America

The increase of 72 million barrels in revisions and reclassifications mainly resulted from field performance studies and development activities in the Lula (recently renamed Tupi) and Lapa fields (Brazil). The net increase of 60 million barrels in extensions and discoveries was mainly in Mero (Brazil).

SUPPLEMENTARY INFORMATION – OIL AND GAS (UNAUDITED) continued**Proved developed and undeveloped reserves 2020**

	Million barrels											
	Europe	Asia	Oceania	Africa	North America				South America			Total
					Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Synthetic crude oil	Bitumen	
Shell subsidiaries												
At January 1	274	1,551	121	395	982	18	607	–	1,033	4,374	607	– 4,981
Revisions and reclassifications	(46)	181	(41)	42	(116)	(2)	57	–	(82)	(63)	57	– (6)
Improved recovery	–	–	–	–	–	–	–	–	–	–	–	0
Extensions and discoveries	–	14	–	–	27	7	–	–	–	48	–	– 48
Purchases of minerals in place	–	9	–	–	–	–	–	–	–	9	–	– 9
Sales of minerals in place	(1)	–	–	–	–	–	–	–	–	(1)	–	– (1)
Production [A]	(49)	(182)	(7)	(58)	(165)	(9)	(20)	–	(136)	(606)	(20)	– (626)
At December 31	178	1,573	73	379	728	15	644	–	815	3,761	644	– 4,405
Shell share of joint ventures and associates												
At January 1	12	271	–	–	–	–	–	–	–	283	–	– 283
Revisions and reclassifications	(5)	(27)	–	–	–	–	–	–	–	(32)	–	– (32)
Improved recovery	–	–	–	–	–	–	–	–	–	–	–	–
Extensions and discoveries	–	–	–	–	–	–	–	–	1	1	–	– 1
Purchases of minerals in place	–	–	–	–	–	–	–	–	–	–	–	–
Sales of minerals in place	–	–	–	–	–	–	–	–	–	–	–	–
Production	(1)	(34)	–	–	–	–	–	–	(1)	(36)	–	– (36)
At December 31	6	210	–	–	–	–	–	–	–	216	–	– 216
Total	184	1,783	73	379	728	15	644	–	815	3,977	644	– 4,621
Reserves attributable to noncontrolling interest in Shell subsidiaries at December 31	0	0	0	0	0	0	322	0	0	0	322	0 322

[A] Includes 1 million barrels consumed in operations for synthetic crude oil.

Proved developed reserves 2020

	Million barrels											
	Europe	Asia	Oceania	Africa	North America				South America			Total
					Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Synthetic crude oil	Bitumen	
Shell subsidiaries												
At January 1	156	1,403	106	314	641	15	607	–	675	3,310	607	– 3,917
At December 31	103	1,417	69	316	539	12	644	–	674	3,130	644	– 3,774
Shell share of joint ventures and associates												
At January 1	11	240	–	–	–	–	–	–	–	251	–	– 251
At December 31	6	192	–	–	–	–	–	–	1	199	–	– 199

Proved undeveloped reserves 2020

	Million barrels											
	Europe	Asia	Oceania	Africa	North America				South America			Total
					Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Synthetic crude oil	Bitumen	
Shell subsidiaries												
At January 1	118	149	15	80	341	3	–	–	358	1,064	–	– 1,064
At December 31	76	156	5	63	189	3	–	–	141	633	–	– 633
Shell share of joint ventures and associates												
At January 1	1	31	–	–	–	–	–	–	–	32	–	– 32
At December 31	–	18	–	–	–	–	–	–	–	18	–	– 18

Proved developed and undeveloped reserves 2019

	Million barrels												
					North America				South America				
	Europe	Asia	Oceania	Africa	USA		Canada	Bitumen	Oil and NGL	Oil and NGL	Synthetic crude oil	Bitumen	Total
	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Synthetic crude oil	Bitumen	Oil and NGL	Oil and NGL	Synthetic crude oil	Bitumen	All products
Shell subsidiaries													
At January 1	368	1,502	129	420	1,017	23	661	—	1,027	4,486	661	—	5,147
Revisions and reclassifications	27	226	2	33	86	(2)	(34)	—	72	444	(34)	—	410
Improved recovery	—	—	—	—	—	—	—	—	4	4	—	—	4
Extensions and discoveries	—	7	—	6	74	11	—	—	60	158	—	—	158
Purchases of minerals in place	—	—	—	—	5	—	—	—	—	5	—	—	5
Sales of minerals in place	(65)	—	—	—	(29)	(2)	—	—	—	(96)	—	—	(96)
Production [A]	(56)	(184)	(10)	(64)	(171)	(12)	(20)	—	(130)	(627)	(20)	—	(647)
At December 31	274	1,551	121	395	982	18	607	—	1,033	4,374	607	—	4,981
Shell share of joint ventures and associates													
At January 1	9	281	—	—	—	—	—	—	290	—	—	—	290
Revisions and reclassifications	4	21	—	—	—	—	—	—	—	25	—	—	25
Improved recovery	—	4	—	—	—	—	—	—	—	4	—	—	4
Extensions and discoveries	—	2	—	—	—	—	—	—	—	2	—	—	2
Purchases of minerals in place	—	—	—	—	—	—	—	—	—	—	—	—	—
Sales of minerals in place	—	—	—	—	—	—	—	—	—	—	—	—	—
Production	(1)	(37)	—	—	—	—	—	—	—	(38)	—	—	(38)
At December 31	12	271	—	—	—	—	—	—	—	283	—	—	283
Total	286	1,822	121	395	982	18	607	—	1,033	4,657	607	—	5,264
Reserves attributable to non-controlling interest in Shell subsidiaries at December 31	—	—	—	—	—	—	304	—	—	—	304	—	304

[A] Includes 1 million barrels consumed in operations for synthetic crude oil.

Proved developed reserves 2019

	Million barrels												
					North America				South America				
	Europe	Asia	Oceania	Africa	USA		Canada	Bitumen	Oil and NGL	Oil and NGL	Synthetic crude oil	Bitumen	Total
	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Synthetic crude oil	Bitumen	Oil and NGL	Oil and NGL	Synthetic crude oil	Bitumen	All products
Shell subsidiaries													
At January 1	243	1,318	108	335	629	21	661	—	634	3,288	661	—	3,949
At December 31	156	1,403	106	314	641	15	607	—	675	3,310	607	—	3,917
Shell share of joint ventures and associates													
At January 1	8	251	—	—	—	—	—	—	—	259	—	—	259
At December 31	11	240	—	—	—	—	—	—	—	251	—	—	251

Proved undeveloped reserves 2019

	Million barrels												
					North America				South America				
	Europe	Asia	Oceania	Africa	USA		Canada	Bitumen	Oil and NGL	Oil and NGL	Synthetic crude oil	Bitumen	Total
	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Synthetic crude oil	Bitumen	Oil and NGL	Oil and NGL	Synthetic crude oil	Bitumen	All products
Shell subsidiaries													
At January 1	124	185	21	85	388	2	—	—	394	1,199	—	—	1,199
At December 31	118	149	15	80	341	3	—	—	358	1,064	—	—	1,064
Shell share of joint ventures and associates													
At January 1	1	30	—	—	—	—	—	—	31	—	—	—	31
At December 31	1	31	—	—	—	—	—	—	32	—	—	—	32

SUPPLEMENTARY INFORMATION – OIL AND GAS (UNAUDITED) continued**Proved developed and undeveloped reserves 2018**

	Million barrels												
	Europe	Asia	Oceania	Africa	North America				South America			Total	
					Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Synthetic crude oil	Bitumen		
Shell subsidiaries													
At January 1	356	1,482	132	463	899	22	649	—	946	4,300	649	—	4,949
Revisions and reclassifications	94	227	14	18	81	7	32	—	48	489	32	—	521
Improved recovery	—	27	—	—	—	—	—	—	14	41	—	—	41
Extensions and discoveries	2	3	—	—	179	6	—	—	139	329	—	—	329
Purchases of minerals in place	—	—	—	—	—	—	—	—	3	3	—	—	3
Sales of minerals in place	(14)	(52)	(8)	—	(2)	—	—	—	—	(76)	—	—	(76)
Production [A]	(70)	(185)	(9)	(61)	(140)	(13)	(20)	—	(122)	(600)	(20)	—	(620)
At December 31	368	1,502	129	420	1,017	23	661	—	1,027	4,486	661	—	5,147
Shell share of joint ventures and associates													
At January 1	12	301	—	—	—	—	—	—	313	—	—	—	313
Revisions and reclassifications	(2)	(2)	—	—	—	—	—	—	(4)	—	—	—	(4)
Improved recovery	—	—	—	—	—	—	—	—	—	—	—	—	—
Extensions and discoveries	—	18	—	—	—	—	—	—	—	18	—	—	18
Purchases of minerals in place	—	—	—	—	—	—	—	—	—	—	—	—	—
Sales of minerals in place	—	—	—	—	—	—	—	—	—	—	—	—	—
Production	(1)	(37)	—	—	—	—	—	—	—	(38)	—	—	(38)
At December 31	9	281	—	—	—	—	—	—	—	290	—	—	290
Total	377	1,783	129	420	1,017	23	661	—	1,027	4,776	661	—	5,437
Reserves attributable to non-controlling interest in Shell subsidiaries													
at December 31	—	—	—	—	—	—	331	—	—	—	331	—	331

[A] Includes 1 million barrels consumed in operations for synthetic crude oil.

Proved developed reserves 2018

	Million barrels												
	Europe	Asia	Oceania	Africa	North America				South America			Total	
					Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Synthetic crude oil	Bitumen		
Shell subsidiaries													
At January 1	250	1,364	46	373	569	21	649	—	651	3,274	649	—	3,923
At December 31	243	1,318	108	335	629	21	661	—	634	3,288	661	—	3,949
Shell share of joint ventures and associates													
At January 1	11	253	—	—	—	—	—	—	—	264	—	—	264
At December 31	8	251	—	—	—	—	—	—	—	259	—	—	259

Proved undeveloped reserves 2018

	Million barrels												
	Europe	Asia	Oceania	Africa	North America				South America			Total	
					Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Oil and NGL	Synthetic crude oil	Bitumen		
Shell subsidiaries													
At January 1	106	118	86	90	330	1	—	—	295	1,026	—	—	1,026
At December 31	124	185	21	85	388	2	—	—	394	1,199	—	—	1,199
Shell share of joint ventures and associates													
At January 1	1	48	—	—	—	—	—	—	—	49	—	—	49
At December 31	1	30	—	—	—	—	—	—	—	31	—	—	31

NATURAL GAS

Shell subsidiaries' proved reserves of natural gas at the end of the year, their share of the proved reserves of joint ventures and associates at the end of the year, and the changes in such reserves during the years are set out on pages 270-272. Significant changes in these proved reserves are discussed below. Volumes are not adjusted to standard heat content.

Apart from integrated projects, volumes of gas are reported on an "as-sold" basis. The price used to calculate future revenue and cash flows from proved gas reserves is the contract price or the 12-month average on "as-sold" volumes. Volumes associated with integrated projects are those measured at a designated transfer point between the upstream and downstream portions of the integrated project. Natural gas volumes are converted into oil equivalent using a factor of 5,800 scf per barrel.

PROVED RESERVES 2020–2019

Shell subsidiaries

Oceania

The net decrease of 3,512 thousand million scf in revisions and reclassifications was mainly in Gorgon, Jansz-lo and Surat QGC.

USA

The net decrease of 319 thousand million scf in revisions and reclassifications was mainly in Permian. The 542 thousand million scf of Sales of minerals in place are mainly in Tioga.

PROVED RESERVES 2019–2018

Shell subsidiaries

Asia

The net increase of 859 thousand million scf in revisions and reclassifications was mainly in Qatar and Malaysia (Sabah and Sarawak).

Oceania

The net increase of 699 thousand million scf in revisions and reclassifications was mainly in Surat, Gorgon and Jansz-lo.

Africa

The net increase of 290 thousand million scf in revisions and reclassifications was mainly in Bonny and Gbaran (Nigeria).

Canada

The net increase of 317 thousand million scf in extensions and discoveries was mainly in Groundbirch.

Shell share of joint ventures and associates

Europe

The net decrease of 322 thousand million scf in revisions and reclassifications was mainly in Groningen (Netherlands).

SUPPLEMENTARY INFORMATION – OIL AND GAS (UNAUDITED) continued**Proved developed and undeveloped reserves 2020**

	Europe	Asia	Oceania	Africa	USA	Canada	South America	Thousand million standard cubic feet Total
Shell subsidiaries								
At January 1	2,998	10,618	8,360	2,608	1,868	1,281	1,259	28,992
Revisions and reclassifications	(209)	249	(3,512)	93	(319)	59	162	(3,477)
Improved recovery	—	—	—	—	—	—	—	—
Extensions and discoveries	—	2	33	5	66	122	—	228
Purchases of minerals in place	—	—	—	—	—	—	—	—
Sales of minerals in place	(28)	(29)	—	—	(542)	—	—	(599)
Production [A]	(319)	(913)	(705)	(343)	(272)	(167)	(293)	(3,012)
At December 31	2,442	9,927	4,176	2,363	801	1,295	1,128	22,132
Shell share of joint ventures and associates								
At January 1	595	4,198	36	—	—	—	—	4,829
Revisions and reclassifications	(200)	(62)	27	—	—	—	1	(234)
Improved recovery	—	—	—	—	—	—	—	—
Extensions and discoveries	—	1	—	—	—	—	1	2
Purchases of minerals in place	—	—	—	—	—	—	—	—
Sales of minerals in place	—	—	—	—	—	—	—	—
Production [B]	(133)	(459)	(22)	—	—	—	(1)	(615)
At December 31	262	3,678	41	—	—	—	1	3,982
Total	2,703	13,605	4,219	2,363	801	1,295	1,128	26,114
Reserves attributable to non-controlling interest in Shell subsidiaries at December 31	—	—	—	—	—	—	—	—

[A] Includes 225 thousand million standard cubic feet consumed in operations.
 [B] Includes 42 thousand million standard cubic feet consumed in operations.

Proved developed reserves 2020

	Europe	Asia	Oceania	Africa	USA	Canada	South America	Thousand million standard cubic feet Total
Shell subsidiaries								
At January 1	2,060	10,091	5,769	1,523	1,615	781	968	22,807
At December 31	1,590	9,675	3,656	1,341	670	720	924	18,576
Shell share of joint ventures and associates								
At January 1	555	3,519	36	—	—	—	—	4,110
At December 31	227	3,175	42	—	—	—	1	3,445

Proved undeveloped reserves 2020

	Europe	Asia	Oceania	Africa	USA	Canada	South America	Thousand million standard cubic feet Total
Shell subsidiaries								
At January 1	937	528	2,591	1,085	254	499	291	6,185
At December 31	852	252	520	1,022	132	575	203	3,556
Shell share of joint ventures and associates								
At January 1	39	680	—	—	—	—	—	719
At December 31	35	502	—	—	—	—	—	537

Proved developed and undeveloped reserves 2019

	Europe	Asia	Oceania	Africa	North America	South America	Thousand million standard cubic feet
					USA	Canada	Total
Shell subsidiaries							
At January 1	3,600	10,631	8,427	2,544	2,147	989	1,509
Revisions and reclassifications	(46)	859	699	290	114	235	29
Improved recovery	—	—	—	—	—	—	3
Extensions and discoveries	—	36	—	152	142	317	37
Purchases of minerals in place	—	—	—	—	5	—	5
Sales of minerals in place	(210)	—	—	—	(132)	(30)	—
Production [A]	(346)	(908)	(766)	(378)	(408)	(230)	(319)
At December 31	2,998	10,618	8,360	2,608	1,868	1,281	1,259
Shell share of joint ventures and associates							
At January 1	1,163	4,581	24	—	—	—	5,768
Revisions and reclassifications	(322)	64	34	—	—	—	(224)
Improved recovery	—	1	—	—	—	—	1
Extensions and discoveries	—	5	—	—	—	—	5
Purchases of minerals in place	—	—	—	—	—	—	—
Sales of minerals in place	—	—	—	—	—	—	—
Production [B]	(246)	(453)	(22)	—	—	—	(721)
At December 31	595	4,198	36	—	—	—	4,829
Total	3,593	14,816	8,396	2,608	1,868	1,281	1,259
Reserves attributable to non-controlling interest in shell subsidiaries at December 31	—	—	—	—	—	—	—

[A] Includes 247 thousand million standard cubic feet consumed in operations.
 [B] Includes 42 thousand million standard cubic feet consumed in operations.

Proved developed reserves 2019

	Europe	Asia	Oceania	Africa	North America	South America	Thousand million standard cubic feet
					USA	Canada	Total
Shell subsidiaries							
At January 1	2,658	10,092	5,820	1,573	1,706	721	1,238
At December 31	2,060	10,091	5,769	1,523	1,615	781	968
Shell share of joint ventures and associates							
At January 1	1,136	3,938	24	—	—	—	5,099
At December 31	555	3,519	36	—	—	—	4,110

Proved undeveloped reserves 2019

	Europe	Asia	Oceania	Africa	North America	South America	Thousand million standard cubic feet
					USA	Canada	Total
Shell subsidiaries							
At January 1	942	539	2,607	971	441	268	271
At December 31	937	528	2,591	1,085	254	499	291
Shell share of joint ventures and associates							
At January 1	27	643	—	—	—	—	670
At December 31	39	680	—	—	—	—	719

SUPPLEMENTARY INFORMATION – OIL AND GAS (UNAUDITED) continued**Proved developed and undeveloped reserves 2018**

	Europe	Asia	Oceania	Africa	North America	South America	Thousand million standard cubic feet Total
					USA	Canada	
Shell subsidiaries							
At January 1	3,100	11,822	7,978	2,082	2,569	1,272	1,501 30,324
Revisions and reclassifications	1,183	(483)	1,438	896	(296)	(153)	181 2,766
Improved recovery	—	—	—	—	—	—	7 7
Extensions and discoveries	3	354	—	—	283	131	65 836
Purchases of minerals in place	—	—	—	—	—	—	14 14
Sales of minerals in place	(192)	(157)	(232)	—	(32)	—	— (613)
Production [A]	(494)	(906)	(757)	(434)	(377)	(261)	(258) (3,487)
At December 31	3,600	10,631	8,427	2,544	2,147	989	1,509 29,847
Shell share of joint ventures and associates							
At January 1	5,125	4,964	19	—	—	—	— 10,108
Revisions and reclassifications	(3,653)	62	25	—	—	—	— (3,566)
Improved recovery	—	—	—	—	—	—	—
Extensions and discoveries	—	5	—	—	—	—	— 5
Purchases of minerals in place	—	—	—	—	—	—	—
Sales of minerals in place	(37)	—	—	—	—	—	— (37)
Production [B]	(273)	(450)	(20)	—	—	—	— (743)
At December 31	1,163	4,581	24	—	—	—	— 5,768
Total	4,763	15,212	8,451	2,544	2,147	989	1,509 35,615
Reserves attributable to non-controlling interest in Shell subsidiaries at December 31	—	—	—	—	—	—	—

[A] Includes 245 thousand million standard cubic feet consumed in operations.

[B] Includes 41 thousand million standard cubic feet consumed in operations.

Proved developed reserves 2018

	Europe	Asia	Oceania	Africa	North America	South America	Thousand million standard cubic feet Total
					USA	Canada	
Shell subsidiaries							
At January 1	2,978	11,460	5,026	1,493	1,652	859	1,225 24,693
At December 31	2,658	10,092	5,820	1,573	1,706	721	1,238 23,808
Shell share of joint ventures and associates							
At January 1	5,055	4,275	19	—	—	—	— 9,349
At December 31	1,136	3,938	24	—	—	—	— 5,099

Proved undeveloped reserves 2018

	Europe	Asia	Oceania	Africa	North America	South America	Thousand million standard cubic feet Total
					USA	Canada	
Shell subsidiaries							
At January 1	122	362	2,952	589	917	413	276 5,631
At December 31	942	539	2,607	971	441	268	271 6,039
Shell share of joint ventures and associates							
At January 1	70	689	—	—	—	—	— 759
At December 31	27	643	—	—	—	—	— 670

STANDARDISED MEASURE OF DISCOUNTED FUTURE CASH FLOWS

The SEC Form 20-F requires the disclosure of a standardised measure of discounted future net cash flows, relating to proved reserves quantities and based on a 12-month unweighted arithmetic average sales price, calculated on a first-day-of-the-month basis, with cost factors based on those at the end of each year, currently enacted tax rates and a 10% annual discount factor. In our view, the information so calculated does not provide a reliable measure of future cash flows from proved reserves, nor does it permit a realistic comparison to be made of one entity with another because the assumptions used cannot reflect the varying circumstances within each entity. In addition, a substantial but unknown proportion of future real cash flows from oil and gas production activities is expected to derive from reserves which have already been discovered, but which cannot yet be regarded as proved.

STANDARDISED MEASURE OF DISCOUNTED FUTURE CASH FLOWS RELATING TO PROVED RESERVES AT DECEMBER 31

2020 – Shell subsidiaries

	Europe	Asia	Oceania	Africa	North America	South America	\$ million
					USA	Canada	Total
Future cash inflows	16,581	75,128	25,970	19,743	27,891	22,447	34,502 222,262
Future production costs	6,776	26,896	10,240	9,837	20,341	15,475	19,137 108,702
Future development costs	4,352	12,416	7,441	3,354	7,274	4,559	7,440 46,836
Future tax expenses	4,525	12,585	254	4,713	54	407	1,847 24,385
Future net cash flows	928	23,231	8,035	1,839	222	2,006	6,078 42,339
Effect of discounting cash flows at 10%	338	9,791	1,316	-50	-1,469	1,231	1,369 12,526
Standardised measure of discounted future net cash flows	590	13,440	6,719	1,889	1,691	775	4,709 29,813
Non Controlling Interest Included	-	-	-	-	-	398	- 398

2020 – Shell share of joint ventures and associates

	Europe	Asia	Oceania	Africa	North America	South America	\$ million
					USA	Canada	Total
Future cash inflows	1,209	22,209	139	-	-	-	21 23,578
Future production costs	2,801	11,472	136	-	-	-	17 14,426
Future development costs	948	5,165	111	-	-	-	2 6,226
Future tax expenses	-	3,026	-	-	-	-	- 3,026
Future net cash flows	-2,540	2,546	-108	-	-	-	2 -100
Effect of discounting cash flows at 10%	-583	412	-35	-	-	-	- -206
Standardised measure of discounted future net cash flows	-1,957 [A]	2,134	-73 [A]	-	-	-	2 106

[A] While proved reserves are economically producible at the 2020 yearly average price, the standardised measure of discounted future net cash flows was negative for those proved reserves at December 31, 2020, due to addition of overhead, tax and abandonment costs and ongoing commitments post production of proved reserves.

2019 – Shell subsidiaries

	Europe	Asia	Oceania	Africa	North America	South America	\$ million
					USA	Canada	Total
Future cash inflows	33,762	111,802	71,775	31,046	55,800	31,522	64,957 400,664
Future production costs	11,818	32,581	21,589	12,158	30,139	16,651	32,362 157,298
Future development costs	6,047	13,449	10,103	4,081	11,137	4,603	13,219 62,639
Future tax expenses	9,285	25,938	7,016	10,542	2,397	2,313	5,429 62,920
Future net cash flows	6,612	39,834	33,067	4,265	12,127	7,955	13,947 117,807
Effect of discounting cash flows at 10%	1,917	17,851	13,328	377	1,815	5,571	4,094 44,953
Standardised measure of discounted future net cash flows	4,695	21,983	19,739	3,888	10,312	2,384	9,853 72,854
Non-controlling interest included	-	-	-	-	-	1,371	- 1,371

SUPPLEMENTARY INFORMATION – OIL AND GAS (UNAUDITED) continued**2019 – Shell share of joint ventures and associates**

	Europe	Asia	Oceania	Africa	North America		South America	\$ million
					USA	Canada		Total
Future cash inflows	3,615	38,099	122	–	–	–	–	41,836
Future production costs	2,810	18,336	81	–	–	–	–	21,227
Future development costs	935	6,946	36	–	–	–	–	7,917
Future tax expenses	718	6,160	4	–	–	–	–	6,882
Future net cash flows	(848)	6,657	1	–	–	–	–	5,812
Effect of discounting cash flows at 10%	(266)	1,190	(7)	–	–	–	–	917
Standardised measure of discounted future net cash flows	(582) [A]	5,467	8	–	–	–	–	4,893

[A] While proved reserves are economically producible at the 2019 yearly average price, the standardised measure of discounted future net cash flows was negative for those proved reserves at December 31, 2019, due to addition of overhead, tax and abandonment costs and ongoing commitments post production of proved reserves.

2018 – Shell subsidiaries

	Europe	Asia	Oceania	Africa	North America		South America	\$ million
					USA	Canada		Total
Future cash inflows	50,392	122,037	72,355	36,080	68,546	34,719	74,417	458,545
Future production costs	18,400	32,773	22,219	13,237	32,533	17,378	42,301	178,842
Future development costs	8,649	12,301	11,598	4,672	11,486	4,674	6,991	60,370
Future tax expenses	12,603	30,994	5,899	12,805	1,948	3,257	7,764	75,271
Future net cash flows	10,739	45,969	32,639	5,366	22,578	9,411	17,360	144,062
Effect of discounting cash flows at 10%	3,024	20,957	12,130	572	5,039	6,446	6,048	54,217
Standardised measure of discounted future net cash flows	7,715	25,012	20,509	4,794	17,539	2,964	11,312	89,845
Non-controlling interest included	–	1	–	–	–	1,638	–	1,639

2018 – Shell share of joint ventures and associates

	Europe	Asia	Oceania	Africa	North America		South America	\$ million
					USA	Canada		Total
Future cash inflows	5,260	44,327	104	–	–	–	–	49,691
Future production costs	2,712	20,886	80	–	–	–	–	23,677
Future development costs	1,083	6,726	36	–	–	–	–	7,844
Future tax expenses	1,136	7,128	1	–	–	–	–	8,265
Future net cash flows	329	9,588	(13)	–	–	–	–	9,904
Effect of discounting cash flows at 10%	(76)	2,759	(8)	–	–	–	–	2,675
Standardised measure of discounted future net cash flows	405	6,829	(5) [A]	–	–	–	–	7,229

[A] While proved reserves are economically producible at the 2018 yearly average price, the standardised measure of discounted future net cash flows was negative for those proved reserves at December 31, 2018, due to addition of overhead, tax and abandonment costs and ongoing commitments post production of proved reserves.

CHANGE IN STANDARDISED MEASURE OF DISCOUNTED FUTURE NET CASH FLOWS RELATING TO PROVED RESERVES

2020

	\$ million	Shell subsidiaries	Shell share of joint ventures and associates	Total
At January 1	72,854	4,893	77,747	
Net changes in prices and production costs	(69,363)	(6,097)	(75,460)	
Revisions of previous reserves estimates	695	17	712	
Extensions, discoveries and improved recovery	(540)	0	(540)	
Purchases and sales of minerals in place	24	(459)	(435)	
Development cost related to future production	2,906	(426)	2,480	
Sales and transfers of oil and gas, net of production costs	(16,904)	(1,954)	(18,858)	
Development cost incurred during the year	8,197	759	8,956	
Accretion of discount	9,881	832	10,713	
Net change in income tax	22,063	2,541	24,604	
At December 31	29,813	106	29,919	

2019

	\$ million	Shell subsidiaries	Shell share of joint ventures and associates	Total
At January 1	89,845	7,229	97,074	
Net changes in prices and production costs	(18,759)	(1,017)	(19,776)	
Revisions of previous reserves estimates	13,777	(293)	13,484	
Extensions, discoveries and improved recovery	5,193	93	5,286	
Purchases and sales of minerals in place	(2,831)	–	(2,831)	
Development cost related to future production	(9,417)	(2)	(9,419)	
Sales and transfers of oil and gas, net of production costs	(33,319)	(3,918)	(37,237)	
Development cost incurred during the year	10,430	702	11,132	
Accretion of discount	12,004	1,133	13,137	
Net change in income tax	5,931	966	6,897	
At December 31	72,854	4,893	77,747	

2018

	\$ million	Shell subsidiaries	Shell share of joint ventures and associates	Total
At January 1	50,524	7,109	57,633	
Net changes in prices and production costs	58,128	6,156	64,284	
Revisions of previous reserves estimates	15,265	(1,447)	13,818	
Extensions, discoveries and improved recovery	8,936	532	9,468	
Purchases and sales of minerals in place	(3,401)	(20)	(3,421)	
Development cost related to future production	(3,876)	(308)	(4,184)	
Sales and transfers of oil and gas, net of production costs	(38,014)	(4,858)	(42,872)	
Development cost incurred during the year	10,724	666	11,390	
Accretion of discount	7,060	994	8,054	
Net change in income tax	(15,501)	(1,595)	(17,096)	
At December 31	89,845	7,229	97,074	

SUPPLEMENTARY INFORMATION – OIL AND GAS (UNAUDITED) continued

OIL AND GAS EXPLORATION AND PRODUCTION ACTIVITIES CAPITALISED COSTS

The aggregate amount of property, plant and equipment and intangible assets, excluding goodwill, relating to oil and gas exploration and production activities, and the aggregate amount of the related depreciation, depletion and amortisation at December 31, are shown in the tables below.

Shell subsidiaries

	\$ million	
	2020	2019
Cost		
Proved properties [A]	276,762	265,700
Unproved properties	14,563	18,669
Support equipment and facilities	10,803	11,043
	302,128	295,412
Depreciation, depletion and amortisation		
Proved properties [A]	158,149	129,809
Unproved properties	5,342	4,089
Support equipment and facilities	5,031	4,078
	168,522	137,976
Net capitalised costs	133,606	157,436

[A] Includes capitalised asset decommissioning and restoration costs and related depreciation.

Shell share of joint ventures and associates

	\$ million	
	2020	2019
Cost		
Proved properties [A]	50,592	46,895
Unproved properties	2,512	2,428
Support equipment and facilities	5,037	4,882
	58,141	54,205
Depreciation, depletion and amortisation		
Proved properties [A]	36,876	34,120
Unproved properties	473 [B]	–
Support equipment and facilities	3,070	2,817
	40,419	36,937
Net capitalised costs	17,722	17,268

[A] Includes capitalised asset decommissioning and restoration costs and related depreciation.

[B] The major part of this cost consists of an impairment charge for the year.

OIL AND GAS EXPLORATION AND PRODUCTION ACTIVITIES COSTS INCURRED

Costs incurred during the year in oil and gas property acquisition, exploration and development activities, whether capitalised or charged to income currently, are shown in the tables below. As a result of the adoption of IFRS 16 *Leases* as of January 1, 2019, leases are included in years 2020 and 2019. Development costs include capitalised asset decommissioning and restoration costs (including increases or decreases arising from changes to cost estimates or to the discount rate applied to the obligations) and exclude costs of acquiring support equipment and facilities, but include depreciation thereon.

Shell subsidiaries

2020

	Europe	Asia	Oceania	Africa	North America		South America	Total
					USA	Other [A]		
Acquisition of properties								
Proved	4	156	–	5	–	–	–	165
Unproved	115	19	–	48	80	6	180	448
Exploration	287	102	33	168	951	275	390	2,206 [B]
Development	1,612	1,018	1,465	807	4,186	325	1,930	11,343

[A] Comprises Canada and Mexico.

[B] Includes \$504 million of Shales-related exploration activities. In 2020, we participated in 161 Shales productive exploratory wells with proved reserves allocated (Shell share: 77 wells).

2019

	Europe	Asia	Oceania	Africa	North America		South America	\$ million Total
					USA	Other [A]		
Acquisition of properties								
Proved	3	105	—	10	—	—	—	118
Unproved	—	11	—	67	118	5	3	204
Exploration	428	165	117	253	1,723	402	500	3,588 [B]
Development	2,054	1,434	1,225	1,480	4,455	287	2,418	13,353

[A] Comprises Canada and Mexico.

[B] Includes \$1,195 million of Shales-related exploration activities. In 2019, we participated in 231 Shales productive exploratory wells with proved reserves allocated (Shell share: 117 wells).

2018

	Europe	Asia	Oceania	Africa	North America		South America	\$ million Total
					USA	Other [A]		
Acquisition of properties								
Proved	3	3	—	596	44	—	—	646
Unproved	2	6	—	76	44	310	486	924
Exploration	384	182	49	188	1,912	251	502	3,468 [B]
Development	1,452	1,102	1,632	962	4,052	505	2,095	11,800

[A] Comprises Canada, Honduras and Mexico.

[B] Includes \$1,581 million of Shales-related exploration activities. In 2018, we participated in 234 Shales productive exploratory wells with proved reserves allocated (Shell share: 118 wells).

Shell share of joint ventures and associates

Joint ventures and associates did not incur costs in the acquisition of oil and gas properties in 2019 or 2018.

2020

	Europe	Asia	Oceania	Africa	North America		South America	\$ million Total
					USA	Canada		
Acquisition of properties								
Unproved	—	—	—	—	—	—	—	128 128
Exploration	—	94	10	—	—	—	—	105 209
Development	124	2,173	67	—	—	—	—	2 2,366

2019

	Europe	Asia	Oceania	Africa	North America		South America	\$ million Total
					USA	Canada		
Exploration								
Exploration	1	116	12	—	—	—	—	129
Development	94	1,400	65	—	—	—	—	1,559

2018

	Europe	Asia	Oceania	Africa	North America		South America	\$ million Total
					USA	Canada		
Exploration								
Exploration	—	90	14	—	—	—	—	104
Development	229	1,026	79	—	—	—	—	1,334

SUPPLEMENTARY INFORMATION – OIL AND GAS (UNAUDITED) continued

OIL AND GAS EXPLORATION AND PRODUCTION ACTIVITIES EARNINGS

In Shell, extractive activities, or oil and gas exploration and production activities, are undertaken within the Integrated Gas segment, the Upstream segment and the Oil Products segment. Shell's extractive activities do not represent the full extent of Integrated Gas, Upstream and Oil Products activities, and exclude downstream GTL, some LNG activities, Marketing business in Oil Products, Power and New Energies, trading and optimisation, as well as other non-extractive activities.

The earnings disclosed in this "extractive activities" section are only a subset of Shell's total earnings and are therefore not suitable for modelling Shell's integrated businesses, for which we refer to the full segment earnings and descriptions of the Integrated Gas, Upstream and Oil Products businesses, which are available on page 46, 53 and 70 respectively. The earnings disclosed in this "extractive activities" section are not adjusted for items such as impairment charges, restructuring charges and charges for onerous contract provisions. Full segment information to the Consolidated Financial Statements is available on pages 230-232.

The results of operations for oil and gas producing activities are shown in the tables below. Taxes other than income tax include cash-paid royalties to governments outside North America.

Shell subsidiaries

2020

	Europe	Asia	Oceania	Africa	North America		South America	\$ million Total
					USA	Other [A]		
Revenue								
Third parties	767	2,104	589	1,540	1,008	753	567	7,328
Sales between businesses	2,879	6,360	1,951	1,816	5,239	943	4,656	23,844
Total	3,646	8,464	2,540	3,356	6,247	1,696	5,223	31,172
Production costs excluding taxes	2,023	1,811	1,040	1,064	2,615	735	936	10,224
Taxes other than income tax	64	389	93	245	64	—	1,494	2,349
Exploration	256	149	234	202	325	108	473	1,747
Depreciation, depletion and amortisation	3,618	2,120	10,178	2,589	7,927	2,147	6,282	34,861
Other costs/(income)	553	1,127	(981)	645	230	631	161	2,366
Earnings before taxation	(2,868)	2,868	(8,024)	(1,389)	(4,914)	(1,925)	(4,123)	(20,375)
Taxation charge/(credit)	(423)	1,854	(3,175)	(104)	(790)	(449)	(300)	(3,387)
Earnings after taxation	(2,445)	1,014	(4,849)	(1,285)	(4,124)	(1,476)	(3,823)	(16,988)

[A] Comprises Canada and Mexico.

2019

	Europe	Asia	Oceania	Africa	North America		South America	\$ million Total
					USA	Other [A]		
Revenue								
Third parties	1,257	3,065	931	1,936	2,638	632	844	11,303
Sales between businesses	4,911	10,526	4,719	3,289	7,786	1,936	7,647	40,814
Total	6,168	13,591	5,650	5,225	10,424	2,568	8,491	52,117
Production costs excluding taxes	1,582	2,065	1,178	1,062	2,807	983	1,135	10,812
Taxes other than income tax	94	749	136	370	103	—	2,613	4,065
Exploration	619	583	107	187	411	159	288	2,354
Depreciation, depletion and amortisation	2,604	2,130	1,957	1,354	6,932	858	3,929	19,764
Other costs/(income)	(20)	1,599	(105)	121	(575)	818	1,379	3,217
Earnings before taxation	1,289	6,465	2,377	2,131	746	(250)	(853)	11,905
Taxation charge/(credit)	848	4,013	1,094	1,431	154	(110)	(78)	7,352
Earnings after taxation	441	2,452	1,283	700	592	(140)	(775)	4,553

[A] Comprises Canada, Honduras and Mexico.

2018

\$ million

	Europe	Asia	Oceania	Africa	North America	South America	Total
					USA	Other [A]	
Revenue							
Third parties	1,875	3,364	1,389	2,401	2,165	507	1,023
Sales between businesses	6,705	11,284	4,683	3,586	7,716	1,946	7,154
Total	8,580	14,648	6,072	5,987	9,881	2,453	8,177
Production costs excluding taxes	2,262	2,143	1,073	1,093	2,573	1,069	1,401
Taxes other than income tax	122	841	199	328	83	—	2,767
Exploration	277	149	78	144	341	114	237
Depreciation, depletion and amortisation	2,684	2,301	1,571	1,394	4,543	(346)	3,271
Other costs/(income)	947	(180)	(514)	609	447	667	849
Earnings before taxation	2,288	9,394	3,665	2,419	1,894	949	(348)
Taxation charge/(credit)	2,047	4,851	893	902	550	236	1,162
Earnings after taxation	241	4,543	2,772	1,517	1,344	713	(1,510)
[A] Comprises Canada, Honduras and Mexico.							9,620

[A] Comprises Canada, Honduras and Mexico.

Shell share of joint ventures and associates

2020

\$ million

	Europe	Asia	Oceania	Africa	North America	South America	Total
					USA	Canada	
Third-party revenue	514	3,464	65	—	—	—	32
Total	514	3,464	65	—	—	—	32
Production costs excluding taxes	272	726	72	—	—	—	8
Taxes other than income tax	22	423	5	—	—	—	4
Exploration	2	97	—	—	—	—	99
Depreciation, depletion and amortisation	366	1,219	270	—	(7)	—	23
Other costs/(income)	296	365	(14)	—	(1)	—	12
Earnings before taxation	(444)	634	(268)	—	8	—	(15)
Taxation charge	(281)	162	—	—	2	—	(9)
Earnings after taxation	(163)	472	(268)	—	6	—	(6)
							41

2019

\$ million

	Europe	Asia	Oceania	Africa	North America	South America	Total
					USA	Canada	
Third-party revenue	1,233	5,475	81	—	—	—	—
Total	1,233	5,475	81	—	—	—	—
Production costs excluding taxes	249	669	88	—	—	—	—
Taxes other than income tax	75	1,037	6	—	—	—	—
Exploration	4	51	—	—	—	—	55
Depreciation, depletion and amortisation	217	949	415	—	—	—	—
Other costs/(income)	547	622	(18)	—	1	1	—
Earnings before taxation	141	2,147	(410)	—	(1)	(1)	—
Taxation charge	39	957	—	—	—	—	996
Earnings after taxation	102	1,190	(410)	—	(1)	(1)	—
							880

SUPPLEMENTARY INFORMATION – OIL AND GAS (UNAUDITED) continued**2018**

	Europe	Asia	Oceania	Africa	North America	South America	Total	\$ million
					USA	Canada		
Third-party revenue	1,395	5,884	79	–	–	–	–	7,358
Total	1,395	5,884	79	–	–	–	–	7,358
Production costs excluding taxes	307	674	105	–	–	–	–	1,086
Taxes other than income tax	82	1,259	4	–	–	–	–	1,345
Exploration	5	45	–	–	–	–	–	50
Depreciation, depletion and amortisation	318	1,016	163	–	–	–	–	1,497
Other costs/(income)	595	615	(26)	–	–	–	–	1,184
Earnings before taxation	88	2,275	(167)	–	–	–	–	2,196
Taxation charge	7	975	–	–	–	–	–	982
Earnings after taxation	81	1,300	(167)	–	–	–	–	1,214

ACREAGE AND WELLS

The tables below reflect acreage and wells of Shell subsidiaries, joint ventures and associates. The term "gross" refers to the total activity in which Shell subsidiaries, joint ventures and associates have an interest. The term "net" refers to the sum of the fractional interests owned by Shell subsidiaries plus the Shell share of joint ventures and associates' fractional interests. Data below are rounded to the nearest whole number.

Oil and gas acreage (at December 31)

	Thousand acres											
	2020				2019				2018			
	Developed		Undeveloped		Developed		Undeveloped		Developed		Undeveloped	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net
Europe [A]	6,075	1,900	13,399	5,663	6,278 [B]	1,910 [B]	13,844 [C]	6,077 [C]	6,022	1,954	13,732 [D]	6,322 [D]
Asia	21,360	7,651	34,545	18,003	21,387	7,672	31,486	14,880	22,087	7,885	31,676	15,433
Oceania	3,151	1,275	9,156	4,974	3,025	1,215	11,720	6,260	3,202	1,220	15,319	10,095
Africa	4,764	1,996	69,194	37,743	4,663	1,938	62,965	32,564	4,666	1,940	38,874	22,732
North America – USA	1,145	728	1,916	1,408	1,346 [E]	906 [E]	2,483 [F]	1,911 [F]	1,548 [G]	977 [G]	2,133	1,638 [H]
North America – Mexico	–	–	5,178	3,291	–	–	5,178	3,291	–	–	5,178	3,885
North America – Canada	490	336	1,689	1,177	483	329	1,783	1,265	1,108	752	1,681	1,193
South America	1,449	609	20,147	11,731	1,393	595	16,446	10,214	1,490	710	10,352	6,725
Total	38,434	14,495	155,224	83,990	38,575	14,565	145,905	76,462	40,123	15,438	118,945	68,023

[A] Includes Greenland for 2018.

[B] Corrected from 6,289 Gross [1,915 Net]

[C] Corrected from 13,864 Gross [6,082 Net]

[D] Corrected from 14,385 Gross [6,540 Net]

[E] Corrected from 1,333 Gross [877 Net]

[F] Corrected from 2,489 Gross [1,917 Net]

[G] Corrected from 1,541 Gross [952 Net]

[H] Corrected from 1,635 Net

Number of productive wells [A] (at December 31)

	2020						2019						2018	
	Oil		Gas		Oil		Gas		Oil		Gas			
	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net
Europe	814	197	1,055	336	894 [B]	217	1,095 [C]	345	1,077	277	1,205 [D]	379		
Asia	8,505	3,105	342	193	7,860 [E]	2,874 [E]	336	193	7,449 [F]	2,728	331	189		
Oceania	—	—	3,394	1,927	—	—	3,348 [G]	1,891 [G]	—	—	3,411	1,924		
Africa	567	235	209	141	514	206	202	139	478	189	195	132		
North America - USA	14,505	7,402	401	223	14,953 [H]	7,650 [H]	824 [I]	518 [I]	15,238 [J]	7,755 [J]	1,481 [K]	674 [K]		
North America - Canada	—	—	757	684	—	—	748	676	1	1	936	846		
South America	179	82	63	37	137	63	58	36	117	52	63	41		
Total	24,570	11,021	6,221	3,541	24,358	11,010	6,611	3,798	24,360	11,002	7,622	4,185		

[A] The number of productive wells with multiple completions at December 31, 2020, was 956 gross (416 Net); December 31, 2019: 950 Gross (418 net) corrected from 955 Gross, December 31, 2018: 1,055 Gross (454 net) corrected from 1,061 Gross

[B] Corrected from 893

[C] Corrected from 1,091 Gross

[D] Corrected from 1,201 Gross

[E] Corrected from 7,767 Gross (2,841 Net)

[F] Corrected from 7,455

[G] Corrected from 3,352 Gross (1,896 Net)

[H] Corrected from 14,935 Gross (7,638 Net)

[I] Corrected from 822 Gross (516 Net)

[J] Corrected from 15,224 Gross (7,745 Net)

[K] Corrected from 1,479 Gross (672 Net)

Number of net productive wells and dry holes drilled

	2020			2019			2018		
	Productive		Dry	Productive		Dry	Productive		Dry
Exploratory [A]									
Europe	—	1	—	4	—	2			
Asia	10	8	25	17	22	11			
Oceania	—	6 [B]	—	2	—	—			
Africa	5	7	8	8	6	6			
North America - USA	57	81 [C]	89	9	104	4			
North America - Canada	17	1	24	—	14	—			
South America	5	3	8	1	6	7			
Total	94	107	154	41	153	30			
Development									
Europe	6	—	4	1	4	—			
Asia	169	—	182	—	198	—			
Oceania	22	—	16	—	54	—			
Africa	19	—	34	—	24	1			
North America - USA	110	—	280	5	276	—			
North America - Canada	—	—	6	—	53	—			
South America	14	—	10	1	5	—			
Total	340	—	532	7	614	1			

[A] Productive wells are wells with proved reserves allocated. Wells in the process of drilling are excluded and presented separately below.

[B] Includes 4 Wells in Shell Australia (SAL) which were relinquished in June 2020

[C] Includes 75 sold wells in Tioga that were pending determination at time of sale

SUPPLEMENTARY INFORMATION – OIL AND GAS (UNAUDITED) continued

Number of wells in the process of exploratory drilling [A]

	At January 1		Wells in the process of drilling at January 1 and allocated proved reserves during the year		Wells in the process of drilling at January 1 and determined as dry during the year		New wells in the process of drilling at December 31		At December 31	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net
Europe	15	8	–	–	(3)	(1)	–	–	12	7
Asia	53	20	(7)	(3)	(7)	(2)	18	7	57	22
Oceania	44 [B]	17 [B]	(1)	–	(11)	(6)	–	–	32	11
Africa	36 [C]	24 [C]	(1)	(1)	(7)	(4)	–	–	28	19
North America – USA	219 [D]	132 [D]	(101)	(38)	(90)	(79)	64	28	92	43
North America – Canada	21	21	(16)	(16)	–	–	10	10	15	15
South America	33	15 [E]	(7)	(3)	(5)	(3)	14	4	35	13
Total	421	237	(133)	(61)	(123)	(95)	106	49	271	130

[A] Wells in the process of exploratory drilling includes wells pending further evaluation.

[B] Corrected from 40 Gross (15 Net); Includes 8 Gross (4 Net) in Shell Australia (SAL) which were relinquished in June 2020

[C] Corrected from 45 (28 Net)

[D] Corrected from 197 (126 Net); Includes 75 Gross (75 Net) sold wells in Tioga that were pending determination at time of sale

[E] Corrected from 16

Number of wells in the process of development drilling

	At January 1		At December 31		2020
	Gross	Net	Gross	Net	
Europe	9 [A]	3	7	2	
Asia	53	21	41	24	
Oceania	122 [B]	71	191	124	
Africa	5	2	4	1	
North America – USA	41	34	30	20	
North America – Canada	–	–	–	–	
South America	12	8	30	21	
Total	242	139	303	192	

[A] Corrected from 11

[B] Corrected from 123

In addition to the present activities mentioned above, the following recovery methods are operational in the following countries: water flooding (Brazil (including water alternating gas), Brunei, Egypt, Malaysia, Nigeria, Norway, Oman, Russia, the UK and the USA); gas injection (Brunei, Kazakhstan, Malaysia, Nigeria and Oman); steam injection (the Netherlands, Oman and the USA), and polymer flooding (Oman).

PARENT COMPANY FINANCIAL STATEMENTS

The Parent Company Financial Statements have not been audited in accordance with the standards of the Public Company Accounting Oversight Board (United States).

- 284** Statement of Income
- 284** Statement of Comprehensive Income
- 284** Balance Sheet
- 285** Statement of Changes in Equity
- 285** Statement of Cash Flows
- 286** Notes to the Parent Company Financial Statements
- 286** Note 1 Basis of preparation
- 286** Note 2 Significant accounting policies
- 287** Note 3 Interest and other income/expense
- 287** Note 4 Investments in subsidiaries
- 287** Note 5 Accounts payable and accrued liabilities
- 288** Note 6 Taxation
- 288** Note 7 Financial instruments
- 289** Note 8 Share capital
- 290** Note 9 Other reserves
- 291** Note 10 Dividends
- 291** Note 11 Legal proceedings and other contingencies
- 291** Note 12 Directors and Senior Management
- 291** Note 13 Related parties
- 291** Note 14 Auditor's remuneration

PARENT COMPANY FINANCIAL STATEMENTS continued**STATEMENT OF INCOME**

	Notes	2020	2019	\$ million
Dividend income		8,481	21,051	
Interest and other income	3	11	101	
Administrative expenses		(58)	(54)	
Interest and other expense	3	(1)	(146)	
Income before taxation		8,433	20,952	
Taxation credit/(charge)	6	8	(567)	
Income for the period		8,441	20,385	

STATEMENT OF COMPREHENSIVE INCOME

	2020	2019	\$ million
Income for the period	8,441	20,385	
Comprehensive income for the period	8,441	20,385	

BALANCE SHEET

	Notes	Dec 31, 2020	Dec 31, 2019	\$ million
Assets				
Non-current assets				
Investments in subsidiaries	4	256,663	256,654	
		256,663	256,654	
Current assets				
Amounts due from subsidiaries	13	1,488	1,864	
Cash and cash equivalents		1	4	
		1,489	1,868	
Total assets		258,152	258,522	
Liabilities				
Current liabilities				
Accounts payable and accrued liabilities	5	1,250	1,775	
Total liabilities		1,250	1,775	
Equity				
Share capital	8	651	657	
Other reserves	9	235,419	235,561	
Retained earnings		20,832	20,529	
Total equity		256,902	256,747	
Total liabilities and equity		258,152	258,522	

Signed on behalf of the Board

/s/ Jessica Uhl

JESSICA UHLChief Financial Officer
March 10, 2021

STATEMENT OF CHANGES IN EQUITY

	Notes	Share capital	Other reserves	Retained earnings	Total equity
At January 1, 2020		657	235,561	20,529	256,747
Comprehensive income for the period		–	–	8,441	8,441
Dividends	10	–	–	(7,270)	(7,270)
Repurchases of shares	8	(6)	6	(1,214)	(1,214)
Share-based compensation	9	–	(148)	346	198
At December 31, 2020		651	235,419	20,832	256,902
At January 1, 2019		685	235,536	25,458	261,679
Comprehensive income for the period		–	–	20,385	20,385
Dividends	10	–	–	(15,199)	(15,199)
Repurchases of shares	8	(28)	28	(10,286)	(10,286)
Share-based compensation	9	–	(3)	171	168
At December 31, 2019		657	235,561	20,529	256,747

STATEMENT OF CASH FLOWS

	Notes	2020	2019
Income before taxation for the period		8,433	20,952
Adjustment for:			
Dividend income		(8,481)	(21,051)
Interest income		(11)	(101)
Interest expense		–	111
Share-based compensation		25	19
Decrease in working capital		501	4,008
Cash flow from operating activities		467	3,938
Dividends received		8,481	21,051
Interest received		11	101
Share-based compensation		164	408
Cash flow from investing activities		8,656	21,560
Cash dividends paid	10	(7,424)	(15,198)
Shares repurchased	8	(1,702)	(10,188)
Interest and other expenses paid		–	(111)
Cash flow from financing activities		(9,126)	(25,497)
Change in cash and cash equivalents		(3)	1
Cash and cash equivalents at beginning of the year		4	3
Cash and cash equivalents at end of the year		1	4

[A] Cash dividends paid represents the payment of net dividends (after deduction of withholding taxes where applicable) and payment of withholding taxes on dividends paid in the previous quarter.

NOTES TO THE PARENT COMPANY FINANCIAL STATEMENTS

1 BASIS OF PREPARATION

The Financial Statements of Royal Dutch Shell plc (the "Company") have been prepared in accordance with international accounting standards in conformity with the requirements of the Companies Act 2006 (the "Act"). As applied to the Company, there are no material differences from International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB); therefore, the Financial Statements have been prepared in accordance with IFRS as issued by the IASB.

As described in the accounting policies in Note 2, the Financial Statements have been prepared under the historical cost convention except for certain items measured at fair value. Those accounting policies have been applied consistently in all periods.

The preparation of financial statements in conformity with IFRS requires the use of certain accounting estimates. It also requires management to exercise its judgement in the process of applying the Company's accounting policies. Actual results may differ from those estimates.

The financial results of the Company are included in the Consolidated Financial Statements on pages 216-264. The financial results of the Company incorporate the results of the Dividend Access Trust (the "Trust"), the financial statements of which are presented on pages 294-297.

The Company's principal activity is being the parent company for Shell, as described in Note 1 of the Consolidated Financial Statements (see page 221).

2 SIGNIFICANT ACCOUNTING POLICIES

The Company's accounting policies follow those of Shell as set out in Note 2 to the Consolidated Financial Statements on pages 221-229. The following are Company-specific policies.

Presentation and functional currency

The Company's presentation and functional currency is US dollars (dollars).

Investments

Investments in subsidiaries are stated at cost, net of any impairment. Investments are tested for impairment whenever events or changes in circumstances indicate that the carrying amounts for those investments may not be recoverable. For the purposes of determining whether impairment of investments in subsidiaries has occurred, and the extent of any impairment loss or its reversal, the key assumptions management uses in estimating future cash flows for value-in-use measures include future oil and gas prices, market supply and demand, potential costs associated with operational greenhouse gas (GHG) emissions, and expected product volumes and refining margins appropriate to the local circumstances and environment. These assumptions and the judgements of management that are based on them are subject to change as new information becomes available. Cash flow estimates are discounted at a rate based on Shell's marginal cost of debt. Changes in economic conditions can also affect the rate used to discount future cash flow estimates.

The original cost of the Company's investment in Royal Dutch Petroleum Company (Royal Dutch) was based on the fair value of the shares transferred to the Company by the former shareholders of Royal Dutch in exchange for A shares in the Company during the public exchange offer in 2005. The original cost of the Company's investment in The "Shell" Transport and Trading Company plc, now The Shell Transport and Trading Company Limited (Shell Transport), was the fair value of the shares held by the former shareholders of The "Shell" Transport and Trading Company plc, transferred in consideration for the issuance of B shares as part of the Scheme of Arrangement in 2005. The Company's investments in Royal Dutch and Shell Transport subsequently became an investment in Shell Petroleum N.V. (Shell Petroleum); this change had no impact on the cost of investments in subsidiaries. On February 15, 2016 the Company acquired all the voting rights in BG Group plc via the issuance of shares and cash payments of a total fair value \$53,086 million. In September 2016, the Company's shares in BG Group Limited (BG), formerly BG Group plc, were exchanged for an increased investment in Shell Petroleum. This change had no impact on the cost of investment in subsidiaries.

Dividend income

Dividends are recognised on a paid basis unless the dividend has been confirmed by a general meeting of Shell Petroleum, in which case income is recognised on the date at which receipt is deemed virtually certain.

Share-based compensation plans

The fair value of share-based compensation for equity-settled plans granted to employees of subsidiaries under the Company's plans is recognised as an investment in subsidiaries from the date of grant over the vesting period with a corresponding increase in equity.

In the year of vesting of a plan, the costs for the actual deliveries are charged to the relevant employing subsidiaries. This is recognised as a realisation of the investment originally booked. If the actual vesting costs are higher than the cumulatively recognised share-based compensation charge, the difference is recognised in income.

See Note 21 of the Consolidated Financial Statements (see page 256) for information on the Company's principal plan.

Taxation

The Company is tax-resident in the Netherlands. For the assessment of corporate income tax in the Netherlands, the Company and certain of its subsidiaries form a fiscal unit. The recognition and derecognition of deferred tax assets and or liabilities, as applicable, may be done either by the Company or by any of its subsidiary members. Any current tax receivable or payable (and deferred tax asset or liability) recognised by the Company for the fiscal unit as a whole is settled between the Company and other members of the fiscal unit at the balance sheet date. Balances not settled with the Company at the balance sheet date are recognised in the subsidiary member's financial statements and, to the extent they are material, are disclosed in the notes to the Company's financial statements.

The Company's tax charge or credit recognised in the income statement is calculated at the statutory tax rate prevailing in the Netherlands for current tax and statutory tax rate substantively enacted in the Netherlands for deferred tax.

3 INTEREST AND OTHER INCOME/EXPENSE

	\$ million	
	2020	2019
Interest and other income:		
Interest income	11	101
Total	11	101
Interest and other expenses:		
Interest expense	—	(111)
Foreign exchange losses	(1)	(35)
Total	(1)	(146)

4 INVESTMENTS IN SUBSIDIARIES

	\$ million	
	2020	2019
At January 1	256,654	256,920
Share-based compensation	332	506
Recovery of vested share-based compensation	(323)	(772)
At December 31	256,663	256,654

As at December 31, 2020, the market capitalisation of the Royal Dutch Shell plc and its subsidiaries (collectively referred to as the "Group") was less than the Company's carrying value of its investment in the Group. As such, management has performed an impairment test in order to compare the carrying value of the investment in the Group to the associated value in use. Cash flow projections have been derived from internally approved business plans, and reflect management's forecasts of commodity prices, market supply and demand, potential costs associated with GHG emissions, product margins including refining margins and expected production volumes. Cash flows include a balanced view of risk arising from the integrated nature of the portfolio. The nominal pre-tax rate applied was 6% (see Note 8 to the Consolidated Financial Statements).

Oil and gas price assumptions applied for impairment testing are reviewed and, where necessary, adjusted on a periodic basis. Reviews include comparison with available market data and forecasts that reflect developments in demand such as global economic growth, technology efficiency, policy measures and, in supply, consideration of investment and resource potential, cost of development of new supply, and behaviour of major resource holders. The near-term commodity price assumptions applied in impairment testing were as follows:

Commodity price assumptions [A]

	2021	2022	2023	2024
Brent crude oil (\$/b)	40	50	60	63
Henry Hub natural gas (\$/MMBtu)	2.50	2.50	2.75	3.03

[A] Money of the day.

For periods after 2024, the real-terms long-term price assumptions applied were \$60 per barrel (/b) (2019: \$60/b) for Brent crude oil and \$3.00 per million British thermal units (/MMBtu) (2019: \$3.00/MMBtu) for Henry Hub natural gas, both at real-terms 2020.

Underlying cash flow forecasts used in determining value in use are consistent with those used to assess the recoverable amount of individual cash generating units in the Consolidated Financial Statements.

Based on the impairment test analysis performed, management remains satisfied that the carrying amount of the investment remains recoverable under the reasonable range of anticipated outcomes.

5 ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

	Dec 31, 2020		Dec 31, 2019	
	Current	Non-current	Current	Non-current
Amounts due to subsidiaries (see Note 13)	874	—	750	—
Accruals and other liabilities	44	—	730	—
Withholding tax payable	322	—	291	—
Unclaimed dividends	10	—	4	—
Total	1,250	—	1,775	—

Accruals and other liabilities at December 31, 2019, principally comprise commitments for share repurchases undertaken on the Company's behalf under irrevocable, non-discretionary arrangements. There is no such liability outstanding as at December 31, 2020. See Note 20 to the Consolidated Financial Statements.

NOTES TO THE PARENT COMPANY FINANCIAL STATEMENTS

continued

6 TAXATION

	\$ million	
	2020	2019
Current tax:		
Charge in respect of current period	–	9
Total	–	9
Deferred tax:		
Relating to the origination and reversal of tax losses and credits	(8)	539
Relating to changes in tax rates and legislation	–	19
Total	(8)	558
Taxation (credit)/charge	(8)	567

In 2020, current taxes of nil and deferred taxes of \$8 million have been recognised in the Company's accounts. Derecognition of deferred tax assets of \$517 million (representing unused tax losses and tax credits related to the fiscal unit) have not been recognised in the Company, but in the income statement of Shell Petroleum, a subsidiary of the Company forming part of the same fiscal unit. The amount derecognised in the Company's accounts in 2019 was \$539 million.

Reconciliation of applicable tax charge at statutory tax rate to taxation charge

	\$ million	
	2020	2019
Income before taxation	8,433	20,952
Applicable tax charge at the statutory tax rate of 25.0% (2019: 25.0%)	2,108	5,238
Derecognition of deferred tax assets	–	539
Tax effects of:		
Income not subject to tax at statutory rates	(2,120)	(5,253)
Expenses not deductible for tax purposes	4	24
Other	–	19
Taxation (credit)/charge	(8)	567

Taxes payable are reported within accounts payable and accrued liabilities (see Note 5).

Deferred tax assets

	\$ million	
	2020	2019
At January 1	–	355
Recognised in income	8	(558)
Other movements	(8)	203
At December 31	–	–

As at December 31, 2020, in the Company's capacity as head of the fiscal unit, no deferred tax assets have been recognised (2019: nil). The Dutch Fiscal Unit has unrecognised unused tax losses amounting to \$3,776 million (2019: \$1,683 million) and unrecognised credits carried forward amounted to \$349 million (2019: \$273 million). Unused tax losses are available for relief against future taxable profits for a period of up to six to nine years, depending on the year in which the losses were incurred. Unused tax credits are available indefinitely. Under the proposed new tax legislation, which is not considered substantively enacted as at December 31, 2020, the losses are expected to be available indefinitely, to the extent not yet expired as at January 1, 2022.

7 FINANCIAL INSTRUMENTS

Financial assets and liabilities measured at amortised cost in the Company's Balance Sheet comprise amounts due from subsidiaries (see Note 13) and certain amounts reported within accounts payable and accrued liabilities (see Note 5). The fair value of financial assets and liabilities at December 31, 2020, and December 31, 2019, approximates their carrying amount.

Information on financial risk management is presented in Note 19 of the Consolidated Financial Statements (see pages 251-255). Foreign currency derivatives are used by the Company to manage foreign exchange risk, which arises when certain transactions are denominated in a currency that is not the Company's functional currency. No derivative financial instruments were held at December 31, 2020, or December 31, 2019.

8 SHARE CAPITAL

Issued and fully paid ordinary shares of €0.07 each [A]

	Number of shares		Nominal value (\$ million)		
	A	B	A	B	Total
At January 1, 2020	4,151,787,517	3,729,407,107	349	308	657
Repurchases of shares	(50,548,018)	(23,223,271)	(4)	(2)	(6)
At December 31, 2020	4,101,239,499	3,706,183,836	345	306	651
At January 1, 2019	4,471,889,296	3,745,486,731	376	309	685
Repurchases of shares	(320,101,779)	(16,079,624)	(27)	(1)	(28)
At December 31, 2019	4,151,787,517	3,729,407,107	349	308	657

[A] Share capital at December 31, 2020, and 2019, also included 50,000 issued and fully paid sterling deferred shares of £1 each.

At the Company's Annual General Meeting (AGM) on May 19, 2020, the Board was authorised to allot ordinary shares in the Company, and to grant rights to subscribe for or to convert any security into ordinary shares in the Company, up to an aggregate nominal amount of €182.7 million (representing 2,611 million ordinary shares of €0.07 each), and to list such shares or rights on any stock exchange. This authority expires at the earlier of the close of business on August 19, 2021, and the end of the AGM to be held in 2021, unless previously renewed, revoked or varied by the Company in a general meeting.

At the May 19, 2020 AGM, shareholders granted the Company the authority to repurchase up to 783 million ordinary shares (excluding any treasury shares), renewing the authority granted by the shareholders at previous AGMs. The authority will expire at the earlier of the close of business on August 19, 2021 and the end of the AGM of the Company to be held in 2021. Ordinary shares purchased by the Company pursuant to this authority will either be cancelled or held in treasury. Treasury shares are shares in the Company which are owned by the Company itself. The minimum price, exclusive of expenses, which may be paid for an ordinary share is €0.07. The maximum price, exclusive of expenses, which may be paid for an ordinary share is the higher of: (i) an amount equal to 5% above the average market value for an ordinary share for the five business days immediately preceding the date of the purchase; and (ii) the higher of the price of the last independent trade and the highest current independent bid on the trading venues where the purchase is carried out.

On March 23, 2020, in light of the economic and oil price environment, the Board decided not to continue with the next tranche of the share buyback programme following the completion of the tranche announced on January 30, 2020.

A and B shares repurchased in 2020 under the Company's share buyback programme were all cancelled.

B shares rank equally in all respects with A shares except for the dividend access mechanism described below. The Company, Shell Transport and BG can procure the termination of the dividend access mechanism at any time. Upon such termination, B shares will form one class with A shares ranking equally in all respects and A and B shares will be known as ordinary shares without further distinction.

The sterling deferred shares are redeemable only at the discretion of the Company for £1 each and carry no voting rights. There are no further rights to participate in profits or assets, including the right to receive dividends. Upon winding up or liquidation, the shares carry a right to repayment of paid-up nominal value, ranking ahead of A and B shares.

For information on the number of shares in the Company held by Shell employee share ownership trusts and trust-like entities to meet delivery commitments under employee share plans, see Note 21 of the Consolidated Financial Statements (see page 256).

Dividend access mechanism for B shares

General

Dividends paid on A shares have a Dutch source for tax purposes and are subject to Dutch withholding tax.

It is the expectation and the intention, although there can be no certainty, that holders of B shares will receive dividends through the dividend access mechanism. Any dividends paid on the dividend access shares will have a UK source for UK and Dutch tax purposes. There will be no Dutch withholding tax on such dividends. From April 2016, there were changes to the taxation of dividends for individual shareholders resident in the UK. The dividend tax credit was abolished, and a tax-free dividend allowance introduced.

Description of dividend access mechanism

Shell Transport and BG have each issued a dividend access share to Computershare Trustees (Jersey) Limited as Trustee. Pursuant to a declaration of trust, the Trustee will hold any dividends paid in respect of the dividend access shares on trust for the holders of B shares and will arrange for prompt disbursement of such dividends to holders of B shares. Interest and other income earned on unclaimed dividends will be for the account of Shell Transport and BG and any dividends which are unclaimed after 12 years will revert to Shell Transport and BG once forfeited. Holders of B shares will not have any interest in either dividend access share and will not have any rights against Shell Transport and BG as issuers of the dividend access shares. The only assets held on trust for the benefit of the holders of B shares will be dividends paid to the Trustee in respect of the dividend access shares.

The declaration and payment of dividends on the dividend access shares will require board action by Shell Transport and BG (as applicable) and will be subject to any applicable limitations in law or in the Shell Transport or BG (as appropriate) articles of association in effect. In no event will the aggregate amount of the dividend paid by Shell Transport and BG under the dividend access mechanism for a particular period exceed the aggregate of the dividend announced by the Board of the Company on B shares in respect of the same period (after giving effect to currency conversions).

In particular, under their respective articles of association, Shell Transport and BG are each only able to pay a dividend on their respective dividend access shares which represents a proportional amount of the aggregate of any dividend announced by the Company on the B shares in respect of the relevant period, where such proportions are calculated by reference to, in the case of Shell Transport, the number of B shares in existence prior to completion of the Company's acquisition of BG and, in the case of BG, the number of B shares issued as part of the acquisition, in each case as against the total number of B shares in issue immediately following completion of the acquisition of BG.

NOTES TO THE PARENT COMPANY FINANCIAL STATEMENTS

continued

8 SHARE CAPITAL continued

Operation of the dividend access mechanism

If, in connection with the announcement of a dividend by the Company on B shares, the Board of Shell Transport and/or the Board of BG elects to declare and pay a dividend on their respective dividend access shares to the Trustee, the holders of B shares will be beneficially entitled to receive their share of those dividends pursuant to the declaration of trust (and arrangements will be made to ensure that the dividend is paid in the same currency in which they would have received a dividend from the Company).

If any amount is paid by Shell Transport or BG by way of a dividend on the dividend access shares and paid by the Trustee to any holder of B shares, the dividend which the Company would otherwise pay on B shares will be reduced by an amount equal to the amount paid to such holders of B shares by the Trustee.

The Company will have a full and unconditional obligation, in the event that the Trustee does not pay an amount to holders of B shares on a cash dividend payment date (even if that amount has been paid to the Trustee), to pay immediately the dividend announced on B shares. The right of holders of B shares to receive distributions from the Trustee will be reduced by an amount equal to the amount of any payment actually made by the Company on account of any dividend on B shares.

If for any reason no dividend is paid on the dividend access shares, holders of B shares will only receive dividends from the Company directly. Any payment by the Company will be subject to Dutch withholding tax (unless an exemption is obtained under Dutch law or under the provisions of an applicable tax treaty).

The Dutch tax treatment of dividends paid under the dividend access mechanism has been confirmed by the Dutch Revenue Service in an agreement (vaststellingsovereenkomst) with the Company and N.V. Koninklijke Nederlandsche Petroleum Maatschappij (Royal Dutch Petroleum Company) dated October 26, 2004, as supplemented and amended by an agreement between the same parties dated April 25, 2005, and a final settlement agreement in connection with the acquisition of BG dated November 9, 2015. The agreements state, among other things, that dividend distributions on the dividend access shares by Shell Transport and/or BG will not be subject to Dutch withholding tax provided that the dividend access mechanism is structured and operated substantially as set out above.

The Company may not extend the dividend access mechanism to any future issuances of B shares without prior consultation with the Dutch Revenue Service.

Accordingly, the Company would not expect to issue additional B shares unless confirmation from the Dutch Revenue Service was obtained or the Company were to determine that the continued operation of the dividend access mechanism was unnecessary. Any further issue of B shares is subject to advance consultation with the Dutch Revenue Service.

The dividend access mechanism may be suspended or terminated at any time by the Company's Directors or the Directors of Shell Transport or BG, for any reason and without financial recompense. This might, for instance, occur in response to changes in relevant tax legislation.

9 OTHER RESERVES

					\$ million
	Merger reserve	Share premium reserve	Capital redemption reserve	Share plan reserve	Total
At January 1, 2020	234,231	154	123	1,053	235,561
Repurchases of shares	—	—	6	—	6
Share-based compensation	—	—	—	(148)	(148)
At December 31, 2020	234,231	154	129	905	235,419
At January 1, 2019	234,231	154	95	1,056	235,536
Repurchases of shares	—	—	28	—	28
Share-based compensation	—	—	—	(3)	(3)
At December 31, 2019	234,231	154	123	1,053	235,561

The merger reserve was established as a consequence of the Company becoming the single parent company of Royal Dutch and Shell Transport and represented the difference between the cost of the investment in those companies and the nominal value of shares issued in exchange for those investments as required by the prevailing legislation at that time, section 131 of the Companies Act 1985. On February 15, 2016, the Company acquired all shares in BG Group plc by means of a Scheme of Arrangement under Part 26 of the Act, via the issuance of 218.7 million A shares and 1,305.1 million B shares and cash payments. This resulted in an increase in the merger reserve, representing the difference between the fair value and the nominal value of the shares issued by the Company.

On January 6, 2006, loan notes were converted into 4,827,974 A shares. The difference between the carrying value of the loan notes and the nominal value of the new shares issued was credited to the share premium reserve. The capital redemption reserve was established in connection with repurchases of shares of the Company. The share plan reserve is in respect of equity-settled share-based compensation plans (see Note 21 to the Consolidated Financial Statements) and movement in share-based compensation for the year is the net of the charge to equity and the release as a result of vested awards.

10 DIVIDENDS

See Note 23 of the Consolidated Financial Statements (see page 259).

11 LEGAL PROCEEDINGS AND OTHER CONTINGENCIES

See Note 25 of the Consolidated Financial Statements (see page 260).

12 DIRECTORS AND SENIOR MANAGEMENT

See Note 27 of the Consolidated Financial Statements (see page 262) for the remuneration of Directors of the Company. In 2020, the Company recognised \$25 million (2019: \$25 million) in administrative expenses for the compensation of Directors and Senior Management.

13 RELATED PARTIES

Information about the Company's subsidiaries, and whether these are held directly or indirectly, and other related undertakings (all of which are held indirectly), at December 31, 2020, is set out in 'Appendix 1: Significant Subsidiaries and Other Related Undertakings'.

	\$ million			
	Amounts due from subsidiaries		Amounts due to subsidiaries (see Note 5)	
	2020	2019	2020	2019
Shell Petroleum	—	—	855	748
Shell Treasury Centre Limited	1,484	1,862	14	—
Other	4	2	5	2
Total	1,488	1,864	874	750

The amount due from Shell Treasury Centre Limited (STCL) comprises call deposits and overdrafts in dollars, sterling and euros. Interest is calculated at US LIBOR (2019: US LIBOR less 0.21%) on dollar balances, at GBP LIBOR less 0.03% (2019: GBP LIBOR less 0.19%) on sterling balances and at Euro Overnight Index Average (EONIA) (2019: EONIA) on euro balances, unless this results in a negative interest rate in which case no interest is earned. Net interest income in 2020 from STCL was \$11 million (2019: \$41 million).

The Company received no interest from Shell Petroleum in 2020 (2019: \$60 million). In 2019 interest was calculated at US LIBOR less 0.21%. At both December, 31 2020 and 2019 the closing amount due from Shell Petroleum was \$nil.

Other transactions and balances

The Company periodically enters into forward and spot foreign currency contracts with Treasury companies, which are subsidiaries. There were no open foreign currency contracts at December 31, 2020, or December 31, 2019.

The Company settles general and administrative expenses of the Trust, including the auditor's remuneration.

The Company has guaranteed contractual payments totalling \$63,146 million at December 31, 2020 (December 31, 2019: \$52,357 million), and related interest, in respect of listed debt issued by Shell International Finance B.V. The fair value of this guarantee was considered to be immaterial at initial recognition and since the likelihood of default is considered remote no subsequent expected credit losses have been recognised.

14 AUDITOR'S REMUNERATION

See Note 28 of the Consolidated Financial Statements (see page 263).

INDEPENDENT AUDITOR'S REPORT TO COMPUTERSHARE TRUSTEES (JERSEY) LIMITED AS TRUSTEE OF THE ROYAL DUTCH SHELL DIVIDEND ACCESS TRUST AND THE BOARD OF DIRECTORS AND SHAREHOLDERS OF ROYAL DUTCH SHELL PLC

TO COMPUTERSHARE TRUSTEES (JERSEY) LIMITED AS TRUSTEE OF THE ROYAL DUTCH SHELL DIVIDEND ACCESS TRUST AND THE BOARD OF DIRECTORS AND SHAREHOLDERS OF ROYAL DUTCH SHELL PLC

Opinion

We have audited the non-statutory financial statements of the Royal Dutch Shell Dividend Access Trust (the Financial Statements) for the year ended December 31, 2020 which comprise the Statement of Income, the Statement of Comprehensive Income, the Balance Sheet, the Statement of Changes in Equity, the Statement of Cash Flows and the related notes 1 to 8. The financial reporting framework that has been applied in their preparation is International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB).

In our opinion the Financial Statements give a true and fair view of the Royal Dutch Shell Dividend Access Trust's (the Trust) affairs as at December 31, 2020 and of its income for the year then ended; and have been properly prepared in accordance with IFRS as issued by the IASB.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the "Auditor's responsibilities for the audit of the financial statements" section of our report. We are independent of the Trust in accordance with the ethical requirements that are relevant to our audit of the Financial Statements in the UK, including the Financial Reporting Council's Ethical Standard, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Conclusions relating to going concern

In auditing the financial statements, we have concluded that the Trustee of Royal Dutch Shell Dividend Access Trust's (the Trustee) use of the going concern basis of accounting in the preparation of the financial statements is appropriate.

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the Trust's ability to continue as a going concern until 31 March 2022 (the going concern period).

Our responsibilities and the responsibilities of the directors with respect to going concern are described in the relevant sections of this report. However, because not all future events or conditions can be predicted, this statement is not a guarantee as to the company's ability to continue as a going concern.

Other information

The other information comprises the information included in the annual report, other than the Financial Statements and our auditor's report thereon. The Board of Directors of Royal Dutch Shell plc (the Directors) are responsible for the other information contained within the annual report.

Our opinion on the Financial Statements does not cover the other information and, except to the extent otherwise explicitly stated in this report, we do not express any form of assurance conclusion thereon.

Our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the Financial Statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the Financial Statements themselves. If, based on the work we have performed, we conclude that there is a material misstatement of the other information, we are required to report that fact.

We have nothing to report in this regard.

Responsibilities of the Trustee

The Trustee is responsible for the preparation of the Financial Statements and for being satisfied that they give a true and fair view, and for such internal control as the Trustee determines is necessary to enable the preparation of Financial Statements that are free from material misstatement, whether due to fraud or error.

In preparing the Financial Statements, the Trustee is responsible for assessing the Trust's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Trustee either intends to liquidate the Trust or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the Financial Statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

Explanation as to what extent the audit was considered capable of detecting irregularities, including fraud

Irregularities, including fraud, are instances of non-compliance with laws and regulations. We design procedures in line with our responsibilities, outlined above, to detect irregularities, including fraud. The risk of not detecting a material misstatement due to fraud is higher than the risk of not detecting one resulting from error, as fraud may involve deliberate concealment by, for example, forgery or intentional misrepresentations, or through collusion. The extent to which our procedures are capable of detecting irregularities, including fraud is detailed below. However, the primary responsibility for the prevention and detection of fraud rests with both the Trustee and those charged with governance of Royal Dutch Shell plc and its management.

- We obtained an understanding of the legal and regulatory frameworks that are applicable to the Trust and determined that the most significant are those that relate to the reporting framework (IFRS and the US Securities Exchange Act of 1934).
- We understood how the Trust is complying with those frameworks by making enquiries of the Trustee, Royal Dutch Shell plc management and those responsible for legal and compliance procedures over the Trust. We corroborated our enquiries through our review of Resolutions of the Trust Committee of the Trustee, papers provided to the Royal Dutch Shell plc Audit Committee and correspondence received from regulatory bodies and noted that there was no contradictory evidence.

- We assessed the susceptibility of the Trust's financial statements to material misstatement, including how fraud might occur by regular meetings with the Trustee, Royal Dutch Shell plc management and those responsible for legal and compliance procedures over the Trust to understand where it was considered there was susceptibility to fraud. We considered the programmes and design, implementation and maintenance of internal controls that the Trustee and Royal Dutch Shell plc have established to prevent and detect fraud over the Trust and how the Trustee, Royal Dutch Shell plc management and those responsible for legal and compliance procedures over the Trust monitor those programmes and controls.
- Based on this understanding we designed our audit procedures to identify noncompliance with such laws and regulations. Our procedures involved review of Resolutions of the Trust Committee of the Trustee and Royal Dutch Shell plc Audit Committee minutes to identify noncompliance with laws and regulations, journal entry testing with a focus on journals meeting our defined risk criteria based on our understanding of the Trust and enquiries of the Trustee, Royal Dutch Shell plc management and those responsible for legal and compliance procedures over the Trust.

A further description of our responsibilities for the audit of the Financial Statements is located on the Financial Reporting Council's website at <https://www.frc.org.uk/auditorsresponsibilities>. This description forms part of our auditor's report.

Use of our report

This report is made solely to the Trustee and the Board of Directors and Shareholders of Royal Dutch Shell plc as a body, in accordance with our engagement letter. Our audit work has been undertaken so that we might state to the Trustee and the Board of Directors and Shareholders of Royal Dutch Shell plc those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Trustee and the Board of Directors and Shareholders of Royal Dutch Shell plc as a body, for our audit work, for this report, or for the opinions we have formed.

/s/ Paul Sater

for and on behalf of Ernst & Young LLP, Statutory Auditor
London
March 10, 2021

ROYAL DUTCH SHELL DIVIDEND ACCESS TRUST FINANCIAL STATEMENTS

- 295** Statement of Income
- 295** Statement of Comprehensive Income
- 295** Balance Sheet
- 296** Statement of Changes in Equity
- 296** Statement of Cash Flows
- 297** Notes to the Royal Dutch Shell Dividend Access Trust Financial Statements
- 297** Note 1 The Trust
- 297** Note 2 Basis of preparation
- 297** Note 3 Significant accounting policies
- 297** Note 4 Unclaimed dividends
- 297** Note 5 Capital account
- 297** Note 6 Distributions made
- 297** Note 7 Related parties
- 297** Note 8 Auditor's remuneration

STATEMENT OF INCOME

	£ million		
	2020	2019	2018
Dividend income	2,777	5,484	5,328
Income before taxation and for the period	2,777	5,484	5,328

STATEMENT OF COMPREHENSIVE INCOME

	£ million		
	2020	2019	2018
Income for the period	2,777	5,484	5,328
Comprehensive income for the period	2,777	5,484	5,328

BALANCE SHEET

	Notes	Dec 31, 2020	Dec 31, 2019
Assets			
Other current assets		7	–
Cash and cash equivalents		–	3
Total assets		7	3
Liabilities			
Unclaimed dividends	4	7	3
Total liabilities		7	3
Equity			
Capital account	5	–	–
Revenue account		–	–
Total equity		–	–
Total liabilities and equity		7	3

Signed on behalf of Computershare Trustees (Jersey) Limited as Trustee of the Royal Dutch Shell Dividend Access Trust

/s/ John Le Marquand

/s/ Martin Fish

JOHN LE MARQUAND

March 10, 2021

MARTIN FISH

ROYAL DUTCH SHELL DIVIDEND ACCESS TRUST

FINANCIAL STATEMENTS continued

STATEMENT OF CHANGES IN EQUITY

	Notes	Capital account	Revenue account	£ million Total equity
At January 1, 2020		—	—	—
Comprehensive income for the period		—	2,777	2,777
Distributions made	6	—	(2,777)	(2,777)
At December 31, 2020		—	—	—
At January 1, 2019		—	—	—
Comprehensive income for the period		—	5,484	5,484
Distributions made	6	—	(5,484)	(5,484)
At December 31, 2019		—	—	—
At January 1, 2018		—	—	—
Comprehensive income for the period		—	5,328	5,328
Distributions made	6	—	(5,328)	(5,328)
At December 31, 2018		—	—	—

STATEMENT OF CASH FLOWS

	2020	2019	2018	£ million
Income for the period	2,777	5,484	5,328	
Adjustment for:				
Dividends received	(2,777)	(5,484)	(5,328)	
Cash flow from operating activities	—	—	—	
Dividends received	2,772	5,484	5,328	
Cash flow from investing activities	2,772	5,484	5,328	
Cash distributions made	(2,775)	(5,484)	(5,327)	
Cash flow from financing activities	(2,775)	(5,484)	(5,327)	
Change in cash and cash equivalents	(3)	—	1	
Cash and cash equivalents at January 1	3	3	2	
Cash and cash equivalents at December 31	—	3	3	

NOTES TO THE ROYAL DUTCH SHELL DIVIDEND ACCESS TRUST FINANCIAL STATEMENTS

1 THE TRUST

The Royal Dutch Shell Dividend Access Trust (the "Trust") was established on May 19, 2005, by The "Shell" Transport and Trading Company, plc, now The Shell Transport and Trading Company Limited (Shell Transport), and Royal Dutch Shell plc (the "Company"). The Trust is governed by the applicable laws of England and Wales and is resident and domiciled in Jersey. The Trust is not subject to taxation. The Trustee of the Trust is Computershare Trustees (Jersey) Limited, registration number 92182 (the "Trustee"), 13 Castle Street, St Helier, Jersey, JE1 1ES. The Trust was established as part of a dividend access mechanism.

Shell Transport and BG Group Limited (BG), have each issued a dividend access share to the Trustee. Following the announcement of a dividend by the Company on the B shares, Shell Transport and BG may declare a dividend on their dividend access shares.

The primary purposes of the Trust are to receive, on behalf of the B shareholders of the Company and in accordance with their respective holdings of B shares in the Company, any amounts paid by way of dividend on the dividend access shares and to pay such amounts to the B shareholders on the same pro rata basis. The Trust is not subject to significant market risk, credit risk or liquidity risk.

The Trust shall not endure for a period in excess of 80 years from May 19, 2005, being the date on which the Trust Deed was executed.

2 BASIS OF PREPARATION

The Financial Statements of the Trust have been prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB).

The Financial Statements have been prepared under the historical cost convention. The accounting policies described in Note 3 have been applied consistently in all periods presented.

The Financial Statements were approved and authorised for issue by the Trustee on March 10, 2021.

The financial results of the Trust are included in the Consolidated and Parent Company Financial Statements on pages 216-264 and pages 283-291 respectively.

3 SIGNIFICANT ACCOUNTING POLICIES

The Trust's accounting policies follow those of Shell as set out in Note 2 of the Consolidated Financial Statements (see pages 221-229). The following are Trust-specific policies.

Presentation and functional currency

The Trust's presentation and functional currency is sterling. The Trust's dividend income and dividends paid are principally in sterling.

Dividend income

Dividends on the dividend access shares are recognised on a paid basis unless the dividend has been confirmed by a general meeting of Shell Transport or BG, in which case income is recognised on the date on which receipt is deemed virtually certain. Dividend income includes amounts receivable from Shell Transport and BG in respect of dividends declared but unclaimed (see Note 4).

Distributions made

Amounts are recorded as distributed once a payment is made in the appropriate currency using various electronic transfer methods, or an unconditional payment obligation is established. Shell Transport or BG (as appropriate) may, each at their respective discretion, withhold any part of the funding relating to an unpayable dividend until such time as the relevant B shareholder provides accurate or complete details for payment of any such dividend.

4 UNCLAIMED DIVIDENDS

Unclaimed dividends of £7 million (2019: £3 million) include any pre-electronic transfer dividend cheque payments that have not been presented within 12 months, have expired or have been returned unrepresented. Dividends are also classified as unclaimed where amounts have been withheld due to incomplete or incorrect electronic payment details. Dividends which are unclaimed after 12 years will unconditionally revert to Shell Transport and BG once forfeited.

5 CAPITAL ACCOUNT

The capital account is represented by the dividend access share of 25 pence settled in the Trust by Shell Transport and the dividend access share of 10 pence settled in the Trust by BG. There have been no changes in the capital account in the current or prior year.

6 DISTRIBUTIONS MADE

Distributions are made to the B shareholders of the Company in accordance with the Trust Deed. See Note 23 of the Consolidated Financial Statements (see page 259) for information about dividends per share.

7 RELATED PARTIES

The Trust recognised dividend income of £1,805 million (2019: £3,573 million; 2018: £3,470 million) in respect of the dividend access share from Shell Transport and £972 million (2019: £1,911 million; 2018: £1,858 million) in respect of the dividend access share from BG. The Trust made distributions of £2,777 million (2019: £5,484 million; 2018: £5,328 million) to the B shareholders of the Company.

As at December 31, 2020 the Trust recorded amounts due from Shell Transport of £5 million and BG of £2 million relating to unclaimed dividends, following a move to electronic settlement of dividend payments in the year.

The Company pays the general and administrative expenses of the Trust, including the auditor's remuneration.

8 AUDITOR'S REMUNERATION

Auditor's remuneration for 2020 audit services was £33,750 (2019: £33,750; 2018: £33,750).

A person wearing a yellow safety vest over a red shirt and blue jeans is kneeling on a sandy, coastal ground, planting a small tree. They are wearing white gloves and holding a small tree sapling with several green leaves. The background shows a body of water and some greenery. The text 'ADDITIONAL INFORMATION' is overlaid in large white letters.

ADDITIONAL INFORMATION

- 300** Shareholder information
- 305** Non-GAAP measures reconciliations
- 308** Appendix I: significant subsidiaries and other related undertakings (audited)
- 324** Appendix 2: five-year financial dataset



RESPECTING **NATURE**



SHAREHOLDER INFORMATION

Royal Dutch Shell plc (the Company) was incorporated in England and Wales on February 5, 2002, as a private company under the Companies Act 1985, as amended. On October 27, 2004, the Company was re-registered as a public company limited by shares and changed its name from Forthdeal Limited to Royal Dutch Shell plc. The Company is registered at Companies House, Cardiff, under company number 4366849, and at the Chamber of Commerce, The Hague, under company number 34179503. The Legal Entity Identifier (LEI) issued by the London Stock Exchange is 21380068PIDRHMJ8KU70. The business address for the Directors and Senior Management is Carel van Bylandtlaan 30, 2596 HR, The Hague, The Netherlands.

The Company is resident in the Netherlands for Dutch and UK tax purposes and its primary objective is to carry on the business of a holding company. It is not directly or indirectly owned or controlled by another corporation or by any government and does not know of any arrangements that may result in a change of control of the Company.

NATURE OF TRADING MARKET

The Company has two classes of ordinary shares: A and B shares. The principal trading market for A shares is Euronext Amsterdam and the principal trading market for B shares is the London Stock Exchange. Ordinary shares are traded in registered form.

A and B American Depository Shares (ADSs) are listed on the New York Stock Exchange [A]. A depository receipt is a certificate that evidences ADSs. Depository receipts are issued, cancelled and exchanged at the office of JP Morgan Chase Bank, N.A., 383 Madison Avenue, New York, New York 10179, USA, as depositary (the Depositary), under a deposit agreement between the Company, the Depositary and the holders of ADSs. Each ADS represents two €0.07 shares of Royal Dutch Shell plc deposited under the agreement. More information relating to ADSs is given on pages 300-304.

[A] At February 12, 2021, 307,263,635 A ADSs and 292,034,995 B ADSs were outstanding, representing 14.98% and 15.76% of the respective share capital class, held by 4,872 and 910 holders of record with an address in the USA, respectively. In addition to holders of ADSs, at February 12, 2021, 21,790 A shares and 929,184 B shares of €0.07 each were outstanding, representing 0.0002% and 0.119% of the respective share capital class, held by 299 and 3,063 holders of record registered with an address in the USA, respectively.

Listing information

	A shares	B shares
Ticker symbol London	RDSA	RDSB
Ticker symbol Amsterdam	RDSA	RDSB
Ticker symbol New York (ADS [A])	RDS.A	RDS.B
ISIN for shares	GB00B03MLX29	GB00B03MM408
ISIN for ADS	US7802592060	US7802591070
CUSIP	G7690A100	G7690A118
SEDOL Number Amsterdam	B09CBL4	B09CBN6
SEDOL Number London	B03MLX2	B03MM40
SEDOL Number New York	B03MM62	B03MM73
Weighting on FTSE 100 at 31/12/20	3.09%	2.71%
Weighting on AEX at 31/12/20	10.58%	not included

[A] Each A ADS represents two A shares of €0.07 each and each B ADS represents two B shares of €0.07 each.

SHARE CAPITAL

The issued and fully paid share capital of the Company at February 12, 2021, was as follows:

Share capital

	Issued and fully paid	
	Number	Nominal value
Ordinary shares of €0.07 each		
A shares	4,101,239,499	€287,086,765
B shares	3,706,183,836	€259,432,869
Sterling deferred shares of £1 each	50,000	£50,000

The Directors may only allot new ordinary shares if they have authority from shareholders to do so. The Company seeks to renew this authority annually at its AGM. Under the resolution passed at the Company's 2020 AGM, the Directors were granted authority to allot ordinary shares up to an aggregate nominal amount equivalent to approximately one-third of the issued ordinary share capital of the Company (in line with the guidelines issued by institutional investors).

The following is a summary of the material terms of the Company's ordinary shares, including brief descriptions of the provisions contained in the Articles of Association (the Articles) and applicable laws of England and Wales in effect on the date of this document. This summary does not purport to include complete statements of these provisions:

- upon issuance, A and B shares are fully paid and free from all liens, equities, charges, encumbrances and other interest of the Company and not subject to calls of any kind;
- all A and B shares rank equally for all dividends and distributions on ordinary share capital; and
- A and B shares are admitted to the Official List of the UK Financial Conduct Authority and to trading on the market for listed securities of the London Stock Exchange. A and B shares are also admitted to trading on Euronext Amsterdam. A and B ADSs are listed on the New York Stock Exchange.

At December 31, 2020, trusts and trust-like entities holding shares for the benefit of employee share plans of Shell held (directly and indirectly) 25 million shares of the Company with an aggregate market value of \$526 million and an aggregate nominal value of €2 million.

SIGNIFICANT SHAREHOLDINGS

The Company's A and B shares have identical voting rights, and accordingly the Company's major shareholders do not have different voting rights.

Notification of major shareholdings

The Company received two notifications pursuant to Disclosure Guidance and Transparency Rule (DTR) 5 from the Capital Group Companies, Inc. during the year and up to February 12, 2021, (being a date not more than one month prior to the date of the Company's Notice of Annual General Meeting). The information provided includes the percentage of issued capital as at the date of the notifications.

Investor

	A shares		B shares		Total[A]	
	Number	%	Number	%	Number	%
The Capital Group Companies, Inc.[B]	42,482,002	0.54	349,161,475	4.45	391,643,477	4.99

[A] Excludes financial instruments according to Art. 13(1)(a) of Directive 2004/109/EC (DTR 5.3.1.1 (a)) and financial instruments with similar economic effect according to Art. 13(1)(b) of Directive 2004/109/EC (DTR 5.3.1.1 (b)).

[B] Notifications were announced on 20 January 2020 and 24 February 2020. The figures in the table above reflect that of the latest announcement, made on 24 February 2020.

Designation of the Netherlands as EU Home Member State for regulatory purposes

Following the exit of the UK from the EU and the end of the transition period, the Company has announced that the EU Home Member State of the Company for the purposes of the EU Transparency Directive will be the Netherlands as from January 1, 2021. As a consequence, going forward the Company will file Transparency Directive and Market Abuse Regulation-related regulatory information with the Netherlands Authority for the Financial Markets (Autoriteit Financiële Markten, or AFM). Major shareholders will have to report substantial holdings in Shell to the AFM in accordance with applicable Dutch law, in addition to their ongoing disclosure obligations under the UK Disclosure Guidance and Transparency Rules (DTR). The Company's status as a UK PLC, headquartered in the Netherlands, remains the same.

DIVIDENDS

The following tables show the dividends on each class of share and each class of ADS for the years 2016-2020.

A and B shares

	2020	2019	2018	2017	2016
Q1	0.16	0.47	0.47	0.47	0.47
Q2	0.16	0.47	0.47	0.47	0.47
Q3	0.17	0.47	0.47	0.47	0.47
Q4	0.17	0.47	0.47	0.47	0.47
Total announced in respect of the year	0.65	1.88	1.88	1.88	1.88

A shares

	2020	2019	2018	2017	2016
Q1	0.14	0.42	0.4	0.42	0.42
Q2	0.14	0.43	0.4	0.39	0.42
Q3	0.14	0.42	0.41	0.4	0.44
Q4 [B]	TBA	0.42	0.42	0.38	0.44
Total announced in respect of the year [B]	TBA	1.68	1.64	1.59	1.72
Amount paid during the year	0.84	1.68	1.60	1.65	1.70

[A] Euro equivalent, rounded to the nearest euro cent.

[B] Q4 2020 euro equivalent will be announced on March 15, 2021.

SHAREHOLDER INFORMATION continued

B shares

		2020	2019	2018	2017	Pence [A] 2016
Q1		12.68	36.97	35.18	37.12	32.98
Q2		12.09	38.01	36.5	36.28	35.27
Q3		12.48	35.73	36.77	35.02	37.16
Q4 [B]		TBA	36.4	35.94	33.91	38.64
Total announced in respect of the year [B]		TBA	147.11	144.39	142.33	144.05
Amount paid during the year		73.65	146.65	142.36	147.06	138.19

[A] Sterling equivalent.

[B] Q4 2020 sterling equivalent will be announced on March 15, 2021

A and B ADSs

		2020	2019	2018	2017	\$ 2016
Q1		0.32	0.94	0.94	0.94	0.94
Q2		0.32	0.94	0.94	0.94	0.94
Q3		0.33	0.94	0.94	0.94	0.94
Q4		0.33	0.94	0.94	0.94	0.94
Total announced in respect of the year		1.31	3.76	3.76	3.76	3.76
Amount paid during the year		1.91	3.76	3.76	3.76	3.76

METHOD OF HOLDING SHARES OR AN INTEREST IN SHARES

There are several ways in which Royal Dutch Shell plc registered shares or an interest in these shares can be held, including:

- directly as registered shares either in uncertificated form or in certificated form in a shareholder's own name;
- indirectly through Euroclear Nederland (in respect of which the Dutch Securities Giro Act (Wet giraal effectenverkeer) is applicable);
- through the Royal Dutch Shell Corporate Nominee Service;
- through another third-party nominee or intermediary company; and
- as a direct or indirect holder of either an A or a B ADS with the Depositary.

AMERICAN DEPOSITORY SHARES

The Depositary is the registered shareholder of the shares underlying the A or B ADSs and enjoys the rights of a shareholder under the Articles.

Holders of ADSs will not have shareholder rights. The rights of the holder of an A or a B ADS are specified in the Deposit Agreement with the Depositary and are summarised below.

The Depositary will receive all cash dividends and other cash distributions made on the deposited shares underlying the ADSs and, where possible and on a reasonable basis, will distribute such dividends and distributions to holders of ADSs. Rights to purchase additional shares will also be made available to the Depositary who may make such rights available to holders of ADSs. All other distributions made on the Company's shares will be distributed by the Depositary in any means that the Depositary thinks is equitable and practical. The Depositary may deduct its fees and expenses and the amount of any taxes owed from any payments to holders and it may sell a holder's deposited shares to pay any taxes owed. The Depositary is not responsible if it decides that it is unlawful or impractical to make a distribution available to holders of ADSs.

The Depositary will notify holders of ADSs of shareholders' meetings of the Company and will arrange to deliver voting materials to such holders of ADSs if requested by the Company. Upon request by a holder, the Depositary will endeavour to appoint such holder as proxy in respect of such holder's deposited shares entitling such holder to attend and vote at

shareholders' meetings. Holders of ADSs may also instruct the Depositary to vote their deposited securities and the Depositary will try, as far as practical and lawful, to vote deposited shares in accordance with such instructions. The Company cannot ensure that holders will receive voting materials or otherwise learn of an upcoming shareholders' meeting in time to ensure that holders can instruct the Depositary to vote their shares.

Upon payment of appropriate fees, expenses and taxes: (i) shareholders may deposit their shares with the Depositary and receive the corresponding class and amount of ADSs; and (ii) holders of ADSs may surrender their ADSs to the Depositary and have the corresponding class and amount of shares credited to their account.

Further, subject to certain limitations, holders may, at any time, cancel ADSs and withdraw their underlying shares or have the corresponding class and amount of shares credited to their account.

FEES PAID BY HOLDERS OF ADSs

The Depositary collects its fees for delivery and surrender of ADSs directly from investors depositing shares or surrendering ADSs for the purpose of withdrawal or from intermediaries acting for them. The Depositary collects fees for making distributions to investors by deducting those fees from the amounts distributed or by selling a portion of distributable property to pay the fees. The Depositary may generally refuse to provide fee-attracting services until its fees for those services are paid. See page 301.

PAYMENTS BY DEPOSITORY TO THE COMPANY

J.P. Morgan Chase Bank, N.A., as Depositary, has agreed to share with the Company portions of certain fees collected, less ADS programme expenses paid by the Depositary. For example, these expenses include the Depositary's annual programme fees, transfer agency fees, custody fees, legal expenses, postage and envelopes for mailing annual and interim financial reports, printing and distributing dividend cheques, electronic filing of US federal tax information, mailing required tax forms, stationery, postage, facsimile and telephone calls and the standard out-of-pocket maintenance costs for the ADSs. From January 1, 2020, to February 12, 2021, the Company received \$6,418,504.69 from the Depositary.

Persons depositing or withdrawing shares must pay:	For:
\$5.00 or less per 100 ADSs (or portion of 100 ADSs)	<ul style="list-style-type: none"> ■ Issuance of ADSs, including those resulting from a distribution of shares, rights or other property; ■ Cancellation of ADSs for the purpose of their withdrawal, including if the deposit agreement terminates; and ■ Distribution of securities to holders of deposited securities by the Depositary to ADS registered holders.
Registration and transfer fees	<ul style="list-style-type: none"> ■ Registration and transfer of shares on the share register to or from the name of the Depositary or its agent when they deposit or withdraw shares.
Expenses of the Depositary	<ul style="list-style-type: none"> ■ Cable, telex and facsimile transmissions (when expressly provided in the deposit agreement); and ■ Converting foreign currency into dollars.
Taxes and other governmental charges the Depositary or the custodian has to pay on any ADS or share underlying an ADS, for example, share transfer taxes, stamp duty or withholding taxes	<ul style="list-style-type: none"> ■ As necessary.

DIVIDEND REINVESTMENT PLAN

Equiniti Financial Services Limited, part of the same group of companies as the Company's Registrar, Equiniti Limited, operates a Dividend Reinvestment Plan (DRIP) which enables RDS shareholders to elect to have their dividend payments used to purchase RDS shares of the same class as those already held by them. More information can be found at www.shareview.co.uk/info/drip or by contacting Equiniti.

ABN AMRO Bank N.V. and JP Morgan Chase Bank N.A. also operate dividend reinvestment options. More information can be found by contacting the relevant provider.

In addition to the above, the Depositary may charge: (i) a dividend fee of \$5.00 or less per 100 ADSs (or portion of 100 ADSs) for cash dividends or issuance of ADSs resulting from share dividends and (ii) an administrative fee of \$5.00 or less per 100 ADSs (or portion of 100 ADSs) per calendar year. The Company and Depositary have agreed not to charge these fees at this time.

EXCHANGE CONTROLS AND OTHER LIMITATIONS AFFECTING SECURITY HOLDERS

Other than restrictions affecting those individuals, entities, government bodies, corporations or agencies that are subject to European Union (EU) sanctions for example, regarding Syria, and those sanctions adopted by the government of the UK, and the general EU prohibition to transfer funds to and from for example, North Korea, we are not aware of any other legislative or other legal provision currently in force in the UK, the Netherlands or arising under the Articles restricting remittances to holders of the Company's ordinary shares who are non-residents of the UK, or affecting the import or export of capital.

TAXATION

General

The Company is incorporated in England and Wales and tax-resident in the Netherlands. As a tax resident of the Netherlands, it is generally required by Dutch law to withhold tax at a rate of 15% on dividends on its ordinary shares and ADSs, subject to the provisions of any applicable tax convention or domestic law. Depending on their particular circumstances, non-Dutch tax-resident holders may be entitled to a full or partial refund of Dutch withholding tax. The following sets forth the operation of other provisions on dividends on the Company's various ordinary shares and ADSs to UK and US holders, as well as certain other tax rules pertinent to holders. Holders should consult their own tax adviser if they are uncertain as to the tax treatment of any dividend.

Dividends paid on the dividend access shares

There is no Dutch withholding tax on dividends on B shares or B ADSs, provided that such dividends are paid on the dividend access shares pursuant to the dividend access mechanism (see "Dividend access

mechanism for B shares" on page 289). Dividends paid on the dividend access shares are treated as UK-source for tax purposes and there is no UK withholding tax on them.

In 2020, all dividends with respect to B shares and B ADSs were paid on the dividend access shares pursuant to the dividend access mechanism.

Dutch withholding tax

When Dutch withholding tax applies on dividends paid to a US holder (that is, dividends on A shares or A ADSs, or on B shares or B ADSs that are not paid on the dividend access shares pursuant to the dividend access mechanism), the US holder will be subject to Dutch withholding tax at the rate of 15%. A US holder who is entitled to the benefits of the 1992 Double Taxation Convention (the Convention) between the USA and the Netherlands as amended by the protocol signed on March 8, 2004, will be entitled to a reduction in the Dutch withholding tax, either by way of a full or a partial exemption at source or by way of a partial refund or a credit as follows:

- if the US holder is an exempt pension trust as described in article 35 of the Convention, or an exempt organisation as described in article 36 thereof, the US holder will be exempt from Dutch withholding tax; or
- if the US holder is a company that holds directly at least 10% of the voting power in the Company, the US holder will be subject to Dutch withholding tax at a rate not exceeding 5%.

In general, the entire dividend (including any amount withheld) will be dividend income to the US holder and the withholding tax will be treated as a foreign income tax that is eligible for credit against the US holder's income tax liability or a deduction subject to certain limitations. A "US holder" includes, but is not limited to, a citizen or resident of the USA, or a corporation or other entity organised under the laws of the USA or any of its political subdivisions.

When Dutch withholding tax applies on dividends paid to UK tax-resident holders (that is, dividends on A shares or A ADSs, or on B shares or B ADSs that are not paid on the dividend access shares pursuant to the dividend access mechanism), the dividend will typically be subject to withholding tax at a rate of 15%. Such UK tax-resident holder may be entitled to a credit (not repayable) for withholding tax against their UK tax liability. However, certain corporate shareholders are, subject to conditions, exempt from UK tax on dividends. Withholding tax suffered cannot be offset against such exempt dividends. UK tax-resident holders should also be entitled to claim a refund of one-third of the Dutch withholding tax from the Dutch tax authorities in reliance on the tax convention between the Netherlands and the UK. Pension plans meeting certain defined criteria can, however, be entitled to claim a full refund or exemption at source of the dividend tax withheld. Also, UK tax-resident corporate shareholders holding at least a 5% shareholding and meeting other defined criteria are exempted at source from dividend tax.

SHAREHOLDER INFORMATION continued

For holders who are tax-resident in any other country, the availability of a whole or partial exemption or refund of Dutch withholding tax is governed by Dutch tax law and/or the tax convention, if any, between the Netherlands and the country of the holder's residence.

There may be other grounds on which holders who are tax-resident in the UK, the USA or any other country can obtain a full or partial refund of the Dutch withholding tax, depending on their particular circumstances; see "Taxation: General" above.

Dutch capital gains taxation

Capital gains on the sale of shares of a Dutch tax-resident company by a US holder are generally not subject to taxation by the Netherlands unless the US holder has a permanent establishment therein and the capital gain is derived from the sale of shares that are part of the business property of the permanent establishment.

Dutch succession duty and gift taxes

Shares of a Dutch tax-resident company held by an individual who is not a resident or a deemed resident of the Netherlands will generally not be subject to succession duty in the Netherlands on the individual's death.

A gift of shares of a Dutch tax-resident company by an individual who is not a resident or a deemed resident of the Netherlands is generally not subject to Dutch gift tax.

UK stamp duty and stamp duty reserve tax

Sales or transfers of the Company's ordinary shares within a clearance service (such as Euroclear Nederland) or of the Company's ADSs within the ADS depositary receipts system will not give rise to a stamp duty reserve tax (SDRT) liability and should not in practice require the payment of UK stamp duty.

The transfer of the Company's ordinary shares to a clearance service (such as Euroclear Nederland) or to an issuer of depositary shares (such as ADSs) will generally give rise to a UK stamp duty or SDRT liability at the rate of 1.5% of consideration given or, if none, of the value of the shares. A sale of the Company's ordinary shares that are not held within a clearance service (for example, settled through the UK's CREST system of paperless transfers) will generally be subject to UK stamp duty or SDRT at the rate of 0.5% of the amount of the consideration, normally paid by the purchaser.

Capital gains tax

For the purposes of UK capital gains tax, the market values [A] of the shares of the former public parent companies of the Royal Dutch/Shell Group at the relevant dates were:

	March 31, 1982	July 20, 2005	£
Royal Dutch Petroleum Company (N.V. Koninklijke Nederlandsche Petroleum Maatschappij) which ceased to exist on December 21, 2005	1.1349	17.6625	
The "Shell" Transport and Trading Company, p.l.c. which delisted on July 19, 2005	1.4502	Not applicable	

[A] Restated where applicable to reflect all capitalisation issues since the relevant date. This includes the change in the capital structure in 2005, when Royal Dutch Shell plc became the single parent company of Royal Dutch Petroleum Company and of The "Shell" Transport and Trading Company, p.l.c., now The Shell Transport and Trading Company Limited, and one share in Royal Dutch Petroleum Company was exchanged for two Royal Dutch Shell plc A shares and one share in The "Shell" Transport and Trading Company, p.l.c. was exchanged for 0.287333066 Royal Dutch Shell plc B shares.

NON-GAAP MEASURES RECONCILIATIONS

These non-GAAP measures, also known as alternative performance measures, are financial measures other than those defined in International Financial Reporting Standards, which Shell considers provide useful information.

EARNINGS ON A CURRENT COST OF SUPPLIES BASIS

Segment earnings are presented on a current cost of supplies basis (CCS earnings), which is the earnings measure used by the Chief Executive Officer for the purposes of making decisions about allocating resources and assessing performance. On this basis, the purchase price of volumes sold during the period is based on the current cost of supplies during the same period after making allowance for the tax effect. CCS earnings therefore exclude the effect of changes in the oil price on inventory carrying amounts. The current cost of supplies adjustment does not impact cash flow from operating activities in the "Consolidated Statement of Cash Flows".

Reconciliation of income for the period to CCS earnings

	\$ million		
	2020	2019	2018
Income/(loss) attributable to Royal Dutch Shell plc shareholders	(21,680)	15,842	23,352
Income/(loss) attributable to non-controlling interest	146	590	554
Income/(loss) for the period	(21,534)	16,432	23,906
Current cost of supplies adjustment	1,833	(605)	458
Of which:			
Attributable to Royal Dutch Shell plc shareholders	1,759	(572)	481
Attributable to non-controlling interest	74	(33)	(23)
CCS earnings	(19,701)	15,827	24,364
Of which:			
Attributable to Royal Dutch Shell plc shareholders	(19,921)	15,270	23,833
Attributable to non-controlling interest	220	557	531

ADJUSTED EARNINGS

The "Adjusted Earnings" measure aims to facilitate a comparative understanding of Shell's financial performance from period to period by removing the effects of oil price changes on inventory carrying amounts and removing the effects of identified items. These items are in some cases driven by external factors and may, either individually or collectively, hinder the comparative understanding of Shell's financial results from period to period.

Adjusted Earnings

	\$ million		
	2020	2019	2018
Income/(loss) attributable to Royal Dutch Shell shareholders	(21,680)	15,842	23,352
Add: Current cost of supplies adjustment attributable to Royal Dutch Shell plc shareholders	1,759	(572)	481
Less: Identified items attributable to Royal Dutch Shell plc shareholders	(24,767)	(1,192)	2,429
Adjusted Earnings	4,846	16,462	21,404
Of which:			
Integrated Gas	4,383	8,955	9,399
Upstream	(2,852)	4,452	6,472
Oil Products	5,995	6,231	5,794
Chemicals	962	741	2,076
Corporate	(3,412)	(3,383)	(1,806)
less: Non-controlling interest	(230)	(535)	(531)

Adjusted Earnings per share

	\$ million		
	2020	2019	2018
Adjusted Earnings	4,846	16,462	21,404
Basic weighted average number of shares	7,796	8,058	8,283
Adjusted EPS	0.62	2.04	2.58

Identified Items

The objective of identified items is to remove material impacts on net income/loss arising from transactions which are generally uncontrollable and unusual (infrequent or non-recurring) in nature or giving rise to a mismatch of accounting and economic results, or certain transactions that are generally excluded from underlying results in the industry.

	\$ million		
	2020	2019	2018
Identified items before tax	(31,877)	(1,844)	3,089
Of which:			
Divestment gains/(losses)	316	2,611	3,283
Impairments	(28,061)	(4,155)	(1,020)
Fair value accounting of commodity derivatives and certain gas contracts	(1,151)	602	1,145
Redundancy and restructuring	(883)	(132)	(203)
Other	(2,098)	(770)	(116)
Total identified items before tax	(31,877)	(1,844)	3,089
Tax impact	7,100	674	(660)
Identified items after tax	(24,777)	(1,170)	2,429
Of which:			
Divestment gains/(losses)	4	2,170	3,064
Impairments	(21,267)	(3,162)	(1,112)
Fair value accounting of commodity derivatives and certain gas contracts	(1,034)	650	863
Redundancy and restructuring	(644)	(89)	(150)
Impact of exchange rate movements on tax balances	(240)	(69)	(338)
Other	(1,596)	(670)	102
Impact on CCS earnings	(24,777)	(1,170)	2,429

Of which:

Identified items attributable to Royal Dutch Shell plc shareholders	(24,767)	(1,192)	2,429
Identified items attributable to Non-controlling interest	(10)	22	–

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.

With effect from January 1, 2020, "Capital investment" is no longer presented in this announcement since Cash capital expenditure is considered to be more closely aligned with management's focus on free cash flow generation.

NON-GAAP MEASURES RECONCILIATIONS continued

The reconciliation of "Capital expenditure" to "Cash capital expenditure" is as follows.

Cash capital expenditure

	\$ million		
	2020	2019	2018
Capital expenditure [A]	16,585	22,971	23,011
Investments in joint ventures and associates [A]	1,024	743	880
Investments in equity securities [A]	218	205	187
Cash capital expenditure	17,827	23,919	24,078
Of which:			
Integrated Gas	4,301	4,299	3,819
Upstream	7,296	10,205	12,134
Oil Products	3,328	4,907	4,643
Chemicals	2,640	4,090	3,212
Corporate	262	418	269

[A] Included within Cash flow from investing activities in the "Consolidated Statement of Cash Flows".

OPERATING EXPENSES

Operating expenses is a measure of Shell's cost management performance, comprising items from the "Consolidated Statement of Income" as follows.

Operating expenses

	\$ million		
	2020	2019	2018
Production and manufacturing expenses	24,001	26,438	26,970
Selling, distribution and administrative expenses	9,881	10,493	11,360
Research and development	907	962	986
Total	34,789	37,893	39,316
Of which:			
Integrated Gas	6,555	6,667	6,014
Upstream	10,983	11,582	11,690
Oil Products	13,511	15,730	17,615
Chemicals	3,235	3,430	3,594
Corporate	505	486	402

RETURN ON AVERAGE CAPITAL EMPLOYED

Return on average capital employed (ROACE) measures the efficiency of our utilisation of the capital that we employ. In this calculation, ROACE is defined as income for the period, adjusted for after-tax interest expense, as a percentage of the average capital employed for the period. Capital employed consists of total equity, current debt and non-current debt.

Calculation of return on average capital employed

	\$ million		
	2020	2019	2018
Income for the period	(21,534)	16,432	23,906
Interest expense after tax	2,822	3,024	2,513
Income before interest expense	(18,712)	19,456	26,419
Capital employed - opening	286,887	295,398	283,477
Capital employed - closing	266,551	286,887	279,358
Capital employed - average	276,719	291,142	281,417
ROACE	(6.8)%	6.7%	9.4%

FREE CASH FLOW AND ORGANIC FREE CASH FLOW

Free cash flow is used to evaluate cash available for financing activities, including dividend payments, after investment in maintaining and growing our business.

Organic free cash flow is defined as Free cash flow excluding the cash flows from acquisition and divestment activities. It is a measure used by management to evaluate generation of cash flow without these activities.

Free cash flow and Organic free cash flow

	\$ million		
	2020	2019	2018
Cash flow from operating activities	34,105	42,178	53,085
Cash flow from investing activities	(13,278)	(15,779)	(13,659)
Free cash flow	20,828	26,399	39,426
Less: Cash inflows related to divestments [A]	4,010	7,871	10,465
Add: Tax paid on divestments	—	187	482
Add: Cash outflows related to inorganic capital expenditure [B]	817	1,400	1,740
Organic free cash flow	17,634	20,116	31,183

[A] Cash inflows related to divestments includes Proceeds from sale of property, plant and equipment and businesses, Proceeds from sale of joint ventures and associates, and Proceeds from sale of equity securities as reported in the "Consolidated Statement of Cash Flows".

[B] Cash outflows related to inorganic capital expenditure includes portfolio actions which expand Shell's activities through acquisitions and restructuring activities as reported in capital expenditure lines in the "Consolidated Statement of Cash Flows".

SHAREHOLDER DISTRIBUTION

Shareholder distribution is used to evaluate the level of cash distribution to shareholders. It is defined as the sum of Cash dividends paid to Royal Dutch Shell plc shareholders and Repurchases of shares, both of which are reported in the Consolidated Statement of Cash Flows.

Calculation of shareholder distribution

	\$ million		
	2020	2019	2018
Cash dividends paid to Royal Dutch Shell plc shareholders	(7,424)	(15,198)	(15,675)
Repurchases of shares	(1,702)	(10,188)	(3,947)
Shareholder distribution	(9,126)	(25,386)	(19,622)

DIVESTMENT PROCEEDS

Divestment proceeds represent cash received from divestment activities in the period. Management regularly monitors this measure as a key lever to deliver sustainable cash flow.

Calculation of Divestment proceeds

	\$ million		
	2020	2019	2018
Proceeds from sale of property, plant and equipment and businesses	2,489	4,803	4,366
Proceeds from sale of joint ventures and associates [A]	1,240	2,599	1,594
Proceeds from sale of equity securities	281	469	4,505
Divestment proceeds	4,010	7,871	10,465
Of which:			
Integrated Gas	503	723	3,156
Upstream	1,909	5,384	3,364
Oil Products	1,368	1,517	540
Chemicals	26	22	1
Corporate	205	225	3,405

[A] includes \$313 million (2019: \$155 million) of long-term of loan repayments received from joint ventures and associates

APPENDICES

APPENDIX 1**SIGNIFICANT SUBSIDIARIES AND OTHER RELATED UNDERTAKINGS (AUDITED)**

Significant subsidiaries and other related undertakings at December 31, 2020, are set out below. Shell's percentage of share capital is shown to the nearest whole number. All subsidiaries have been included in the "Consolidated Financial Statements" on pages 216-264, and those held directly by the Company are marked with the footnote [a]. A number of the entities listed are dormant or not yet operational. Entities that are proportionately consolidated are identified by the footnote [b]. Shell-owned shares are ordinary (voting) shares unless identified with one of the following annotations against the company name: [c] Membership interest; [d] Partnership capital; [e] Non-redeemable; [f] Ordinary, Partnership capital; [g] Ordinary, Redeemable; [h] Ordinary, Redeemable, Non-redeemable; and [i] Redeemable, Non-redeemable.

Company by country and address of incorporation	%	Company by country and address of incorporation	%
ARGENTINA			
AVENIDA PTE. ROQUE SÁENZ PENA 788, 2ND FLOOR, CIUDAD DE BUENOS AIRES, 1035		QGC Train 2 Pty Ltd	100
Bandurria Sur Investments S.A.	50	QGC Train 2 Tolling No.2 Pty Ltd	100
Shell Argentina S.A.	100	QGC Train 2 Tolling Pty Ltd	100
AUSTRALIA		QGC Train 2 UJV Manager Pty Ltd	100
C/O ALANDS ACCOUNTANTS, LEVEL 1/293 QUEEN STREET, BRISBANE, QLD 4000		QGC Upstream Finance Pty Ltd	100
Alliance Automation Pty Ltd	50	QGC Upstream Holdings Pty Ltd	100
C/O JEFFERY ZIVIN, UNIT 4, 4 GEORGE STREET, CAMBERWELL, VIC 3124		QGC Upstream Investments Pty Ltd	100
Solpod Pty Ltd	24	Queensland Gas Company Pty Ltd	100
INFRASTRUCTURE CAPITAL GROUP, LEVEL 15 MARTIN PLACE, SYDNEY, NSW 2000		Roma Petroleum Pty Limited	100
NewGen Neerabup Pty Ltd [b]	50	Select Carbon Pty Ltd	100
LEVEL 30, 275 GEORGE STREET, BRISBANE, QLD 4000		SGA (Queensland) Pty Ltd	100
BC 789 Holdings Pty Ltd	100	SGAI Pty Limited	100
BG CPS Pty Limited	100	Shell Energy Australia Pty Ltd	100
BNG (Surat) Pty Ltd	100	Shell New Energies Australia Pty Ltd	100
Condamine 1 Pty Ltd	100	Shell QGC Pty Ltd	100
Condamine 2 Pty Ltd	100	Starzap Pty Ltd	100
Condamine 3 Pty Ltd	100	Sunshine 685 Pty Limited	100
Condamine 4 Pty Ltd	100	Walloons Coal Seam Gas Company Pty Limited [g]	75
Condamine Power Station Pty Ltd	100	LEVEL 39, 111 EAGLE STREET, BRISBANE, QLD 4000	
ERM Power Limited	100	Arrow Energy Holdings Pty Ltd	50
New South Oil Pty Ltd	100	LEVEL 4, 13 CREMORNE STREET, RICHMOND, VIC 3121	
OME Resources Australia Pty Ltd	100	ESCO Pacific Holdings Pty Ltd	49
Petroleum Resources (Thailand) Pty. Limited	100	LEVEL 4, 459 LITTLE COLLINS STREET, MELBOURNE, VIC 3000	
Pure Energy Resources Pty Limited	100	1st Energy Pty Ltd	30
QCLNG Operating Company Pty Ltd [g]	75	LEVEL 42, BOURKE PLACE, 600 BOURKE STREET, MELBOURNE, VIC 3000	
QCLNG Pty Ltd	100	QGC Midstream Limited Partnership	100
QGC (B7) Pty Ltd	100	QGC Upstream Limited Partnership	100
QGC (Exploration) Pty Ltd	100	LEVEL 52, 111 EAGLE STREET, BRISBANE, QLD 4000	
QGC (Infrastructure) Pty Ltd	100	Braemar 3 Holdings Pty Ltd	100
QGC Common Facilities Company Pty Ltd	100	CCM Energy Solutions Pty Ltd	100
QGC Holdings 2 Pty Ltd	100	E.R.M. Oakey Power Pty Ltd	100
QGC Holdings 3 Pty Ltd	100	ERM Braemar 3 Power Pty Ltd	100
QGC Holdings 4 Pty Ltd	100	ERM Braemar 3 Pty Ltd	100
QGC Holdings 5 Pty Ltd	100	ERM Employee Share Plan Administrator Pty Ltd	100
QGC Holdings 6 Pty Ltd	100	ERM Energy Solutions Holdings Pty Ltd	100
QGC Holdings 7 Pty Ltd	100	ERM Financial Services Pty Ltd	100
QGC Holdings 8 Pty Ltd	100	ERM Gas Pty Ltd	100
QGC Holdings 9 Pty Ltd	100	ERM Gas WA01 Pty Ltd	100
QGC Midstream Holdings Pty Ltd	100	ERM Holdings Pty Ltd	100
QGC Midstream Investments Pty Ltd	100	ERM Innovation Labs Pty Ltd	100
QGC Midstream Land Pty Ltd	100	ERM Land Holdings Pty Ltd	100
QGC Midstream Services Pty Ltd	100	ERM Neerabup Power Pty Ltd	100
QGC Northern Forestry Pty Ltd	100	ERM Neerabup Pty Ltd	100
QGC Pty Limited	100	ERM Oakey Power Holdings Pty Ltd	100
QGC Sales Qld Pty Ltd	100	ERM Power Developments Pty Ltd	100
QGC Train 1 Pty Ltd	100	ERM Power Engineering Pty Ltd	100
QGC Train 1 Tolling Pty Ltd	100	ERM Power Generation Pty Ltd	100
QGC Train 1 UJV Manager Pty Ltd	100	ERM Power International Pty Ltd	100
		ERM Power Investments Pty Ltd	100

Company by country and address of incorporation	%	Company by country and address of incorporation	%
ERM Power Projects Pty Ltd	100	BERMUDA	
ERM Power Retail Pty Ltd	100	3RD FLOOR CONTINENTAL BUILDING, 25 CHURCH STREET, HAMILTON, HM 12	
ERM Power Services Pty Ltd	100	Gas Investments & Services Company Limited	85
ERM Power Utility Systems Pty Ltd	100	Pecten Somalia Company Limited	100
ERM Wellington 1 Holdings Pty Ltd	100	Qatar Shell GTL Limited	100
Greensense Pty Ltd	100	Shell Australia Natural Gas Shipping Limited	100
Lumaled Pty Ltd	100	Shell Bermuda (Overseas) Limited	100
Oakey Power Holdings Pty Ltd	100	Shell Deepwater Borneo Limited	100
Out Performers Trading Pty Ltd	100	Shell EP International Limited	100
Powermetric Metering Pty Ltd	100	Shell Holdings (Bermuda) Limited	100
Queensland Electricity Investors Pty Ltd	100	Shell International Trading Middle East Limited	100
Richmond Valley Solar Thermal Pty Ltd	100	Shell Markets (Middle East) Limited	100
SHELL HOUSE, 562 WELLINGTON STREET, PERTH, WA 6000		Shell Oman Trading Limited	100
Austen & Butta Pty Ltd	100	Shell Petroleum (Malaysia) Ltd	100
North West Shelf LNG Pty Ltd	100	Shell Saudi Arabia (Refining) Limited	100
SASF Pty Ltd	100	Shell Trading (M.E.) Private Limited	100
Shell Australia FLNG Pty Ltd	100	Shell Trust (Bermuda) Limited	100
Shell Australia Pty Ltd	100	Solen Life Insurance Limited	100
Shell Australia Services Company Pty Ltd	100	CLARENDON HOUSE, 2 CHURCH STREET, HAMILTON, HM 11	
Shell Development (PSC19) Pty Ltd	100	Egypt LNG Shipping Limited	25
Shell Development (PSC20) Pty Ltd	100	Sakhalin Energy Investment Company Ltd	28
Shell Energy Holdings Australia Limited	100	BRAZIL	
Shell Energy Investments Australia Pty Ltd	100	AVENIDA BRIGADEIRO FARIA LIMA N° 3.311, CONJUNTO 82, ITAIM BIBI, SÃO PAULO, 04538-133	
Shell Global Solutions Australia Pty Ltd	100	Shell Energy do Brasil Ltda.	100
Shell Tankers Australia Pty Ltd	100	AVENIDA BRIGADEIRO FARIA LIMA, 4100, 11TH FLOOR, PART V, ITAIM BIBI, SÃO PAULO, 04538-132	
Trident LNG Shipping Services Pty Ltd	100	Raizen Energia S.A.	49
TENANCY 6, LIONSGATE BUSINESS PARK, 180 PHILIP HIGHWAY, ELIZABETH SOUTH, SA 5112		AVENIDA DAS ALMIRANTE BARROSO, N° 81, 36° ANDAR, SALA 36A104, RIO DE JANEIRO, 20031-004	
Sonnen Australia Pty Limited	100	Raizen Combustíveis S.A.	54
AUSTRIA		AVENIDA DAS REPUBLICA DO CHILE 330, 23° ANDAR (PARTE) - TORRE 2, CENTRO, RIO DE JANEIRO, 20031-170	
INNSBRUCKER BUNDESSTRASSE 95, SALZBURG, 5020		BG Petroleo & Gas Brasil Ltda.	100
Salzburg Fuelling GmbH	33	AVENIDA DAS REPUBLICA DO CHILE 330, 23° ANDAR, TORRE 2, CENTRO, RIO DE JANEIRO, 20031-170	
KIENBURG 11, MATREI IN OSTTIROL, 9971		BG Comercio e Importacao Ltda.	100
Transalpine Ölleitung in Österreich GmbH	19	Avenida Paulista, 1274, 8° andar, Conjunto 23, Sala B, Bela Vista, São Paulo, 01310-100	
RETENLACKSTRASSE 3, SALZBURG, 5020		Marlim Azul Energia S.A.	30
TBG Tanklager Betriebsgesellschaft m.b.H.	50	AVENIDA REPÚBLICA DO CHILE N° 330, BLOCO 2, SALA 2001, CENTRO, RIO DE JANEIRO, 20031-170	
SCHULHOF 6/1, VIENNA, 1010		Shell Energy do Brasil Gás Ltda.	100
Shell China Holding GmbH	100	AVENIDA REPÚBLICA DO CHILE N° 330, BLOCO 2, SALA 2301, CENTRO, RIO DE JANEIRO, 20031-170	
TECH GATE, DONAU-CITY-STR. 1, VIENNA, 1220		Pecten do Brasil Servicos de Petroleo Ltda.	100
Shell Austria Gesellschaft mbH	100	AVENIDA REPÚBLICA DO CHILE N° 330, BLOCO 2, SALA 2401, CENTRO, RIO DE JANEIRO, 20031-170	
Shell Brazil Holding GmbH	100	Seopos Ltda.	100
BAHAMAS		AVENIDA REPÚBLICA DO CHILE N° 330, BLOCO 2, SALAS 2001, 2301, 2401, 2501, 3101, 3201, 3301 E 3401, CENTRO, RIO DE JANEIRO, 20031-170	
GTC CORPORATE SERVICES LIMITED, SASSOON HOUSE, SHIRLEY STREET & VICTORIA AVENUE, NASSAU		Shell Brasil Petroleo Ltda.	100
Shell Western Supply and Trading Limited	100	BRUNEI	
P.O. BOX N4805, ST. ANDREW'S COURT, FREDERICK STREET STEPS, NASSAU		BRUNEI SHELL PETROLEUM COMPANY, SENDIRIAN BERHAD, SERIA, KB2933	
Shell Bahamas Power Company Inc.	100	Brunei Shell Marketing Company Sendirian Berhad	50
BARBADOS		C/O BSP HEAD OFFICE, NDCO BLOCK, GROUND FLOOR, JALAN UTARA, PANAGA SERIA, KB3534	
ONE WELCHES, WELCHES, ST. THOMAS, BB22025		Shell Borneo Sendirian Berhad	100
Shell Trinidad and Tobago Resources SRL	100	JALAN UTARA, PANAGA, SERIA, KB2933	
BELGIUM		Brunei Shell Petroleum Company Sendirian Berhad	50
BORSBEEKSEBRUG 34/1, ANTWERPEN, 2600		Brunei Shell Tankers Sendirian Berhad	25
The New Motion Belgium BV	100	LUMUT, SERIA, KC2935	
CANTERSTEEN 47, BRUSSELS, 1000		Brunei LNG Sendirian Berhad	25
Belgian Shell S.A.	100		
New Market Belgium S.A.	100		
PANTSERSCHIPSTRAAT 331, GENT, 9000			
Shell Catalysts & Technologies Belgium N.V.	100		

APPENDIX 1 continued

Company by country and address of incorporation	%	Company by country and address of incorporation	%
BULGARIA			
48, SITNYAKOVO BLVD., SERDIKA OFFICES, 8TH FLOOR, SOFIA, 1505		PICCADILLY CENTRE, 28 ELGIN AVENUE, SUITE 201, P.O. BOX 2570, GEORGE TOWN, GRAND CAYMAN, KY1-1103	
Shell Bulgaria Ead	100	BG Egypt S.A.	100
CAMBODIA		Gas Resources Limited	100
186C, STREET NO. 155, N/A - TUOL TUMPUNG MUOY, CHAMKAR MON, PHNOM PENH		Shell Bolivia Corporation	100
Angkor Resources Company Limited	49	STERLING TRUST (CAYMAN) LIMITED, WHITEHALL HOUSE, 238 NORTH CHURCH STREET, P.O. BOX 1043, GEORGE TOWN, GRAND CAYMAN, KY1-1102	
CANADA		Beryl North Sea Limited	100
1701 HOLLIS STREET, SUITE 1400, HALIFAX, NOVA SCOTIA, B3J 3M8		CHILE	
Sable Offshore Energy Inc.	33	C/O CAREY Y CIA ABOGADOS, MIRAFLORES 222, PISO 28, SANTIAGO	
199 BAY STREET, SUITE 5300, COMMERCE COURT WEST, TORONTO, ONTARIO, M5L 1B9		Shell Chile S.A.	100
SFJ Inc.	50	CHINA	
2100, 855 - 2ND STREET S.W., CALGARY, ALBERTA, T2P 4J8		18TH FLOOR, TOWER 1, YONGLI INTERNATIONAL FINANCE CENTRE, JINYE NO. 1 ROAD, HIGH-TECH DISTRICT, XI'AN, 710075	
1745844 Alberta Ltd.	50	Yanchang and Shell Petroleum Company Limited	45
400 4TH AVENUE S.W., CALGARY, ALBERTA, T2P 0J4		23F, YANLORD SQUARE, SECTION 2, RENMIN SOUTH ROAD, CHENGDU, SICHUAN, 610016	
10084751 Canada Limited	100	Yanchang and Shell (Sichuan) Petroleum Company Limited	45
7026609 Canada Inc.	100	30/F UNIT 01-02, NO. 16 BUILDING, NO. 1 COURTYARD, JIAN GUO MEN WAI AVENUE, CHAOYANG DISTRICT, BEIJING, 100004	
7645929 Canada Limited	100	Shell (China) Limited	100
Cansolv Technologies Inc.	100	39TH FLOOR AS PLANNING-DESIGNED (41ST FLOOR AS SELF-DESIGNATED), LEATOP PLAZA, NO. 32 EAST ZHUIJIANG ROAD, ZHUIJIANG NEW TOWN, TIANHE DISTRICT, GUANGZHOU	
Coral Cibola Canada Inc.	100	Yanchang and Shell (Guangdong) Petroleum Co., Ltd.	49
FP Solutions Corporation	33	8/F, BUILDING 1, NO. 818 SHENCHANG ROAD, MINHANG DISTRICT, SHANGHAI, 201106	
LNG Canada Development Inc. [b]	40	Shell Management and Consulting Company Limited	100
SCL Pipeline Inc.	100	Shell Ventures Company Limited	100
Shell Americas Funding (Canada) Limited	100	BAISHA, HEKOU, SANSHUI DISTRICT, FOSHAN, GUANGDONG, 528133	
Shell Canada BROS Inc.	100	Shell Road Solutions Xinyue (Foshan) Co. Ltd.	60
Shell Canada Energy [c]	100	BUILDING 4, JIN CHUANG BUILDING, NO. 4560, JIN KE ROAD, PILOT FREE TRADE ZONE, SHANGHAI	
Shell Canada Limited	100	Shell (Shanghai) Technology Limited	100
Shell Canada OP Inc.	100	BUILDING NO. 2, HEBEI GUOKONG NORTHERN SILICON VALLEY HI, NO. 28 EAST ZHANQIAN STREET, QIAODONG DI, ZHANGJIAKOU, 075000	
Shell Canada Products	100	Zhangjiakou City Transport and Shell New Energy Co., Ltd	48
Shell Canada Resources [c]	100	DAYAWAN PETROCHEMICAL INDUSTRIAL PARK, HUIZHOU, GUANGDONG, 516086	
Shell Canada Services Limited	100	CNOOC and Shell Petrochemicals Company Limited	50
Shell Catalysts & Technologies Canada Inc.	100	NANJIN WAN, GAOLAN DAO, GAOLAN HARBOUR ECONOMIC ZONE, ZHUHAI, 519050	
Shell Chemicals Canada [c]	100	Shell (Zhuhai) Lubricants Company Limited	100
Shell Energy Merchants Canada Inc.	100	NO. 1 DONGXIN ROAD, JIANGSU YANGTZE RIVER INTERNATIONAL, CHEMICAL INDUSTRY PARK, ZHANGJIAGANG, JIANGSU, 215600	
Shell Energy North America (Canada) Inc.	100	Infineur (China) Co. Ltd.	50
Shell Global Solutions Canada Inc.	100	NO. 1 WANGJIA, XINMIAOZHI VILLAGE, PUYUAN TOWN, TONGXIANG, JIAXING, ZHEJIANG, 314502	
Shell Quebec Limitée	100	Shell (Zhejiang) Petroleum Trading Limited	100
Shell Trading Canada [c]	100	NO. 100, XINGANG DADAO, NANJING ECONOMIC AND TECHNOLOGICAL DEVELOPMENT ZONE, NANJING, JIANGSU, 210000	
Zeco Systems (Canada) Inc.	100	Sinopec and Shell (Jiangsu) Petroleum Marketing Company Limited	40
45 VOGEL ROAD, SUITE 310, RICHMOND HILL, ONTARIO, L4B 3P6		NO. 196, SHUANG YUAN STREET, BEIBEI ZONE, CHONGMING, 400700	
Trans-Northern Pipelines Inc.	33	Chongqing Shell Energy Company Limited	100
5305 MCCALL WAY N.E., CALGARY, ALBERTA, T2E 7N7		NO. 286 NANSEN ROAD, TIANJIN HARBOUR NANJIANG DEV. ZONE, TANGGU, BINHAI NEWDISTRICT, TIANJIN, 300452	
Alberta Products Pipe Line Ltd.	20	Shell (Tianjin) Oil and Petrochemical Company Limited	100
830 HIGHWAY NO. 6 NORTH, FLAMBOROUGH, ONTARIO, LOR 2H0		NO. 358 ZHUHUI ROAD, SUZHOU, 215000	
Sun-Canadian Pipe Line Company Limited	45	Suzhou Liyuan Retail Site Management Co., Ltd.	50
CAYMAN ISLANDS		NO. 4, 5, 12/F, UNIT A, OCEANWIDE INTERNATIONAL CENTER OFFICE, 187 YUNXIA ROAD, CBD, JIANNAN DISTRICT, WUHAN, 430000	
C/O APPLEBY GLOBAL SERVICES (CAYMAN) LIMITED, 71 FORT STREET, P.O. BOX 500, GEORGE TOWN, GRAND CAYMAN, KY1-1106		Hubei Shell Energy Company Limited	100
KE STP Company	100	NO. 68 XIANJIE, DAGANG, ZHENJIANG NEW DISTRICT, ZHENJIANG, 212132	
KE Suriname Company	100	Shell Road Solutions (Zhenjiang) Co. Ltd	100
Portfolio Holdings	100	NORTH TO GANG BEI ROAD AND EAST TO HAI GANG ROAD, NANGANG INDUSTRIAL ZONE, TIANJIN ECONOMIC-TECHNOLOGICAL DEVELOPMENT AREA, TIANJIN, 300280	
C/O APPLEBY GLOBAL SERVICES (CAYMAN) LIMITED, 71 FORT STREET, PO BOX 500, GEORGE TOWN, GRAND CAYMAN, KY1-1106		Shell (Tianjin) Lubricants Company Limited	100
KE Namibia Company	100	RM 1503, BUILDING 2, PLAZA OF ZBA, NO. 939 MINHE ROAD, NINGWEI STREET, XIAOSHAN, HANGZHOU, ZHEJIANG, 311215	
CALEDONIAN TRUST (CAYMAN) LIMITED, CALEDONIAN HOUSE, 69 DR ROY'S DRIVE P.O. BOX 1043, GEORGE TOWN, GRAND CAYMAN, KY1-1102		Zhejiang Transfar and Shell Energy Company Limited	49
Schiehallion Oil & Gas Limited	100		
CAMPBELLS, FLOOR 4, WILLOW HOUSE, CRICKET SQUARE, GEORGE TOWN, GRAND CAYMAN, KY1-9010			
BG Exploration and Production India Limited	100		
MAPLES CORPORATE SERVICES LIMITED, UGLAND HOUSE, P.O. BOX 309, GEORGE TOWN, GRAND CAYMAN, KY1-1104			
Shell North Sea Holdings Limited	100		

Company by country and address of incorporation	%
ROOM 1801, BUILDING 1, INTERNATIONAL FINANCE CENTER, NO. 347, JIANGDONG MIDDLE ROAD, JIANYE DISTRICT, NANJING, JIANGSU, 210019	
Jiangsu Shell Energy Company Limited	100
ROOM 2103, NORTH TOWER, YEFENG MODERN CENTER, NO. 161, SHAOXING ROAD, XIACHENG DISTRICT, HANGZHOU, ZHEJIANG, 310004	
Zhejiang Shell Fuels Company Limited	49
ROOM 2407-2409, BUILDING 15, FANGMAOYUAN (PHASE II), NO. 1177 HUANHU ROAD, YUELU DISTRICT, CHANGSHA, 410006	
Hunan Shell Energy Company Limited	100
ROOM 2519-2522, 25/F, GREENLAND CENTER, CROSS-AREA OF SUSONG RD AND CHANGQIN ST, SOUTH ERHUAN, BAOHE DISTRICT, HEFEI, ANHUI, 230000	
Anhui Shell Energy Company Limited	100
ROOM 518, 5TH FLOOR, OFFICE BUILDING, TIANJIN FOOD GROUP COMPANY LTD, NO. 96, QIXIANGTAI ROAD, HEXI DISTRICT, TIANJIN, 300074	
Shell North China Petroleum Group Co., Ltd.	49
ROOM 522, THE BRITISH ROAD NO. 38, CHINA (SHANGHAI) PILOT FREE TRADE ZONE, SHANGHAI, 200131	
Shell (Shanghai) Petroleum Company Limited	100
ROOM 530, 5TH FLOOR, BUILDING 1, NO. 239 GANG'AO ROAD, CHINA (SHANGHAI) FREE TRADE ZONE, SHANGHAI, 200137	
Shell Energy (China) Limited	100
ROOM 609, BUILDING NO. 1, NO. 388 NORTH MU HUA ROAD, FENGXIAN DIST, SHANGHAI, 200120	
Climate Bridge (Shanghai) Ltd.	49
THE PORT OF ZHAPU, JIAXING MUNICIPALITY, ZHEJIANG, 314201	
Zhejiang Shell Oil and Petrochemical Company Limited	100
UNIT 01, 32/F, NO. 16 BUILDING, NO. 1 COURTYARD, JIAN GUO MEN WAI AVENUE, CHAOYANG DISTRICT, BEIJING, 100004	
Shell (Beijing) Real Estate Consulting Ltd.	100
UNIT 01-08, LEVEL 31, NO. 16 BUILDING, NO. 1 JIAN GUO MEN WAI AVENUE, CHAOYANG DISTRICT, BEIJING, 100004	
Shell (China) Projects & Technology Limited	100
UNIT 09, LEVEL 31, NO. 16 BUILDING, NO. 1 JIAN GUO MEN WAI AVENUE, CHAOYANG DISTRICT, BEIJING, 100004	
Cansolv Technologies (Beijing) Company Limited	100
UNIT 1101-1104, LEVEL 11, BUILDING 1, NO. 19 CHAOYANG PARK ROAD, CHAOYANG DISTRICT, BEIJING, 100125	
Beijing Shell Petroleum Company Ltd.	49
UNIT 604, 6/F, BUILDING C, NO. 3 YUNAN FOURTH ROAD, FTPZ XIAMEN SUB-ZONE (TARIFF-FREE ZONE), XIAMEN, 361000	
Fujian Xiangyu and Shell Petroleum Company Limited	49
COLOMBIA	
CALLE 90 NO. 19 – 41, OFICINA 702-EDIFICIO QUANTUM, BOGOTÁ, 452	
Shell Colombia S.A.	100
COOK ISLANDS	
BERMUDA HOUSE, TUTAKIMOA ROAD, RAROTONGA	
Branstone (International) Limited [g]	100
CÔTE D'IVOIRE	
14, BLVD CARDE, IMM. LES HEVEAS, PLATEAU, ABIDJAN, BP V 194	
Cote d'Ivoire GNL	13
CYPRUS	
METOCHIOU STR, 37, AGIOS ANDREAS, NICOSIA, CY-1101	
Rosneft-Shell Caspian Ventures Limited	49
CZECH REPUBLIC	
ANTALA STAŠKA 2027/77, PRAHA 4, 140 00	
Shell Czech Republic a.s.	100
DENMARK	
BREDGADE 30, KØBENHAVN K, 1260	
TetraSpar Demonstrator ApS	66
EGESKOVVEJ 265, FREDERICIA, 7000	
A/S Dansk Shell	100
Shell EP Holdingselskab Danmark ApS	100
NÆRUM HOVEDGADE 8, NÆRUM, 2850	
DCC & Shell Aviation Denmark A/S	49

Company by country and address of incorporation	%
EGYPT	
127 ABDEL AZIZ FAHMY ST., HELIOPOLIS, P.O. BOX 5958, CAIRO, 5958	
Alam El Shawish Petroleum Company [b]	20
Badr Petroleum Company [b]	50
North Alam El-Shawish Petroleum Company [b]	50
North Um Baraka Petroleum Company [b]	50
Obaiyed Petroleum Company [b]	50
Sitra Petroleum Company [b]	50
Tiba Petroleum Company [b]	26
West Sitra Petroleum Company [b]	50
28 ROAD 270, MAADI, CAIRO	
Burillus Gas Company S.A.E. [b]	25
38 STREET NO. 270, MAADI, CAIRO	
Rashid Petroleum Company S.A.E. [b]	50
BUSINESS VIEW BUILDING, NO. 79, 90 STREET (SOUTH), FIFTH SETTLEMENT- NEW CAIRO, CAIRO, 11835	
Shell Egypt Trading	100
Shell Lubricants Egypt	100
CITY OF RASHID, EL BEHERA GOVERNORATE	
El Behera Natural Gas Liquefaction Company S.A.E.	36
IDKU Natural Gas Liquefaction Company S.A.E.	38
The Egyptian LNG Company S.A.E.	36
The Egyptian Operating Company for Natural Gas Liquefaction Projects S.A.E.	36
FINLAND	
TEKNOBULEVARDI 3-5, VANTAA, 01530	
Shell Aviation Finland Oy	100
FRANCE	
10 PLACE DE CATALOGNE, PARIS, 75014	
Accurasea	100
Airesol Energies	67
Airesol Energies 2	67
Airesol Energies 8	67
Airesol Energies 9	67
Centrale Photovoltaïque Bouches-du-Rhône 1	100
Centrale Photovoltaïque Haute-Vienne 1	100
Centrale Photovoltaïque Landes 1	100
Centrale Photovoltaïque Var 1	100
Eolfi Offshore France	10
Eolfi SAS	100
Eoliennes du Gentilhomme	100
Ferme Eolienne Flottante de Groix & Belle-Ile	29
Ferme Eolienne Flottante Stenella Rhône	100
Parc Eolien Aisne 1	100
Parc Eolien Corrèze 1	100
Parc Eolien Côtes Armor 1	100
Parc Eolien de la Vrigne	100
Parc Eolien De Mervent	100
Parc Eolien Haute-Saône 1	100
Parc Eolien HMI	100
Parc Eolien Jura 1	100
Parc Eolien Marne 1	100
Parc Eolien Oise 1	100
Parc Eolien Oise 2	100
Parc Eolien Somme 1	100
Parc Eolien Somme 2	100
Parc Eolien Yonne 1	100
92 AVENUE CHARLES DE GAULLE, CS 30082, NEUILLY SUR SEINE, 92522	
The New Motion France SAS	100

APPENDIX 1 continued

Company by country and address of incorporation	%	Company by country and address of incorporation	%
FRANCE <i>continued</i>		euroShell Deutschland GmbH & Co. KG	100
AÉROPORT ROISSY CHARLES DE GAULLE, ZONE DE FRÈT 1, 3 RUE DES VIGNES, TREMBLAY-EN-FRANCE, 93290		euroShell Deutschland Verwaltungsgesellschaft mbH	100
Groupement Pétrolier Aviation SNC	20	Shell Deutschland Additive GmbH	100
CHEMIN DÉPARTEMENTAL 54, BERRE-L'ETANG, 13130		Shell Deutschland Oil GmbH	100
Infineum France	50	Shell Energy Deutschland GmbH	100
ORLY SUD NO. 144 - BAT. 438, ORLY AEROGARES, 94541		Shell Energy Retail GmbH	100
Service Aviation Paris SNC	33	Shell Erdgas Beteiligungsgesellschaft mbH	100
ROUTE D'ARLES, LA FENOUILLERE, FOS-SUR-MER, 13270		Shell Erdgas Marketing GmbH & Co. KG	75
Ste du Pipeline Sud Européen S.A.	21	Shell Erdöl und Erdgas Exploration GmbH	100
TOUR PACIFIC, 11/13 COURS VALMY - LA DÉFENSE, PUTEAUX, 92800		Shell Exploration and Development Libya GmbH I	100
Avitair SAS	100	Shell Exploration and Production Colombia GmbH	100
Shell Retraites SAS	100	Shell Exploration and Production Libya GmbH	100
Société de Gestion Mobilière et Immobilière SAS	100	Shell Exploration et Production du Maroc GmbH	100
Société des Pétroles Shell SAS	100	Shell Exploration New Ventures One GmbH	100
GERMANY		Shell Exploration und Produktion Deutschland GmbH	100
AM HAUPTTOR, BAU 8322, LEUNA, 06237		Shell Hydrogen Deutschland GmbH	100
CRI Deutschland GmbH	100	Shell Tunisia Offshore GmbH	100
Shell Catalysts & Technologies Leuna GmbH	100	Shell Verwaltungsgesellschaft für Erdgasbeteiligungen mbH	100
AM RIEDBACH 1, WILDPOLDRIED, 87499		SPNV Deutschland Beteiligungsges. mbH	100
Sonnen eServices Deutschland GmbH	100	WATTSTRASSE 11, BERLIN, 13355	
Sonnen eServices GmbH	100	The New Motion Deutschland GmbH	100
Sonnen GmbH	100	WEWORK EUROPAPASSAGE, HERMANNSTRASSE 13, HAMBURG, 20095	
Sonnen Holding GmbH	100	OLF Deutschland GmbH	50
AUF DEM SCHOLLBRUCH 24-26, GELSENKIRCHEN, 45899		WILLINGHUSENER WEG 5 D-E, OSTSTEINBEK, 22113	
Rheinland Kraftstoff GmbH	100	Carissa Einzelhandel- und Tankstellenservice GmbH & Co. KG	100
BERGHÄUSENER STRASSE 96, LANGENFELD, 40764		ZUM OELHAFEN 207, WILHELMSHAVEN, 26384	
AGES Maut System GmbH & Co. KG	25	Nord-West Oelleitung GmbH [b]	20
BRUEHLER STR. 95, WESSELING, 50389		GHANA	
Wasserbeschaffungsverband Wesseling-Hersel	35	NO 4 MOMOTSE AVENUE, ADABRAKA, ACCRA, GP 1632	
CAFFAMACHERREIHE 5, HAMBURG, 20355		Shell Energy Ghana Limited	100
BEB Holding GmbH [b]	50	GIBRALTAR	
DEA-SCHOLVEN-STR., KARLSRUHE, 76187		57/63 LINE WALL ROAD, P.O. BOX 199, GIBRALTAR	
Mineraloelraffinerie Oberrhein Verwaltungs GmbH	32	Shell LNG Gibraltar Limited	51
Oberrheinische Mineraloelwerke GmbH [b]	42	GREECE	
EINSTEINSTR. 47, VAIHINGEN AN DER ENZ, 71665		151 KIFISIAS AVE., MAROSSI, ATHENS, 15124	
Enersol GmbH	100	Shell & MOH Aviation Fuels A.E.	51
EUREF-CAMPUS 10-11, BERLIN, 10829		GREENLAND	
H2 Mobility Deutschland GmbH and Co. KG	28	P.O. BOX 510, ISSORTARFIMMUT 6, 102, NUUSSUAQ, 3905	
FRANZÖSISCHE STRASSE 33 A-C, BERLIN, 10117		Shell Greenland A/S	100
Toll4Europe GmbH	15	GUAM	
GODORFER HAUPTSTRASSE 186, KÖLN, 50997		643 CHALAN SAN ANTONIO, SUITE 100, TAMUNING, GU 96911	
Rhein-Main-Rohrleitungstransportgesellschaft mbH [b]	63	Shell Guam Inc.	100
HOHE-SCHAAR-STRASSE 36, HAMBURG, 21107		HONG KONG	
Shell Global Solutions (Deutschland) GmbH	100	3 SCENIC ROAD, CHEK LAP KOK, LANTAU	
NEUSSER LANDSTRASSE 16, KÖLN, 50735		AFSC Operations Limited	11
Deutsche Infineum GmbH & Co. KG	50	AFSC Refuelling Limited	11
PASSOWER CHAUSSEE 111, SCHWEDT/ODER, 16303		35/F AIA KOWLOON TOWER, LANDMARK EAST, 100 HOW MING STREET, KWUN TONG, KOWLOON	
PCK Raffinerie GmbH [b]	38	Fulmart Limited	100
PAUL WASSERMANN STR. 3, MUNICH, 81829		Ocean Century Tf Limited [g]	100
Deutsche Transalpine Oelleitung GmbH	19	Shell Developments (HK) Limited [g]	100
RIETHORST 12, HANNOVER, 30659		Shell Hong Kong Limited	100
BEB Erdgas und Erdöl GmbH & Co. KG [b]	50	Shell Korea Limited	100
Erdöl-Raffinerie Deurag-Nerag GmbH	50	Shell Macau Limited	100
ST.-LEONHARD-STRASSE 26, BALZHAUSEN, 86483		ESSO TSING YI TERMINAL, LOT 46 TSING YI ROAD, TSING YI ISLAND, NEW TERRITORIES	
Energeticum Energiesysteme GmbH	100	Hong Kong Response Limited	25
SUHRENKAMP 71 - 77, HAMBURG, 22335		HUNGARY	
Carissa Verwaltungsgesellschaft mbH	100	BOCSKAI ÚT 134-146., BUDAPEST, HU 1113	
Deutsche Shell GmbH	100	Shell Hungary Trading close Company Limited by shares	100
Deutsche Shell Holding GmbH	100		

Company by country and address of incorporation	%	Company by country and address of incorporation	%
INDIA			
102, PRESTIGE SIGMA, VITTA MALLYA ROAD, BANGALORE, 560001		VIA SUSA 40, TORINO, 10138	
Shell MRPL Aviation Fuels and Services Limited	50	Shell Fleet Solutions Consorzio	100
2ND FLOOR, CAMPUS 4A, RMZ MILLENNIA BUSINESS PARK II, 143 DR MGR ROAD, KANDHANCHAVADY, PERUNGUDI, CHENNAI, TN 600096		VIA TORTONA 25, MILANO, 20144	
Shell Energy Marketing and Trading India Private Limited	100	BG Italia Power S.r.l.	100
Shell India Markets Private Limited	100	Brindisi LNG S.r.l.	100
3-C WORLD TRADE TOWER, NEW BARAKHAMBA LANE, NEW DELHI, 110001		VIA VITTORIO PISANI 16, MILANO, 20124	
BG India Energy Private Limited	100	Alle S.r.l.	100
BG India Energy Services Private Limited	100	Aquila S.p.A.	100
BG India Energy Solutions Private Limited	100	Development S.r.l.	100
BG LNG Regas India Private Limited	100	Marco Polo Solar S.r.l.	100
OFFICE NO 2008, WESTGATE - D BLOCK, NR YMCA CLUB, S.G.HIGHWAY, MAKARBA, AHMEDABAD, GUJARAT, 380051		Ramacca Solar S.r.l.	100
Hazira Port Private Limited	100	Shell Energy Italia S.r.l.	100
Shell Energy India Private Limited	100	Shell Italia Holding S.p.A.	100
PLATINA TOWER MG ROAD, NEAR SIKANDARPUR METRO STATION, SECTION, HARYANA, GURUGRAM, 122001		Shell Italia Oil Products S.r.l.	100
Greenlots Technology India LLP	100		
TIKI TAR INDUSTRIES VILLAGE ROAD, NEAR BHANDUP VILLAGE, BHANDUP WEST MUMBAI, MUMBAI, MH 400078		JAPAN	
Tiki Tar and Shell India Private Limited	50	1-1-5 WAKAMIYA-CHO, SUMA-KU, KOBE-SHI, HYOGO, 654-0049	
		Y.K. Nishi-Kobe Bosai Center	33
		16F PACIFIC CENTURY PLACE MARUNOUCHI, 1-11-1, MARUNOUCHI, CHIYODA-KU, TOKYO, 100-6216	
		Shell Japan Limited	100
		Sonnen Japan Kabushiki Kaisha	100
		2-3, KANDA, AWAJI-CHO, CHIYODA-KU, TOKYO, 101-0063	
		Sakhalin LNG Services Company Ltd.	50
		4052-2 NAKATSU, AIKAWA-CHO, AIKO-GUN, KANAGAWA, 243-0303	
		K.K. SVC Tokyo	100
		DAIBA FRONTIER BUILDING, 2-3-2, DAIBA, MINATO-KU, TOKYO, 135-8074	
		K.K. Red and Yellow	100
		Shell Lubricants Japan K.K.	100
INDONESIA		JERSEY	
TALAWERA OFFICE PARK 22-26TH FLOOR, JL. LETJEN. TB SIMATUPANG KAV. 22-26, JAKARTA SELATAN, JAKARTA, 12430		13 CASTLE STREET, ST. HELIER, JE1 1ES	
PT Shell LNG Indonesia	100	Shell Service Station Properties Limited	100
PT. Shell Indonesia	100		
PT. Shell Manufacturing Indonesia	100	LUXEMBOURG	
		412F, ROUTE D'ESCH, LUXEMBOURG, L-2086	
IRAQ		Denham International Power SCSp [d]	32
KHOR AL ZUBAIR, BASRAH		7, RUE DE L'INDUSTRIE, BERTRANGE, LUXEMBOURG, L-8005	
Basrah Gas Company	44	Shell Luxembourg Sarl	100
		7, RUE DE L'INDUSTRIE, BERTRANGE, LUXEMBOURG, L-8069	
IRELAND		Shell Finance Luxembourg Sarl	100
1ST FLOOR, TEMPLE HALL, TEMPLE ROAD, BLACKROCK, CO. DUBLIN, A94 K3K0		Shell Treasury Luxembourg Sarl	100
Asiatic Petroleum Company (Dublin) Limited	100		
Irish Shell Trust Designated Activity Company	100	MACAU	
SUITE 7 NORTHWOOD HOUSE, NORTHWOOD BUSINESS PARK, SANTRY, DUBLIN, 9		876 AVENIDA DA AMIZADE, EDIFICIO MARINA GARDENS, ROOM 310, 3RD FLOOR	
Shell and Topaz Aviation Ireland Limited	50	Shell Macau Petroleum Company Limited	100
ISLE OF MAN		MALAYSIA	
EUROMANX HOUSE, FREEPORT, BALLASALLA, IM9 2AP		12TH FLOOR, MENARA SYMPHONY, NO. 5, JALAN PROF. KHOO KAY KIM, SEKSYEN 13, PETALING JAYA/SELANGOR DARUL EHSAN, 46200	
Shell Marine Personnel (I.O.M.) Limited	100	P S Terminal Sendirian Berhad	35
Shell Ship Management Limited	100	Pertini Vista Sdn. Bhd.	100
FIRST NAMES HOUSE, VICTORIA ROAD, DOUGLAS, IM2 4DF		Provista Ventures Sdn. Bhd.	100
Petrolon Europe Limited	100	Sarawak Shell Berhad	100
Petrolon International Limited	100	Shell Business Service Centre Sdn. Bhd.	100
		Shell Global Solutions (Malaysia) Sdn. Bhd.	100
ISRAEL		Shell Malaysia Trading Sendirian Berhad	100
DERECH ABA HILEL 16, RAMAT GAN, 5250608		Shell MDS (Malaysia) Sendirian Berhad	72
Ravin AI Ltd.	36	Shell New Ventures Malaysia Sdn. Bhd. [g]	100
		Shell People Services Asia Sdn. Bhd.	100
ITALY		Shell Sabah Selatan Sendirian Berhad	100
PIAZZA SAN SILVESTRO 8, ROME, 00187		Shell Timur Sdn. Bhd.	70
Shell International Exploration and Development Italia S.p.A.	100		
Shell Italia E&P S.p.A.	100		
STRADA DI SCORRIMENTO 2, VADO LIGURE, SAVONA, 17047			
Infineum Italia S.r.l.	50		
VIA AUTOSTRADA 32, BERGAMO, 24126			
Sonnen eServices Italia S.r.l.	100		
VIA GIORGIO RIBOTTA 51, ROME, 00144			
Societa' Oleodotti Meridionali S.p.A.	30		
VIA MUGGIA #1, SAN DORIGO DELLA VALLE, TRIESTE, 34147			
Societa Italiana per l'Oleodotto Transalpino S.p.A.	19		

APPENDIX 1 continued

Company by country and address of incorporation	%	Company by country and address of incorporation	%
MALAYSIA <i>continued</i>			
KENSINGTON GARDENS, NO. U1317, LOT 7616, JALAN JUMIDAR BUYONG, LABUAN F.T., 87000		BG Gas Sao Paulo Investments B.V.	100
Shell Treasury Malaysia (L) Limited	100	BJS Oil Operations B.V.	80
LEVEL 30, TOWER 1, PETRONAS TWIN TOWERS, KLCC, KUALA LUMPUR/FEDERAL TERRITORY, 50088		BJSA Exploration and Production B.V.	100
P S Pipeline Sendirian Berhad	50	Chosun Shell B.V.	100
LEVEL 8, SYMPHONY HOUSE, BLOCK D13, PUSAT DAGANGAN DANA 1, JALAN PJU 1A/46, PETALING JAYA/SELANGOR DARUL EHSAN, 47301		CrossWind Beheer B.V. [b]	80
Bonuskad Loyalty Sdn. Bhd. [g]	33	Crosswind C.V. [b] [d]	80
LOT 7689 AND LOT 7690, SECTION 64, KUCHING TOWN LAND DISTRICT, JALAN PENDING, KUCHING, SARAWAK, 93450		Geocombinatie Leeuwarden B.V.	30
IOT Management Sdn. Bhd.	7	HKN LP 1 B.V.	100
Tanjung Manis Oil Terminal Management Sdn. Bhd.	14	HKN LP 2 B.V.	100
SUITE 13 03, 13 FLOOR, MENARA TAN & TAN, 207 TUN RAZAK, KUALA LUMPUR/FEDERAL TERRITORY, 50400		HKN LP 3 B.V.	100
Kebabangan Petroleum Operating Company Sdn. Bhd. [b]	30	HKN LP 4 B.V.	100
MAURITIUS		HKN LP 5 B.V.	100
33 EDITH CAVELL STREET, PORT LOUIS, 11324		HKN LP 6 B.V.	100
Pennzoil Products International Company	100	Hkz Lp 18 B.V.	100
6TH FLOOR, TOWER A, 1 CYBERCITY, EBENE, 72201		Hkz Lp 19 B.V.	100
BG Mauritius LNG Holdings Ltd	100	Hkz Lp 20 B.V.	100
BG Mumbai Holdings Limited	100	Hkz Lp 21 B.V.	100
MEXICO		Hkz Lp 22 B.V.	100
AVENIDA CERRO GORDO DEL CAMPESTRE, NUMBER 201, INTERIOR 202, OF COLONIA LAS QUINTAS, LEÓN, GUANAJUATO, 37125		Integral Investments B.V.	100
Mega Gasolineras SA de CV	50	Jordan Oil Shale Company B.V.	100
AVENIDA PASEO DE LAS PALMAS 340, 1ST FLOOR, COLONIA LOMAS DE CHAPULTEPEC, DELEGACIÓN MIGUEL HIDALGO, CIUDAD DE MÉXICO, 11000		LNG Shipping Operation Services Netherlands B.V.	100
Gas Del Litoral, S. de R.L. de C.V.	75	Netherlands Alng Holding Company B.V.	100
Shell Energy Mexico, S.A. de C.V.	100	Raffinaderij Shell Mersin N.V.	100
Shell Exploración y Extracción de México, S.A. de C.V.	100	RESCO B.V.	100
Shell México Gas Natural, S. de R.L. de C.V.	100	Rotterdam Hydrogen Company B.V.	100
Shell México, S.A. de C.V.	100	Salm Petroleum Development N.V. [b]	50
Shell Servicios México, S.A. de C.V.	100	Salm Petroleum Services B.V. [b]	50
Shell Solutions Mexico S.A. de C.V.	100	Shell Abu Dhabi B.V.	100
Shell Trading México, S. de R.L. de C.V.	100	Shell Additives Holdings (I) B.V.	100
GUILLERMO GONZÁLEZ CAMARENA NO. 400, SANTA FÉ, ALVARO OBREGÓN, CIUDAD DE MÉXICO, 01210		Shell Additives Holdings (II) B.V.	100
Comercial Importadora S.A. De C.V.	50	Shell Albania Block 4 B.V.	100
Concilia Asesores y Servicios, S.A. de C.V.	50	Shell and Vivo Lubricants B.V.	50
NETHERLANDS		Shell Brazil Holding B.V.	100
2E HAVENSTRAAT 5B, IJMUIDEN, 1976 CE		Shell Business Development Central Asia B.V.	100
Noordzeewind B.V.	50	Shell Caspian B.V.	100
Noordzeewind C.V. [d]	50	Shell Caspian Pipeline Holdings B.V.	100
AMSTERDAMSEWEG 55, 1182 GP AMSTELVEEN, P.O. BOX 75650, LUCHTHAVEN SCHIPHOL, 1118 ZS		Shell China B.V.	100
Amsterdam Schiphol Pijpleiding Beheer B.V.	40	Shell China Holdings B.V.	100
ANTARESLAAN 39, P.O. BOX 3068, 2130 KB, HOOFDORP, 2132 JE		Shell Deepwater Tanzania B.V.	100
Multi Tank Card B.V.	30	Shell Development Iran B.V.	100
BUTAANWEG 215, VONDELINGPLAAT, ROTTERDAM, 3196 KC		Shell E and P Offshore Services B.V.	100
N.V. Rotterdam-Rijn Pijpleiding Maatschappij [b]	56	Shell Egypt N.V. [e]	100
CAREL VAN BYLANDLAAN 16, THE HAGUE, 2596 HR		Shell Energy Europe B.V.	100
Shell International Exploration and Production B.V.	100	Shell EP Holdings (EE&ME) B.V.	100
CAREL VAN BYLANDLAAN 30, THE HAGUE, 2596 HR		Shell EP Middle East Holdings B.V.	100
Attiki Gas B.V.	100	Shell EP Oman B.V.	100
B.V. Dordtsche Petroleum Maatschappij	100	Shell EP Russia Investments (III) B.V.	100
B.V. Petroleum Assurantie Maatschappij	100	Shell EP Russia Investments (V) B.V.	100
BG Gas Brazil E&P 12 B.V.	100	Shell EP Somalia B.V.	100
BG Gas Brazil Holdings B.V.	100	Shell EP Wells Equipment Services B.V.	100
BG Gas International B.V.	100	Shell Exploration and Production (100) B.V.	100
BG Gas International Holdings B.V.	100	Shell Exploration and Production (101) B.V.	100
BG Gas Netherlands Holdings B.V.	100	Shell Exploration and Production (102) B.V.	100
		Shell Exploration and Production (103) B.V.	100
		Shell Exploration and Production (105) B.V.	100
		Shell Exploration and Production (106) B.V.	100
		Shell Exploration and Production (107) B.V.	100

Company by country and address of incorporation	%
Shell Exploration and Production (82) B.V.	100
Shell Exploration and Production (84) B.V.	100
Shell Exploration and Production (89) B.V.	100
Shell Exploration and Production (90) B.V.	100
Shell Exploration and Production (91) B.V.	100
Shell Exploration and Production (92) B.V.	100
Shell Exploration and Production (93) B.V.	100
Shell Exploration and Production (94) B.V.	100
Shell Exploration and Production (96) B.V.	100
Shell Exploration and Production (99) B.V.	100
Shell Exploration and Production (L1) B.V.	100
Shell Exploration and Production (LVIII) B.V.	100
Shell Exploration and Production (LXII) B.V.	100
Shell Exploration and Production (LXV) B.V.	100
Shell Exploration and Production (LXVI) B.V.	100
Shell Exploration and Production (LXXI) B.V.	100
Shell Exploration and Production (LXXV) B.V.	100
Shell Exploration and Production (XL) B.V.	100
Shell Exploration and Production Brunei B.V.	100
Shell Exploration and Production Holdings B.V.	100
Shell Exploration and Production Investments B.V.	100
Shell Exploration and Production Mauritania (C10) B.V.	100
Shell Exploration and Production Mauritania (C19) B.V.	100
Shell Exploration and Production Services (RF) B.V.	100
Shell Exploration and Production South Africa B.V.	100
Shell Exploration and Production Ukraine I B.V.	100
Shell Exploration and Production Ukraine Investments (I) B.V.	100
Shell Exploration and Production Ukraine Investments (II) B.V.	100
Shell Exploration and Production West-Siberia B.V.	100
Shell Exploration B.V.	100
Shell Exploration Company (RF) B.V.	100
Shell Exploration Company (West) B.V.	100
Shell Exploration Company B.V.	100
Shell Exploration Venture Services B.V.	100
Shell Finance (Netherlands) B.V.	100
Shell Gas & Power Developments B.V.	100
Shell Gas (LPG) Holdings B.V.	100
Shell Gas B.V.	100
Shell Gas Iraq B.V.	100
Shell Gas Nigeria B.V.	100
Shell Gas Venezuela B.V.	100
Shell Generating (Holding) B.V.	100
Shell Geothermal B.V.	100
Shell Global Solutions (Eastern Europe) B.V.	100
Shell Global Solutions Services B.V.	100
Shell Hydrogen Operations & Production BV	100
Shell Information Technology International B.V.	100
Shell Integrated Gas Oman B.V.	100
Shell International B.V.	100
Shell International Finance B.V. [a]	100
Shell Internationale Research Maatschappij B.V.	100
Shell Internet Ventures B.V.	100
Shell Iraq Petroleum Development B.V.	100
Shell Iraq Services B.V.	100
Shell Kazakhstan B.V.	100
Shell Kazakhstan Development B.V.	100
Shell Kuwait Exploration and Production B.V.	100

Company by country and address of incorporation	%
Shell LNG Bunkering B.V.	100
Shell LNG Port Spain B.V.	100
Shell Manufacturing Services B.V.	100
Shell Mozambique B.V.	100
Shell Namibia Upstream B.V.	100
Shell Nanhai B.V.	100
Shell Nederland B.V.	100
Shell Netherlands Canada Financing B.V.	100
Shell New Energies Holding Europe B.V.	100
Shell New Energies NL B.V.	100
Shell Offshore (Personnel) Services B.V.	100
Shell Offshore Services B.V.	100
Shell Offshore Upstream South Africa B.V.	100
Shell OKLNG Holdings B.V.	100
Shell Olie OG Gas Holding B.V. [i]	100
Shell Oman Exploration and Production B.V.	100
Shell Overseas Holdings (Oman) B.V.	100
Shell Overseas Investments B.V.	100
Shell Petroleum N.V. [a]	100
Shell Philippines Exploration B.V.	100
Shell Project Development (VIII) B.V.	100
Shell RDS Holding B.V.	100
Shell Sakhalin Holdings B.V.	100
Shell Sakhalin Services B.V.	100
Shell Salym Development B.V.	100
Shell Sao Tome and Principe B.V.	100
Shell Services Oman B.V.	100
Shell Shared Services (Asia) B.V.	100
Shell South Syria Exploration B.V.	100
Shell Trademark Management B.V.	100
Shell Trading Russia B.V.	100
Shell Upstream Albania B.V.	100
Shell Upstream Development B.V.	100
Shell Upstream Indonesia Services B.V.	100
Shell Upstream Turkey B.V.	100
Shell Ventures B.V.	100
Shell Ventures Investments B.V.	100
Shell Western LNG B.V.	100
Shell Windenergy Netherlands B.V.	100
Shell Windenergy NZW I B.V.	100
Syria Shell Petroleum Development B.V. [h]	65
Tamba B.V.	50
The Green Near Future 5 B.V.	100
CHEMIEWEG 25, P.O. BOX 6060, MOERDIJK, 4780 LN	
Shell Nederland Chemie B.V. [g]	100
DR. HUB VAN DOORNEWEG 183, TILBURG, 5026 RD	
Travis Road Services International B.V.	34
EUROPAWEG 975, MAASVLAKTE, ROTTERDAM, 3199 LC	
Maasvlakte Olie Terminal C.V. [d]	16
HENRI BERSSENBRUGGESTRAAT 9, DEVENTER, 7425 SB	
B.R.E. B.V.	100
Waalbrug Exploitatie Maatschappij B.V.	100
HERENSTREEK 47, NIEUW-DORDRECHT, 7885 AT	
Energiepark Pottendijk B.V.	100
Pottendijk Energie B.V.	100
Pottendijk Wind B.V.	100
Pottendijk Zon B.V.	100

APPENDIX 1 continued

Company by country and address of incorporation	%
NETHERLANDS <i>continued</i>	
HERIKERBERGWEG 238, AMSTERDAM, 1101 CM	
Bogstone Holding B.V.	51
Cicerone Holding B.V.	51
Infineum Holdings B.V.	50
HOPPLEIN 20, ROTTERDAM, 3032 AC	
Shell TapUp B.V.	100
LANGE KLEIWEG 40, RIJSWIJK, 2288 GK	
Shell Global Solutions International B.V.	100
MUIDERSTRAAT 1, AMSTERDAM, 1011 PZ	
Caspi Meruerty Operating Company B.V. [b]	40
OOSTDUINLAAN 2, THE HAGUE, 2596 JM	
North Caspian Operating Company N.V. [b]	17
OOSTERHORN 36, FARMSUM, 9936 HD	
Zeolyst C.V.	50
P.O. BOX 477, GRONINGEN, 9700 AL	
Gasterra B.V.	25
POLARIS AVENUE 81, P.O. BOX 2047, 2130 GE, HOOFFDORP, 2132 JH	
Loyalty Management Netherlands B.V.	40
POSTBUS 157, THE HAGUE, 2501 CD	
Shell Pensioenbureau Nederland B.V.	100
REACTORWEG 301, UNIT 1.3, UTRECHT, 3542 AD	
Paqell B.V.	50
RIGAKADE 20, AMSTERDAM, 1013 BC	
The New Motion B.V.	100
SCHEPERSMAAT 2, ASSEN, 9405 TA	
Nederlandse Aardolie Maatschappij B.V.	50
STATIONSPLEIN 45, ROTTERDAM, 3013 AK	
Fitzroy C.V. [d]	20
W2C GP B.V.	20
STRAWINSKYLAAN 1343, AMSTERDAM, 1077 XX	
Shell & AMG Recycling B.V. [d]	50
STRAWINSKYLAAN 1345, AMSTERDAM, 1077 XX	
Karachaganak Petroleum Operating B.V. [b]	29
STRAWINSKYLAAN 3127 8E ETAGE, AMSTERDAM, 1077 ZX	
Shell Technology Ventures Fund 1 B.V.	52
VONDELINGENWEG 601, VONDELINGENPLAAT, ROTTERDAM, 3196 KK	
Ellba B.V. [b]	50
Ellba C.V. [b] [d]	50
Shell MSPO 2 Holding B.V.	100
Shell Nederland Raffinaderij B.V.	100
WEENA 70, ROTTERDAM, 3012 CM	
Blauwind II C.V. [d]	20
Blauwind Management II B.V.	20
Euroshell Cards B.V.	100
Shell Chemicals Europe B.V.	100
Shell Downstream Services International B.V.	100
Shell Lubricants Supply Company B.V.	100
Shell Nederland Verkoopmaatschappij B.V.	100
Shell Trading Rotterdam B.V.	100
Snijders Olie B.V.	100
Tankstation Exploitatie Maatschappij Holding B.V.	100
WEENA 762, 9E VERDIEPING, ROTTERDAM, 3014 DA	
Guara B.V.	30
Iara B.V.	4
Lapa Oil & Gas B.V.	30
Libra Oil & Gas B.V.	20
Tupi B.V.	23
WINTHONTLAAN 200, UTRECHT, 3526 KV	
Solar-EW II B.V.	100
Company by country and address of incorporation	%
ZEELANDSESTRAAT 1, MILLINGEN AAN DE RIJN, 6566 DE	
SolarNow B.V.	23
NEW ZEALAND	
C/O BAKER TILLY STAPLES RODWAY TARANAKI LIMITED, 109-113 POWDERHAM STREET, P.O. BOX 146, NEW PLYMOUTH, TARANAKI, 4340	
Energy Finance NZ Limited	100
Energy Holdings Offshore Limited	100
Shell (Petroleum Mining) Company Limited	100
Shell Energy Asia Limited	100
Shell Investments NZ Limited	100
Southern Petroleum No Liability	100
MERCER (N.Z.) LIMITED, FLOOR 2, 20 CUSTOMHOUSE QUAY, WELLINGTON, 6011	
Shell New Zealand Pensions Limited	100
NIGERIA	
CORPORATE OFFICE, INTELS ABA ROAD ESTATE, KM16 ABA EXPRESSWAY, PORT HARCOURT, 500211	
Nigeria LNG Limited	26
NLNG Shipping Management Limited	20
FREEMAN HOUSE, 21/22 MARINA, P.M.B. 2418, LAGOS	
BG Exploration and Production Nigeria Limited	100
BG Upstream A Nigeria Limited	100
Delta Business Development Limited	100
Shell Exploration and Production Africa Limited	100
Shell Nigeria Business Operations Limited	100
Shell Nigeria Closed Pension Fund Administrator Ltd	100
Shell Nigeria Exploration and Production Company Ltd	100
Shell Nigeria Exploration and Production Echo Limited	100
Shell Nigeria Exploration Properties Alpha Limited	100
Shell Nigeria Exploration Properties Beta Limited	100
Shell Nigeria Exploration Properties Charlie Limited	100
Shell Nigeria Gas Ltd (SNG)	100
Shell Nigeria Infrastructure Development Limited	100
Shell Nigeria Offshore Prospecting Limited	100
Shell Nigeria Ultra Deep Limited	100
Shell Nigeria Upstream Ventures Limited	100
Shell Thrift & Loan Fund Trustees Nig Ltd	99
SHELL INDUSTRIAL AREA, P.O. BOX 263, RIVERS STATE, PORT HARCOURT, 500272	
The Shell Petroleum Development Company of Nigeria Limited	100
NORWAY	
BYGG 6, DRAMMENSVEIEN 134, OSLO, 0277	
Aviation Fuelling Services Norway AS	50
HELGANESEVEGEN 59, AVALDSNES, KARMØY, 4262	
Gasnor AS	100
KARENLSYLT ALLÉ 2, OSLO, 0278	
Shell New Energies Norway AS	100
KONGSGÅRDBAKKEN 1, STAVANGER, 4005	
Enhanced Well Technologies Group AS	22
MONGSTAD 71A, MONGSTAD, 5954	
Technology Centre Mongstad DA	8
NYHAMNA, AUKRA, 6480	
Ormen Lange Eiendom DA	18
TANKVEGEN 1, TANANGER, 4056	
A/S Norske Shell	100
OMAN	
P.O. BOX 38, MINA AL FAHAL, MUSCAT, 116	
Shell Oman Marketing Company SAOG	49
P.O. BOX 398, SOHAR FREE ZONE, NORTH AL BATINAH GOVERNORATE, SOHAR, 322	
Sohar Solar Qabas (FZC) LLC	100
P.O. BOX 560, MINA AL FAHAL, MUSCAT, 116	

Company by country and address of incorporation	%	Company by country and address of incorporation	%
Oman LNG LLC	30	Limited Liability Company "Shell Neft"	100
P.O. BOX 74, MINA AL FAHAL, MUSCAT, 116		9 LESNAYA STREET, FLOOR 4, MOSCOW, 125196	
Shell Development Oman LLC	100	Limited Liability Company "Shell Neftegaz Development (V)"	100
P.O. BOX 81, MINA AL FAHAL, MUSCAT, 113		LLC Shell NefteGaz Development	100
Petroleum Development Oman LLC	34	Syriaga Neftegaz Development LLC	100
PAKISTAN		SINOPSKAYA NABEREZHNAYA, 22 A, OFFICE 811, SANKT-PETERBURG, 191167	
E110, KHAYABAN E JINNAH, LAHORE CANTONEMENT, PUNJAB, CANTONEMENT, 54810		Gazpromneft-Aero Bryansk LLC [b]	50
Pakistan Energy Gateway Limited	33	SAINT KITTS AND NEVIS	
HOUSE NO. 2-B, NAZIMUDDIN ROAD, F-8/1, ISLAMABAD, 75400		MORNING STAR HOLDINGS LIMITED, MAIN STREET, SUITE 556, CHARLESTOWN, NEVIS, WEST INDIES	
Pak Arab Pipeline Company Limited	20	Shell Oil & Gas (Malaysia) LLC	90
SHELL HOUSE, 6 CH. KHALIQUZZAMAN ROAD, KARACHI, 75530		SAINT LUCIA	
Shell Energy Pakistan (smc-private) Limited	100	MERCURY COURT, CHOC ESTATE, CASTRIES	
Shell Pakistan Limited	76	BG Atlantic 1 Holdings Limited	100
PERU		BG Atlantic 2/3 Holdings Limited	100
CALLE DEAN VALDIVIA 111, OFICINA 802, SAN ISIDRO, LIMA, LIMA 27		BG Atlantic 4 Holdings Limited	100
Shell GNL Peru S.A.C.	100	BG Central Holdings Ltd.	100
Shell Operaciones Peru S.A.C.	100	BG West Indies No. 2 Limited	100
PHILIPPINES		SAUDI ARABIA	
2ND FLOOR, BONIFACIO TECHNOLOGY CENTER, 31ST STREET CORNER 2ND AVENUE, BONIFACIO GLOBAL CITY, TAGUIG, METRO MANILA, 1635		P.O. BOX 41467, RIYADH, 11521	
Bonifacio Gas Corporation	24	Al Jomaih and Shell Lubricating Oil Co.Ltd.	50
41ST FLOOR, THE FINANCE CENTER, 26TH STREET CORNER 9TH AVENUE, BONIFACIO GLOBAL CITY, TAGUIG, METRO MANILA, 1635		SINGAPORE	
Connected Freight Solutions Philippines, Inc.	80	1 COMMONWEALTH LANE, #09-30, ONE COMMONWEALTH, SINGAPORE, 149544	
Pilipinas Shell Petroleum Corporation	55	Zeco Systems Pte. Ltd.	99
Shell Chemicals Philippines, Inc.	100	1 HARBOURFRONT AVENUE, #08-01/08, KEPPEL BAY TOWER, SINGAPORE, 098632	
Shell Energy Philippines Inc	100	Infineum Singapore LLP	50
Shell Gas and Energy Philippines Corporation	100	15, AIRLINE ROAD, SINGAPORE, 819828	
Shell Solar Philippines Corporation	100	Changi Airport Fuel Hydrant Installation Pte. Ltd.	11
NDC BLDG, 116 TORDESILLAS ST., SALCEDO VILLAGE, MAKATI CITY, METRO MANILA, 1227		160 TUAS SOUTH AVENUE 5, SINGAPORE, 637364	
Kamayan Realty Corporation	22	Singapore Lube Park Pte. Ltd. [b]	44
SUBIC BAY FREE PORT ZONE, OLANGAPO CITY, 2200		25 CHURCH STREET, 03-04 CAPITAL SQUARE THREE, SINGAPORE, 049482	
Shell Gas Trading (Asia Pacific), Inc.	100	Cleantech Renewable Assets Pte Ltd	49
UNIT D 9TH FLOOR INOZA TOWER, 40TH STREET, NORTH BONIFACIO, BONIFACIO GLOBAL CITY, TAGUIG, METRO MANILA, 1634		50 GUL ROAD, SINGAPORE, 629351	
Tabangao Realty, Inc.	40	Fuelng Pte. Ltd [b]	50
POLAND		50 RAFFLES PLACE #06-00, SINGAPORE LAND TOWER, SINGAPORE, 048623	
UL. BITWY WARSZAWSKIEJ 1920 R. NR 7A, WARSAW, 02-366		Orb Energy Pte. Ltd.	24
Shell Polska Sp. z o.o.	100	THE METROPOLIS TOWER 1, 9 NORTH BUONA VISTA DRIVE, #07-01, SINGAPORE, 138588	
UL. BITWY WARSZAWSKIEJ 1920R. 7A, WARSZAWA, 02-366		BG Asia Pacific Holdings Pte. Limited	100
Shell Mobility Polska Sp. z o.o.	100	BG Asia Pacific Services Pte. Ltd.	100
UL. PAWIA 21, KRAKOW, 31-154		BG Exploration & Production Myanmar Pte. Ltd.	100
Shell Energy Retail Poland Sp. z o.o.	100	BG Insurance Company (Singapore) Pte Ltd	100
PUERTO RICO		BG Myanmar Pte. Ltd.	100
P.O. BOX 186, YABUCOA, PR 00767-0186		Connected Freight Pte. Ltd.	80
Station Managers of Puerto Rico, Inc.	100	Ellba Eastern (Pte) Ltd	100
QATAR		QPI and Shell Petrochemicals (Singapore) Pte Ltd	51
1ST FLOOR, AL-MIRQAB TOWER, DOHA		Shell Catalysts & Technologies Pte. Ltd.	100
Marine LNG Solutions LLC [b]	50	Shell Chemicals Seraya Pte. Ltd.	100
AL MIRQAB TOWER, WEST BAY, P.O. BOX 3747, DOHA		Shell Eastern Petroleum (Pte) Ltd [g]	100
Qatar Shell Service Company W.L.L.	100	Shell Eastern Trading (Pte) Ltd [g]	100
P.O. BOX 22666, DOHA		Shell Gas Marketing Pte. Ltd.	100
Qatar Liquefied Gas Company Limited (4)	30	Shell Integrated Gas Thailand Pte.Limited	100
QATAR SCIENCE & TECHNOLOGY PARK TECHI, OFFICE 101, P.O. BOX 3747, DOHA		Shell Myanmar Energy Pte. Ltd.	100
Qatar Shell Research & Technology Centre QSTP-LLC	100	Shell Pulau Moa Pte Ltd	100
RUSSIA		Shell Seraya Pioneer (Pte) Ltd	100
24 A YAKUBOVICHA UL., SAINT PETERSBURG, 190000		Shell Tankers (Singapore) Private Limited	100
Khanty-Mansiysk Petroleum Alliance Closed Joint Stock Company [b]	50	Shell Treasury Centre East (Pte) Ltd	100
9 LESNAYA STREET, FLOOR 3, MOSCOW, 125196		Sirius Well Manufacturing Services Pte. Ltd. [b]	50
SLOVAKIA			

APPENDIX 1 continued

Company by country and address of incorporation	%	Company by country and address of incorporation	%
INSTEINOVA 23, BRATISLAVA, 851 01		Shell Trading Switzerland AG	100
SHELL Slovakia s.r.o.	100	Shell Treasury Company Switzerland AG	100
SLOVENIA		Solen Versicherungen AG	100
BAVNICARJEVA ULICA 13, LJUBLJANA, 1000		ROUTE DE PRÉ-BOIS 17, COINTRIN, 1216	
Shell Adria d.o.o.	100	Saraco SA	20
SOUTH AFRICA		ROUTE DE VERNIER 132, VERNIER, 1214	
1ST FLOOR OXFORD PARKS, 199 OXFORD ROAD, DUNKELD, GAUTENG, 2196		SOGEF Société Genevoise des Pétroles SA	34
Sekelo Oil Trading (Pty) Limited	43	STEIGERHUBELSTRASSE 8, BERN, 3008	
HONSHU ROAD, DURBAN, 4001		Shell Lubricants Switzerland AG	100
Blendcor (Pty) Ltd. [b]	36	ZWÜSCHTEICH, RÜMLANG, 8153	
REUNION, DURBAN, 4001		UBAG - Unterflurbetankungsanlage Flughafen Zürich AG	20
Shell & BP South African Petroleum Refineries (Pty) Limited [b]	36	SYRIA	
SUITE OE/2, THE NAUTICA, THE WATERCLUB, BEACH ROAD, GRANGER BAY, CAPE TOWN, 8001		DAMASCUS NEW SHAM WESTERN DUMMAR, ISLAND NO. 1 - PROPERTY 2299, P.O. BOX 7660, DAMASCUS	
STISA (Pty) Limited	72	Al Badia Petroleum Company	22
TWICKENHAM, THE CAMPUS, 57 SLOAN STREET, EPSOM DOWNS, BRYANSTON, 2021		Al Furat Petroleum Company	20
Bituguard Southern Africa (Pty) Ltd	36	TAIWAN	
Shell Downstream South Africa (Pty) Ltd	72	INTERNATIONAL TRADE BUILDING, ROOM 2001, 20TH FLOOR, 333, KEELUNG ROAD SECTION 1, TAIPEI, 110	
Shell South Africa Energy (Pty) Ltd	100	Shell Taiwan Limited	100
Shell South Africa Exploration (Pty) Limited	100	NO. 2, TSO-NAN ROAD, NAN-TZE DISTRICT, P.O. BOX 25-30, KAOHSIUNG, 811	
Shell South Africa Holdings (Pty) Ltd	100	CPC Shell Lubricants Co. Ltd	51
SOUTH KOREA		TANZANIA	
#704-3, TOWER B, HYUNDAI KNOWLEDGE INDUSTRIAL CENTER, 70 DUSAN-RO, GEUMCHEON-GU, SEOUL, 08584		1ST FLOOR KILWA HOUSE, PLOT 369, TOURE DRIVE, OYSTER BAY, P.O. BOX 105833, DAR ES SALAAM	
Korea Impact Carbon Corporation	40	Fahari Gas Marketing Company Limited	53
640-6, DAEJUK-RI, DAESAN-EUP, SEOSAN-SHI, CHUNGCHONGNAM-DO, 356-713		Mzalendo Gas Processing Company Limited	53
Hyundai and Shell Base Oil Co., Ltd	40	Ruvuma Pipeline Company Limited	53
NO. 250, SINSUN-RO, NAM-GU, BUSAN, 48561		Tanzania LNG Limited	100
Hankook Shell Oil Company	54	THAILAND	
SPAIN		10 SOONTHORNKOSA ROAD, KLONGTOEY, BANGKOK, 10110	
PASEO DE LA CASTELLANA, 257-6 ^o , MADRID, 28046		Pattanadhorn Company Limited	42
BG Energy Iberian Holdings, S.L.	100	Sahapanichkijphun Company Limited	42
Shell España, S.A.	100	Shell Global Solutions (Thailand) Limited	100
Shell Spain LNG, S.A.U.	100	Shell Global Solutions Holdings (Thailand) Limited	100
RIO BULLAQUE, 2, MADRID, 28034		Shell Global Solutions Service (Thailand) Company Limited	100
Shell & Disa Aviation España, S.L.	50	Thai Energy Company Limited	100
SUDAN		Unitas Company Limited	42
SHELL HOUSE, P.O. BOX 320, KHARTOUM		TRINIDAD AND TOBAGO	
Shell (Sudan) Petroleum Development Company Limited	100	1 INTERNATIONAL DRIVE, WESTMOORINGS	
SWEDEN		The International School of Port of Spain Limited	25
DELOITTE, P.O. BOX 450, ÖSTERSUND, 831 26		5 SAINT CLAIR AVENUE, SAINT CLAIR, PORT OF SPAIN	
BG International Services AB	100	BG 2/3 Investments Limited	100
GUSTAVSLUNDSVÄGEN 22, BROMMA, 16751		Point Fortin LNG Exports Limited	81
Shell Aviation Sweden AB	100	Shell Gas Supply Trinidad Limited	100
P.O. BOX 135, STOCKHOLM-ARLANDA, 190 46		Shell LNG T&T Ltd	100
A Flygbolag Aktiebolag	25	Shell Manatee Limited	100
P.O. BOX 2154, GOTHEMBURG, 438 14		Shell Trinidad Central Block Limited	100
Gothenburg Fuelling Company AB	33	Shell Trinidad North Coast Limited	100
P.O. BOX 85, STOCKHOLM-ARLANDA, 190 45		TRINLING Limited	100
Stockholm Fuelling Services AB	25	SHELL ENERGY HOUSE, 5 ST. CLAIR AVENUE, PORT OF SPAIN	
STURUP FLYGPLATS, P.O. BOX 22, MALMÖ, 230 32		Shell Trinidad Ltd	100
Malmö Fuelling Services AB	33	TUNISIA	
SWITZERLAND		IMMEUBLE LE TANIT DU LAC, RUE DU LAC WINDERMERE, LES BERGES DU LAC, TUNIS, 1053	
AUTOSTRADA A2 (DIREZIONE GOTTERDO), HOTEL BELLINZONA SUD, MONTE CARASSO, 6513		Shell Tunisia LPG S.A.	100
Stazioni Autostradali Bellinzona SA	50	IMMEUBLE LE TANIT DU LAC, RUE DU LAC WINDERMERE, LES BERGES DU LAC, TUNIS, 1053	
BAARERMATTE, BAAR, 6340		Tunisian Processing S.A.	100
Shell (Switzerland) AG	100	IMMEUBLE MEZGHENNI, RUE DU LAC WINDERMERE, LES BERGES DU LAC, TUNIS, 1053 - BP 36	
Shell Brands International AG	100	Amilcar Petroleum Operations S.A.	50
Shell Corporate Services Switzerland AG	100	TURKEY	
Shell Finance Switzerland AG	100		
Shell Holdings Switzerland AG	100		

Company by country and address of incorporation	%
DILOVASI ORGANIZE SANAYI BOLGESI I.KISIM, 1004 SOKAK NO:10, DILOVASI, KOCAELI	
Samsun Akaryakit VE Depolama A.S.	35
GULBAHAR MAH.SALIH TOZAN SOK., KARAMANCILAR IS MERKEZI B BLOK NO:18, ESENTEPE, SISI, ISTANBUL, 34394	
Shell & Turcas Petrol A.S.	70
Shell Enerji A.S.	100
Shell Petrol A.S.	70
LIMAN MAHALLESI 60. SOKAK NO. 25, KONYAALTI, ANTALYA, 07070	
Cekisan Depolama Hizmetleri Ltd. Sti.	35
SULTANKOY MAHALLESI MALTEPE SOKAK NO:66, MARMARA EREGLISI, TEKIRDAG, 59750	
Marmara Depoculuk Hizmetleri A.S.	32
YAKUPLU MAH. GENCOSMAN CAD. NO:7, BEYLIKDUZU, ISTANBUL, 34524	
Ambarli Depolama Hizmetleri Ltd. Sti.	35
UK	
1 ALTENS FARM ROAD, NIGG, ABERDEEN, AB12 3FY	
Shell Trustee Solutions Limited	100
15 ATHOLL CRESCENT, EDINBURGH, EH3 8HA	
Eolfi Scotland Limited	100
4TH FLOOR, DAVIDSON BUILDING, 5 SOUTHAMPTON STREET, LONDON, WC2E 7HA	
The New Motion EVSE Limited	100
50 LOTHIAN ROAD, FESTIVAL SQUARE, EDINBURGH, EH3 9WJ	
BG General Partner Limited	100
BG Pension Funding Scottish Limited Partnership [j]	100
5-7 ALEXANDRA ROAD, HEMEL HEMPSTEAD, HERTFORDSHIRE, HP2 5BS	
British Pipeline Agency Limited	50
United Kingdom Oil Pipelines Limited [b]	48
Walton-Gatwick Pipeline Company Limited [b]	52
West London Pipeline and Storage Limited [b]	38
ATHENA HOUSE, ATHENA DRIVE, TACHBROOK PARK, WARWICK, CV34 6RL	
Autogas Limited	50
BUILDING 1204, SANDRINGHAM ROAD, HEATHROW AIRPORT, HOUNSLAW, MIDDLESEX, TW6 3SH	
Heathrow Airport Fuel Company Limited	14
Heathrow Hydrant Operating Company Limited	10
CANTERBURY COURT, KENNINGTON PARK, 1-3 BRIXTON ROAD, LONDON, SW9 6DE	
Limejump Energy Limited	100
Limejump Intermediate 1 Limited	100
Limejump Ltd	100
Limejump Virtual 1 Limited	100
Limejump Virtual 10 Limited	100
Limejump Virtual 11 Limited	100
Limejump Virtual 12 Limited	100
Limejump Virtual 13 Limited	100
Limejump Virtual 14 Limited	100
Limejump Virtual 15 Limited	100
Limejump Virtual 2 Limited	100
Limejump Virtual 3 Limited	100
Limejump Virtual 4 Limited	100
Limejump Virtual 5 Limited	100
Limejump Virtual 6 Limited	100
Limejump Virtual 7 Limited	100
Limejump Virtual 8 Limited	100
Limejump Virtual 9 Limited	100
LEVEL 39, ONE CANADA SQUARE, LONDON, E14 5AB	
Applied Blockchain Ltd	21
MAIN ROAD, WATERSTON, MILFORD HAVEN, PEMBROKESHIRE, SA73 1DR	

[j] Established by BG Group plc and the BG Trustee in 2013 as part of the funding agreements associated with the BG pension scheme. Under the exemption conferred by Regulation 7 of the Partnerships (Accounts) Regulations 2008, the accounts of this partnership have not been appended to Shell's Consolidated Financial Statements and have not been filed at the Companies House.

Company by country and address of incorporation	%
Dragon LNG Group Limited [b]	50
ONE BARTHOLOMEW CLOSE, LONDON, EC1A 7BL	
Manchester Airport Storage and Hydrant Company Limited	25
PANNONE CORPORATE LLP, 378-380 DEANSGATE, CASTLEFIELD, MANCHESTER, M3 4LY	
Stearna Company Limited	35
SHELL CENTRE, LONDON, SE1 7NA	
Angkor Shell Limited	100
BG Central Holdings Limited	100
BG Cyprus Limited	100
BG Delta Limited	100
BG Employee Shares Trustees Limited	100
BG Energy Capital Plc	100
BG Energy Holdings Limited	100
BG Energy Marketing Limited	100
BG Equatorial Guinea Limited	100
BG Gas Services Limited	100
BG Gas Supply (UK) Limited	100
BG General Holdings Limited	100
BG Great Britain Limited	100
BG Group Employee Shares Trustees Limited	100
BG Group Limited	100
BG Group Pension Trustees Limited	100
BG Group Trustees Limited	100
BG Intellectual Property Limited	100
BG International Limited	100
BG Karachaganak Limited	100
BG Kenya L10A Limited	100
BG Kenya L10B Limited	100
BG LNG Investments Limited	100
BG Mongolia Holdings Limited	100
BG Netherlands	100
BG Netherlands Financing Unlimited	100
BG Norge Limited	100
BG North Sea Holdings Limited	100
BG OKLNG Limited	100
BG Overseas Holdings Limited	100
BG Overseas Investments Limited	100
BG Overseas Limited	100
BG Rosetta Limited	100
BG South East Asia Limited	100
BG Subsea Well Project Limited	100
BG Tanzania Holdings Limited	100
BG Trinidad LNG Limited	100
BG UK Holdings Limited	100
Brazil Shipping I Limited	100
B-Snug Limited	100
CRI Catalyst Company Europe Limited	100
Derivatives Trading Atlantic Limited	100
Eastham Refinery Limited [b]	50
Enterprise Oil Limited	100
Enterprise Oil Middle East Limited	100
Enterprise Oil Norge Limited	100
Enterprise Oil U.K. Limited	100

UK continued

APPENDIX 1 continued

Company by country and address of incorporation	%	Company by country and address of incorporation	%
Gainrace Limited	100	Shell Pensions Trust Limited	100
Gatwick Airport Storage and Hydrant Company Limited	13	Shell Property Company Limited	100
Glossop Limited	100	Shell QGC Holdings Limited [g]	100
GOGB Limited	100	Shell QGC Midstream 1 Limited [g]	100
Khmer Shell Limited	100	Shell QGC Midstream 2 Limited	100
Machine Max Limited	38	Shell QGC Upstream 1 Limited	100
Methane Services Limited	100	Shell QGC Upstream 2 Limited	100
Murphy Schiehallion Limited	100	Shell Research Limited	100
Private Oil Holdings Oman Limited	85	Shell Response Limited	100
Sabah Shell Petroleum Company Limited	100	Shell South Asia LNG Limited	100
Saxon Oil Limited	100	Shell Supplementary Pension Plan Trustees Limited	100
Saxon Oil Miller Limited	100	Shell Tankers (U.K.) Limited	100
SELAP Limited	100	Shell Trading International Limited	100
Shell Aircraft Limited	100	Shell Treasury Centre Limited	100
Shell Aviation Limited	100	Shell Treasury Dollar Company Limited	100
Shell Business Development Middle East Limited	100	Shell Treasury Euro Company Limited	100
Shell Caribbean Investments Limited	100	Shell Treasury UK Limited	100
Shell Catalysts & Technologies Limited	100	Shell Trinidad 5(A) Limited	100
Shell Chemical Company of Eastern Africa Limited	100	Shell Trinidad and Tobago Limited	100
Shell Chemicals (Hellas) Limited	100	Shell Trinidad Block E Limited	100
Shell Chemicals Limited	100	Shell Tunisia Upstream Limited	100
Shell Chemicals U.K. Limited	100	Shell U.K. Limited	100
Shell China Exploration and Production Company Limited	100	Shell U.K. North Atlantic Limited	100
Shell Clair UK Limited	100	Shell U.K. Oil Products Limited	100
Shell Club Corringham Limited	100	Shell Upstream Overseas Services (I) Limited	100
Shell Company (Hellas) Limited	100	Shell Ventures New Zealand Limited	100
Shell Company (Pacific Islands) Limited	100	Shell Ventures U.K. Limited	100
Shell Corporate Director Limited	100	Shell-Mex and B.P. Limited	60
Shell Corporate Secretary Limited	100	STT (Das Beneficiary) Limited [a]	100
Shell Distributor (Holdings) Limited	100	Synthetic Chemicals (Northern) Limited	100
Shell Employee Benefits Trustee Limited	100	Telegraph Service Stations Limited	100
Shell Energy Europe Limited	100	The Anglo-Saxon Petroleum Company Limited	100
Shell Energy Investments Limited	100	The Asiatic Petroleum Company Limited	100
Shell Energy Supply UK LTD.	100	The Consolidated Petroleum Company Limited	50
Shell EP Offshore Ventures Limited	100	The Mexican Eagle Oil Company Limited	100
Shell Exploration and Production Tanzania Limited	100	The Shell Company (W.I.) Limited	100
Shell Finance GB Limited	100	The Shell Company of Hong Kong Limited	100
Shell Gas Holdings (Malaysia) Limited	100	The Shell Company of India Limited	100
Shell Gas Marketing U.K Limited	100	The Shell Company of Nigeria Limited	100
Shell Global LNG Limited	100	The Shell Company of Thailand Limited	100
Shell Hasdrubal Limited	100	The Shell Company of The Philippines Limited	75
Shell Holdings (U.K.) Limited	100	The Shell Company of Turkey Limited	100
Shell Information Technology International Limited	100	The Shell Marketing Company of Borneo Limited	100
Shell International Gas Limited	100	The Shell Petroleum Company Limited	100
Shell International Limited	100	The Shell Transport and Trading Company Limited	100
Shell International Petroleum Company Limited	100	Thermocomfort Limited	100
Shell International Trading and Shipping Company Limited	100	UK Shell Pension Plan Trust Limited	100
Shell Malaysia Limited	100	Wonderbill Limited	100
Shell Marine Products Limited	100	SHELL ENERGY HOUSE, WESTWOOD BUSINESS PARK, WESTWOOD WAY, COVENTRY, CV4 8HS	
Shell New Energies UK Ltd	100	First Telecommunications Limited	100
Shell Overseas Holdings Limited	100	First Utility Limited	100
Shell Overseas Services Limited	100	Impello Limited	100
Shell Pension Reserve Company (SIPP) Limited	100	Shell Energy Retail Limited	100
Shell Pension Reserve Company (SOCPF) Limited	100	Shell Energy UK Limited	100
Shell Pension Reserve Company (UK) Limited	100	UKRAINE	

Company by country and address of incorporation	%	Company by country and address of incorporation	%
4 MYKOLY GRINCHENKA STREET, KIEV, 03038		Maple Power Holdings LLC [b]	68
Shell Ukraine Exploration and Production I LLC	100	CT CORPORATION SYSTEM, 1999 BRYAN STREET, SUITE 900, DALLAS, TX 75201	
N. GRINCHENKO, 4, KIEV, 03038		EPP LLC [c]	100
Alliance Holding LLC [d]	51	J & J Lubrication, LLC [c]	100
Invest Region LLC [d]	51	Lazylyng Real Estate Company, LLC [c]	100
UNITED ARAB EMIRATES		MP2 Energy LLC [c]	100
EMDAD AVIATION FUEL STORAGE FZCO, P.O. BOX 261781, JEBEL ALI, DUBAI		MP2 Energy NE LLC [c]	100
Emdad Aviation Fuel Storage FZCO	33	MP2 Energy NY LLC [c]	100
P.O. BOX 665, ABU DHABI		MP2 Energy Retail Holdings LLC [c]	100
Abu Dhabi Gas Industries Limited (GASCO)	15	MP2 Energy Texas LLC [c]	100
URUGUAY		MP2 Generation LLC [c]	100
LA CUMPARSITA, 1373 4TH FLOOR, MONTEVIDEO, 11200		MP2 Mesquite Creek Wind LLC [c]	100
BG (Uruguay) S.A.	100	Mpower2 LLC [c]	100
Dinarel S.A.	50	Noble Assurance Company	100
Gasoducto Cruz del Sur S.A.	40	CORPORATION SERVICE COMPANY, 251 LITTLE FALLS DRIVE, WILMINGTON, DE 19808	
USA		Atlantic Shores Offshore Wind, LLC [c]	50
10000 MING AVENUE, BAKERSFIELD, CA 93311		Bengal Pipeline Company LLC	39
Aera Energy LLC [b]	52	Colonial Pipeline Company	11
Aera Energy Services Company	50	Cumulus Digital Systems, Inc.	30
1013 CENTRE ROAD, COUNTY OF NEW CASTLE, DELAWARE, WILMINGTON, DE 19805		EcoSmart Solution LLC	35
Zeco Holdings, Inc.	100	West Shore Pipe Line Company	19
Zeco Systems, Inc.	100	CORPORATION SERVICE COMPANY, 2711 CENTERVILLE ROAD, SUITE 400, WILMINGTON, DE 19808	
10346 BRECKSVILLE RD, BRECKSVILLE, OH 44141		Infineum USA L.P. [f]	50
True North Energy LLC	50	CT CORPORATION SYSTEM, 7700 E ARAPAHOE RD, STE 220, CENTENNIAL, CO 80112-1268	
11111 WILCREST GREEN, SUITE 100, HOUSTON, TX 77042		Positive Energies, LLC [c]	100
Texas Petroleum Group LLC	50	RL & F SERVICE CORP, 920 N KING ST FLOOR 2, NEW CASTLE, WILMINGTON, DE 19801	
1191 2ND AVENUE, SUITE 1900, SEATTLE, WA 98101		Atlantic 1 Holdings LLC [c]	46
Airbiquity Inc.	26	Atlantic 2/3 Holdings LLC [c]	58
150 N. DAIRY ASHFORD, HOUSTON, TX 77079		Atlantic 4 Holdings LLC [c]	51
Gaviota Terminal Company [d]	20	THE CORPORATION TRUST COMPANY OF NEVADA, 311 SOUTH DIVISION STREET, CARSON CITY, NV 89703	
Ship Shoal Pipeline Company [d]	43	Pennzoil-Quaker State Nominee Company	100
16285 PARK TEN PLACE, SUIT 300, HOUSTON, TX 77084		THE CORPORATION TRUST COMPANY, CORPORATION TRUST CENTER, 1209 ORANGE STREET, WILMINGTON, DE 19801	
Bluware Headwave Ventures Inc.	20	Amberjack Pipeline Company LLC [c]	42
1740 ED TEMPLE BLVD, NASHVILLE, TN 37208		Arizona A1 LLC [c]	100
Tri Star Energy LLC	33	Arizona B1 LLC [c]	100
1900 EAST LINDEN AVENUE, LINDEN, NJ 07036		BG Brasilia, LLC [c]	100
Infineum USA Inc.	50	BG Energy Finance, Inc.	100
2048 WEEMS ROAD, BLDG C, TUCKER, GA 30084		BG Energy Merchants, LLC [c]	100
Sonnen Inc.	100	BG Gulf Coast LNG, LLC [c]	100
2050 PLAINFIELD PIKE, CRANSTON, RI 02921		BG LNG Services, LLC [c]	100
Colbea Enterprises, LLC	50	BG LNG Trading, LLC	100
2100 GENG ROAD, SUITE 210, SANTA CLARA, PALO ALTO, CA 94303		BG North America, LLC [c]	100
D.Light Design Inc.	34	BG US Services, Inc.	100
2237 HATCHER HILL ROAD, BACONTON, GA 31716		Brazil Crude Services, LLC [c]	100
Baconton Power LLC [c]	35	Brazos Wind Ventures, LLC [c]	100
2441 HIGH TIMBERS DRIVE, SUITE 220, THE WOODLANDS, TX 77380		Caesar Oil Pipeline Company, LLC [c]	15
Asset Management and Power Services LLC	50	Concha Chemical Pipeline LLC [c]	100
Distributed Generation Solutions LLC	33	Crestwood Permian Basin LLC	34
3333 HWY 6 SOUTH, HOUSTON, TX 77082		CRI Sales and Services Inc.	100
Zeolyst International	50	CRI Zeolites Inc.	100
3450 E. COMMERCIAL CT, MERIDIAN, ID 83642		Deer Park Refining Limited Partnership [b] [d]	50
Pacwest Energy, LLC.	50	USA continued	
4080 WEST JONATHAN MOORE PIKE, COLUMBUS, IN 47201			
RDK Ventures, LLC	50		
41805 ALBRAE STREET, FREMONT, CA 94538			
Au Energy, LLC	50		
BECHTEL ENTERPRISES, 12011 SUNSET HILLS ROAD, RESTON, VA 20190			

APPENDIX 1 continued

Company by country and address of incorporation	%	Company by country and address of incorporation	%
Ellwood Land Holdings, LLC [c]	100	Shell Expatriate Employment US Inc.	100
Endymion Oil Pipeline Company, LLC [c]	7	Shell Exploration & Production Company	100
Enterprise Oil North America Inc.	100	Shell Exploration Company Inc.	100
Equilon Enterprises LLC [c]	100	Shell Frontier Oil & Gas Inc.	100
Explorer Pipeline Company	26	Shell Gas Gathering Corp. #2	100
GI Energy Storage LLC [c]	100	Shell Global Solutions (US) Inc.	100
Husk Power Systems, Inc.	30	Shell GOM Pipeline Company LLC [c]	100
LOOP LLC	46	Shell Gulf of Mexico Inc.	100
Mars Oil Pipeline Company LLC [c]	49	Shell Information Technology International Inc.	100
Mattox Pipeline Company LLC [c]	54	Shell International Exploration and Production Inc.	100
Mayflower Wind Energy LLC [c]	50	Shell Lake Charles Operations, LLC [c]	100
Odyssey Pipeline L.L.C. [c]	48	Shell Leasing Company	100
Oryx Caspian Pipeline, L.L.C. [c]	100	Shell Marina Products (US) Company	100
Pecten Arabian Company	100	Shell Midstream LP Holdings LLC [c]	100
Pecten Brazil Exploration Company	100	Shell Midstream Operating LLC [c]	68
Pecten Midstream LLC [c]	68	Shell Midstream Partners GP LLC [c]	100
Pecten Orient Company	100	Shell Midstream Partners, L.P.	68
Pecten Orient Company LLC [c]	100	Shell NA Gas & Power Holding Company	100
Pecten Producing Company	100	Shell NA LNG LLC [c]	100
Pecten Trading Company	100	Shell New Energies US LLC [c]	100
Pecten Victoria Company	100	Shell North America Gas & Power Services Company	100
Pecten Yemen Masila Company	100	Shell Offshore and Chemical Investments Inc.	100
Pennzoil-Quaker State Company	100	Shell Offshore Inc.	100
Pennzoil-Quaker State International Corporation	100	Shell Offshore Response Company LLC [c]	100
Peru LNG Company LLC [c]	20	Shell Oil Company	100
Poseidon Oil Pipeline Company, LLC	24	Shell Oil Company Investments Inc.	100
Power Limited Partnership [d]	100	Shell Oil Products Company LLC [c]	100
PR Microgrids LLC [c]	100	Shell Onshore Ventures Inc.	100
Premium Velocity Auto LLC [c]	100	Shell Petroleum Inc.	100
Proteus Oil Pipeline Company, LLC [c]	6	Shell Pipeline Company LP [d]	100
Quaker State Investment Corporation	100	Shell Pipeline GP LLC [c]	100
RK Caspian Shipping Company, LLC [c]	100	Shell Rail Operations Company	100
S T Exchange, Inc.	100	Shell Retail and Convenience Operations LLC [c]	100
Salamander Solutions Inc.	28	Shell RSC Company	100
Sand Dollar Pipeline LLC [c]	68	Shell Thailand E&P Inc.	100
SCOGI GP [d]	100	Shell Trademark Management Inc.	100
Shell (US) Gas & Power M&T Holdings, Inc.	100	Shell Trading (US) Company	100
Shell California Pipeline Company LLC [c]	100	Shell Trading North America Company	100
Shell Catalysts & Technologies Americas LP [d]	100	Shell Trading Risk Management, LLC [c]	100
Shell Catalysts & Technologies Company	100	Shell Trading Services Company	100
Shell Catalysts & Technologies Holdings Inc.	100	Shell Transportation Holdings LLC [c]	100
Shell Catalysts & Technologies LP [d]	100	Shell Treasury Center (West) Inc.	100
Shell Catalysts & Technologies US LP [d]	100	Shell US E&P Investments LLC [c]	100
Shell Catalysts Ventures Inc.	100	Shell US Gas & Power LLC [c]	100
Shell Chemical Appalachia LLC [c]	100	Shell US Hosting Company	100
Shell Chemical LP [d]	100	Shell Ventures LLC [c]	100
Shell Chemicals Arabia L.L.C. [c]	100	Shell WindEnergy Inc.	100
Shell Communications, Inc.	100	Shell WindEnergy Services Inc.	100
Shell Deepwater Royalties Inc.	100	Silicon Ranch Corporation	43
Shell Downstream Inc.	100	SOI Finance Inc.	100
Shell Energy Company	100	SOPC Holdings East LLC [c]	100
Shell Energy Holding GP LLC [c]	100	SOPC Holdings West LLC [c]	100
Shell Energy North America (US), L.P. [d]	100	SOPC Southeast Inc.	100
Shell Energy Resources Company	100	Studio X LLC [c]	100
Shell EP Holdings Inc.	100	SWEPI LP [d]	100

Company by country and address of incorporation	%
Tejas Coral GP, LLC [c]	100
Tejas Coral Holding, LLC [c]	100
Tejas Power Generation, LLC [c]	100
Texas-New Mexico Pipe Line Company	100
The Valley Camp Coal Company	100
Three Wind Holdings, LLC [c]	50
TMR Company LLC	100
Triton Diagnostics Inc.	100
Triton Terminaling LLC [c]	100
Triton West LLC [c]	68
URSA Oil Pipeline Company LLC [c]	45
Zydeco Pipeline Company LLC [c]	70
VENEZUELA	
AVENIDA LEONARDO DA VINCI, EDIFICIO PDV SERVICIOS, CARACAS, DISTRITO CAPITAL	
Sucre Gas, S.A.	30
AVENIDA ORINOCO, EDIFICIO CENTRO EMPRESARIAL PREMIUM, PISO 2, OFICINAS 2-A Y 2-B, URBANIZACIÓN LAS MERCEDES, CARACAS, DISTRITO CAPITAL, 1060	
Shell Venezuela Productos, C.A.	100
Shell Venezuela, S.A.	100
VIETNAM	
GO DAU INDUSTRIAL ZONE, PHUOC THAI COMMUNE, LONG THANH DISTRICT, DONG NAI PROVINCE	
Shell Vietnam Ltd	100
ZIMBABWE	
BLOCK 1, TENDSEKA OFFICE PARK, CNR SAMORA MACHEL AVENUE, RENFREW ROAD, HARARE	
Central African Petroleum Refineries (Private) Limited	21

APPENDIX 2**FIVE-YEAR FINANCIAL DATA SET****CONSOLIDATED STATEMENT OF INCOME**

	2020	2019	2018	2017	\$ million 2016
Revenue	180,543	344,877	388,379	305,179	233,591
Share of profit of joint ventures and associates	1,783	3,604	4,106	4,225	3,545
Interest and other income	869	3,625	4,071	2,466	2,897
Total revenue and other income	183,195	352,106	396,556	311,870	240,033
Purchases	117,093	252,983	294,399	223,447	162,574
Production and manufacturing expenses	24,001	26,438	26,970	26,652	28,434
Selling, distribution and administrative expenses	9,881	10,493	11,360	10,509	12,101
Research and development	907	962	986	922	1,014
Exploration	1,747	2,354	1,340	1,945	2,108
Depreciation, depletion and amortisation	52,444	28,701	22,135	26,223	24,993
Interest expense	4,089	4,690	3,745	4,042	3,203
Total expenditure	210,162	326,621	360,935	293,740	234,427
(Loss)/income before taxation	(26,967)	25,485	35,621	18,130	5,606
Taxation (credit)/charge	(5,433)	9,053	11,715	4,695	829
(Loss)/income for the period	(21,534)	16,432	23,906	13,435	4,777
Income attributable to non-controlling interest	146	590	554	458	202
(Loss)/income attributable to Royal Dutch Shell plc shareholders	(21,680)	15,842	23,352	12,977	4,575
Basic earnings per share (\$)	(2.78)	1.97	2.82	1.58	0.58
Diluted earnings per share (\$)	(2.78)	1.95	2.80	1.56	0.58

RECONCILIATION OF INCOME FOR THE PERIOD TO CCS EARNINGS

	2020	2019	2018	2017	\$ million 2016
Income/(loss) attributable to Royal Dutch Shell plc shareholders	(21,680)	15,842	23,352	12,977	4,575
Income/(loss) attributable to non-controlling interest	146	590	554	458	202
Income/(loss) for the period	(21,534)	16,432	23,906	13,435	4,777
Current cost of supplies adjustment	1,833	(605)	458	(964)	(1,085)
Of which:					
Attributable to Royal Dutch Shell plc shareholders	1,759	(572)	481	(896)	(1,042)
Attributable to non-controlling interest	74	(33)	(23)	(68)	(43)
CCS earnings	(19,701)	15,827	24,364	12,471	3,692
Of which:					
Attributable to Royal Dutch Shell plc shareholders	(19,921)	15,270	23,833	12,081	3,533
Attributable to non-controlling interest	220	557	531	390	159

TAXATION CHARGE/(CREDIT)

	2020	2019	2018	2017	\$ million unless indicated 2016
Current tax	3,216	7,596	10,475	6,591	2,731
Deferred tax	(8,649)	1,457	1,240	(1,896)	(1,902)
Total taxation charge/(credit)	(5,433)	9,053	11,715	4,695	829
As a % of income before taxation	20	36	33	26	15

CONSOLIDATED BALANCE SHEET

	Dec 31, 2020	Dec 31, 2019	Dec 31, 2018	Dec 31, 2017	Dec 31, 2016
Assets					
Non-current assets					
Intangible assets	22,822	23,486	23,586	24,180	23,967
Property, plant and equipment	210,847	238,349	223,175	226,380	236,098
Joint ventures and associates	22,451	22,808	25,329	27,927	33,255
Investments in securities	3,222	2,989	3,074	7,222	5,952
Deferred tax	16,311	10,524	12,097	13,791	14,425
Retirement benefits	2,474	4,717	6,051	2,799	1,456
Trade and other receivables	7,641	8,085	7,826	8,475	9,148
Derivative financial instruments	2,805	689	574	919	405
	288,573	311,647	301,712	311,693	324,706
Current assets					
Inventories	19,457	24,071	21,117	25,223	21,775
Trade and other receivables	33,625	43,414	42,431	44,565	39,707
Derivative financial instruments	5,783	7,149	7,193	5,304	5,957
Cash and cash equivalents	31,830	18,055	26,741	20,312	19,130
	90,695	92,689	97,482	95,404	86,569
Total assets	379,268	404,336	399,194	407,097	411,275
Liabilities					
Non-current liabilities					
Debt	91,115	81,360	66,690	73,870	82,992
Trade and other payables	2,304	2,342	2,735	3,447	3,610
Derivative financial instruments	420	1,209	1,399	981	3,315
Deferred tax	10,463	14,522	14,837	13,007	15,274
Retirement benefits	15,168	13,017	11,653	13,247	14,130
Decommissioning and other provisions	27,310	21,799	21,533	24,966	29,618
	146,780	134,249	118,847	129,518	148,939
Current liabilities					
Debt	16,899	15,064	10,134	11,795	9,484
Trade and other payables	41,677	49,208	48,888	51,410	46,999
Derivative financial instruments	5,308	5,429	7,184	5,253	6,418
Taxes payable	6,006	6,693	7,497	7,250	6,685
Retirement benefits	437	419	451	594	455
Decommissioning and other provisions	3,624	2,811	3,659	3,465	3,784
	73,951	79,624	77,813	79,767	73,825
Total liabilities	220,731	213,873	196,660	209,285	222,764
Equity					
Share capital	651	657	685	696	683
Shares held in trust	(709)	(1,063)	(1,260)	(917)	(901)
Other reserves	12,752	14,451	16,615	16,932	11,298
Retained earnings	142,616	172,431	182,606	177,645	175,566
Equity attributable to Royal Dutch Shell plc shareholders	155,310	186,476	198,646	194,356	186,646
Non-controlling interest	3,227	3,987	3,888	3,456	1,865
Total equity	158,537	190,463	202,534	197,812	188,511
Total liabilities and equity	379,268	404,336	399,194	407,097	411,275

APPENDIX 2 continued**CONSOLIDATED STATEMENT OF CASH FLOWS**

	2020	2019	2018	2017	\$ million
(Loss)/income before taxation for the period [A]	(26,967)	25,485	35,621	18,130	5,606
Adjustment for:					
Interest expense (net)	3,316	3,705	2,878	3,365	2,752
Depreciation, depletion and amortisation	52,444	28,701	22,135	26,223	24,993
Exploration well write-offs	815	1,218	449	897	834
Net gains on sale and revaluation of non-current assets and businesses	(286)	(2,519)	(3,265)	(1,640)	(2,141)
Share of profit of joint ventures and associates	(1,783)	(3,604)	(4,106)	(4,225)	(3,545)
Dividends received from joint ventures and associates	2,591	4,139	4,903	4,998	3,820
(Increase)/decrease in inventories	4,477	(2,635)	2,823	(2,079)	(5,658)
(Increase)/decrease in current receivables	9,625	(921)	1,955	(2,577)	(4,127)
(Decrease)/increase in current payables	(9,494)	(1,223)	(1,336)	2,406	1,359
Derivative financial instruments	977	(1,484)	799	(1,039)	1,461
Retirement benefits [A]	568	(365)	390	(654)	127
Decommissioning and other provisions [A]	1,104	(686)	(1,754)	(1,706)	(649)
Other [A]	8	(28)	1,264	(142)	217
Tax paid	(3,290)	(7,605)	(9,671)	(6,307)	(4,434)
Cash flow from operating activities	34,105	42,178	53,085	35,650	20,615
Capital expenditure	(16,585)	(22,971)	(23,011)	(20,845)	(22,116)
Acquisition of BG Group plc, net of cash and cash equivalents acquired	—	—	—	—	(11,421)
Investments in joint ventures and associates	(1,024)	(743)	(880)	(595)	(1,330)
Investments in equity securities [A]	(218)	(205)	(187)	(93)	(132)
Proceeds from sale of property, plant and equipment and businesses	2,489	4,803	4,366	8,808	2,072
Proceeds from sale of joint ventures and associates	1,240	2,599	1,594	2,177	1,565
Proceeds from sale of equity securities [A]	281	469	4,505	2,636	3
Interest received	532	911	823	724	470
Other investing cash inflows [A]	3,239	2,921	1,373	2,909	1,744
Other investing cash outflows [A]	(3,232)	(3,563)	(2,242)	(3,750)	(1,818)
Cash flow from investing activities	(13,278)	(15,779)	(13,659)	(8,029)	(30,963)
Net decrease in debt with maturity period within three months	(63)	(308)	(396)	(869)	(360)
Other debt:				—	—
New borrowings	23,033	11,185	3,977	760	18,144
Repayments	(17,385)	(14,292)	(11,912)	(11,720)	(6,710)
Interest paid	(4,105)	(4,649)	(3,574)	(3,550)	(2,938)
Derivative financial instruments [B]	1,157	(48)	Check	—	—
Change in non-controlling interest	(42)	—	678	293	1,110
Cash dividends paid to:					
Royal Dutch Shell plc shareholders	(7,424) [C]	(15,198)	(15,675)	(10,877)	(9,677)
Non-controlling interest	(311)	(537)	(584)	(406)	(180)
Repurchases of shares	(1,702)	(10,188)	(3,947)	—	—
Shares held in trust: net purchases and dividends received	(382)	(1,174)	(1,115)	(717)	(160)
Cash flow from financing activities	(7,224)	(35,209)	(32,548)	(27,086)	(771)
Currency translation differences relating to cash and cash equivalents	172	124	(449)	647	(1,503)
Increase/(decrease) in cash and cash equivalents	13,775	(8,686)	6,429	1,182	(12,622)
Cash and cash equivalents at beginning of year	18,055	26,741	20,312	19,130	31,752
Cash and cash equivalents at end of year	31,830	18,055	26,741	20,312	19,130

[A] With effect from 2019, the starting point for the Consolidated Statement of Cash Flows is 'Income before taxation' (previously 'Income'). Furthermore, to improve transparency, 'Retirement benefits' and 'Decommissioning and other provisions' have been separately disclosed. The 'Other' component of cash flow from investing activities has been expanded to distinguish between cash inflows and outflows. Prior period comparatives for these line items have been revised to conform with current year presentation. Overall, the revisions do not have an impact on cash flow from operating activities, cash flow from investing activities or cash flow from financing activities, as previously published.

[B] As from 2019, a new line item 'Derivative financial instruments' has been introduced for derivatives related to debt.

[C] Cash dividends paid represents the payment of net dividends (after deduction of withholding taxes where applicable) and payment of withholding taxes on dividends paid in the previous quarter.

FREE CASH FLOW AND ORGANIC FREE CASH FLOW

	2020	2019	2018	2017	2016
Cash flow from operating activities	34,105	42,178	53,085	35,650	20,615
Cash flow from investing activities	(13,278)	(15,779)	(13,659)	(8,029)	(30,963)
Free cash flow	20,828	26,399	39,426	27,621	(10,348)
Less: Cash inflows related to divestments [A]	4,010	7,871	10,465	13,619	3,641
Add: Tax paid on divestments	—	187	482	[C]	[C]
Add: Cash outflows related to inorganic capital expenditure [B]	817	1,400	1,740	1,138	11,481
Organic free cash flow	17,634	20,116	31,183	15,140	(2,507)

[A] Cash inflows related to divestments includes Proceeds from sale of property, plant and equipment and businesses, Proceeds from sale of joint ventures and associates, and Proceeds from sale of equity securities as reported in the "Consolidated Statement of Cash Flows".

[B] Cash outflows related to inorganic capital expenditure includes portfolio actions which expand Shell's activities through acquisitions and restructuring activities as reported in capital expenditure lines in the "Consolidated Statement of Cash Flows".

[C] Tax paid on divestments included in Cash flow from operating activities.

RETURN ON AVERAGE CAPITAL EMPLOYED

	2020	2019	2018	2017	2016
Income for the period	(21,534)	16,432	23,906	13,435	4,777
Interest expense after tax	2,822	3,024	2,513	2,995	2,730
Income before interest expense	(18,712)	19,456	26,419	16,430	7,507
Capital employed – opening	286,887	295,398	283,477	280,988	222,500
Capital employed – closing	266,551	286,887	279,358	283,477	280,988
Capital employed – average	276,719	291,142	281,417	282,233	251,744
ROACE	(6.8)%	6.7%	9.4%	5.8%	3.0%

GEARING

	2020	2019	2018	2017	2016
Current debt	16,899	15,064	10,134	11,795	9,484
Non-current debt	91,115	81,360	66,690	73,870	82,992
Total debt [A]	108,014	96,424	76,824	85,665	92,476
Add: Debt-related derivative financial instruments: net liability/(asset)	(1,979)	701	1,273	591	—
Add: Collateral on debt-related derivatives: net liability/(asset)	1,181	23	72	—	—
Less: Cash and cash equivalents	(31,830)	(18,055)	(26,741)	(20,312)	(19,130)
Net debt [A]	75,386	79,093	51,428	65,944	73,346
Add: Total equity [A]	158,537	190,463	202,534	197,812	188,511
Total capital [A]	233,923	269,556	253,962	263,756	261,857
Gearing [A]	32.2%	29.3%	20.3%	25.0%	29.1%

[A] Shell used the modified retrospective transition method for implementing IFRS 16 Leases. Comparative information was not restated, and continues to be presented as previously reported under IAS 17 Leases.

NOTES



FINANCIAL CALENDAR IN 2021

The Annual General Meeting will be held on May 18, 2021.

	2020 Fourth quarter [A]	2021 First quarter [B]	2021 Second quarter [B]	2021 Third quarter [B]
Results announcements	February 4	April 29	July 29	October 28
Interim dividend timetable				
Announcement date	February 4 [C]	April 29	July 29	October 28
Ex-dividend date for ADS.A and ADS.B [D]	February 18	May 13	August 12	November 10
Ex-dividend date for RDS A and RDS B	February 18	May 13	August 12	November 11
Record date	February 19	May 14	August 13	November 12
Closing of currency election date [E]	March 5	May 28	August 27	November 26
Pounds sterling and euro equivalents announcement date	March 15	June 7	September 6	December 6
Payment date	March 29	June 21	September 20	December 20

[A] In respect of the financial year ended December 31, 2020.

[B] In respect of the financial year ending December 31, 2021.

[C] The Directors do not propose to recommend any further distribution in respect of 2020.

[D] The New York Stock Exchange (NYSE), with effect from September 5, 2017, reduced the standard settlement cycle in accordance with the SEC amendments to Exchange Act Rule 15c6-1(a). Under these rules, regular settlement will occur on a T+2 basis for trades occurring on or after the SEC's implementation date of September 5, 2017. As a result, RDS A ADSs and RDS B ADSs traded on the NYSE markets will now settle in line with RDS A shares and RDS B shares traded on European markets, which moved to a T+2 settlement basis for trades in 2014, resulting in the same ex-dividend date for RDS A shares, RDS B shares, RDS A ADSs and RDS B ADSs. Record dates will not change. The timings of these are detailed above.

[E] A different currency election date may apply to shareholders holding shares in a securities account with a bank or financial institution ultimately through Euroclear Nederland. This may also apply to other shareholders who do not hold their shares either directly on the Register of Members or in the corporate sponsored nominee arrangement. Shareholders can contact their broker, financial intermediary, bank or financial institution for the election deadline that applies.

CONTACT US

The best way to get in touch is via the "Contact us" section of the Shell website. From here questions are properly directed to the Shell team that can assist. In addition, we have introduced an automated question response tool to assist with the most popular questions that we receive and reviewed and updated the "Frequently asked questions" section of our website to provide the most time efficient information for our investors.

REGISTERED OFFICE Royal Dutch Shell plc Shell Centre London SE1 7NA United Kingdom Registered in England and Wales Company number 4366849 Registered with the Dutch Trade Register under number 34179503	SHAREHOLDER RELATIONS Royal Dutch Shell plc Carel van Bylandtlaan 30 2596 HR The Hague The Netherlands +31 (0)70 377 1272 or Royal Dutch Shell plc Shell Centre London SE1 7NA United Kingdom +44 (0)20 7934 3363 www.shell.com/investors	INVESTOR RELATIONS Royal Dutch Shell plc PO Box 162 2501 AN The Hague The Netherlands or Shell Oil Company Investor Relations 150 N Dairy Ashford Houston, TX 77079 USA www.shell.com/investors
SHARE REGISTRATION Equiniti Aspect House Spencer Road Lancing West Sussex BN99 6DA United Kingdom 0800 169 1679 (from the UK) +44 (0)121 415 7073 (from outside the UK) customer@equiniti.com For online information about your holding and to change the way you receive your company documents: www.sharereview.co.uk	AMERICAN DEPOSITORY SHARES (ADSS) JPMorgan Chase Bank, N.A. Shareowner Services P.O. Box 64504 St. Paul, MN 55164-0504 USA Overnight correspondence to: Shareowner Services 1110 Centre Pointe Curve, Suite 101 Mendota Heights, MN 55120-4100 USA +1 800 990 1135 (USA only) +1 651 453 2128 (International) Email: https://www.shareowneronline.com/informational/contact-us/ www.adr.com/shareholder	REPORT ORDERING www.shell.com/order Annual Report/20-F service for US residents +1 888 301 0504

CHECK OUR LATEST NEWS

@SHELL

 Follow @Shell on Twitter

 www.facebook.com/shell



ALL OUR REPORTS ARE AVAILABLE AT
[HTTP://REPORTS.SHELL.COM](http://REPORTS.SHELL.COM)

- Comprehensive financial information on our activities throughout 2020
- Detailed information on Shell's taxes
- Report on our progress in contributing to sustainable development