SHELL

ENERGY TRANSITION REPORT

SHELL AND
THE ENERGY TRANSITION

CONTENTS

Chad Holliday, Chair

CHAIR'S MESSAGE

This report is an important step in answering a question I'm often asked by investors, politicians, reporters, and even friends. How can Shell survive, let alone thrive, as the world transitions to lower-carbon energy?

As you will read here, we see several possible paths towards a lower-carbon energy system. And we believe we have a strategy that is flexible enough to keep in step with the changes in the energy system as they unfold.

This strategy is based on creating strong returns for our shareholders and continuing to provide the world with the oil and gas it needs for decades to come. It is based on exploring new business models and technologies to help us find the clear commercial winners in a lower-carbon world.

Contributing to society

Thriving through the energy transition also means working with society. The United Nations' sustainable development goals provide an excellent roadmap, with their pledges to end poverty, protect the planet and ensure prosperity for all by 2030.

Shell is helping advance some of these goals. We have set an ambition to reduce the Net Carbon Footprint[1] of our energy products by around half by the middle of the century. And we will review our progress every five years to make sure we are in step with society as it moves towards the Paris Agreement goal of limiting global warming.

We also support the goal to improve access to energy for the 1.1 billion people on earth who are still without electricity, and the 3 billion who cook using solid fuels that pollute their air and reduce the quality of people's lives.

Shell can play a part here by offering new energy supplies to communities that are underserved, and by providing cleaner energy solutions in the form of electricity generated from a combination of natural gas and renewable energy.

Preparing for the future

Today's Shell has many strengths: we have a global energy supply and trading network; we have the biggest branded retail network in the world; we are a world leader in natural gas, the cleanest-burning fossil fuel when burnt to produce electricity; and we have some of the best engineering and project management expertise around.

We are preparing for the future by using those strengths while investing in new areas of energy, whether that is wind or solar power, charging points for electric vehicles or lower-carbon biofuels.

Building new skills

Over the course of the coming decades, as the world moves increasingly towards lower-carbon energy, we will have to learn new skills at Shell. And the ways we work will have to evolve.

There are many uncertainties ahead. No doubt we will have setbacks along the way, but when that happens we are determined to pick ourselves up and move on quickly. The key will be to engage, learn and adapt to find and realise new opportunities. And the same spirit of innovation that has been the foundation of Shell's success for more than a century will continue to fuel our success in the future.

In the three years since I became Chair of Shell, I have seen great progress. Under Ben's leadership, we have improved free cash flow and returns to shareholders. We acquired BG Group, speeding up our growth in natural gas and deep water to help meet demand for oil and gas in the decades ahead. We have set bold climate-related ambitions to prepare our company for the future, and we have created a New Energies business, that is focusing on new, lower-carbon fuels and power.

I like to think that our New Energies business is sowing different seeds in different places. Over time, we will see where the best and most profitable crops start to grow. Then we will give the winners all the nourishment they need to flourish.

These are the many reasons why the Board of Directors of Royal Dutch Shell is confident that the company will continue to thrive and navigate the opportunities, and risks, of the energy transition ahead.

CHAD HOLLIDAY
Chair

1 Throughout this report, Shell expresses Net Carbon Footprint in grams of carbon dioxide (CO_2) equivalent per megajoule consumed. This includes methane and other greenhouse gas emissions. It covers emissions directly from Shell operations, those caused by third parties who supply energy for that production and those from consumption of these products by end-users.

Ben van Beurden, CEO

CHIEF EXECUTIVE OFFICER'S INTRODUCTION

We have set three strategic ambitions for Shell. They all provide a strong foundation for managing the risks and opportunities linked to the transition to a lower-carbon energy system.

Our first ambition is to provide a world-class investment case, which means being the number one company in our sector in terms of total shareholder return. This will give us the financial capacity to invest in areas where we see growth, and to withstand volatility in oil and gas prices, as well as in downstream manufacturing and marketing margins.

The second is to thrive through the transition to lower-carbon energy by meeting society's need for more and cleaner energy. This means providing the mix of products our customers need as the energy system evolves. It means investing in assets that will remain financially resilient in the energy system of the future.

The third is to sustain Shell's societal licence to operate, to make a real contribution to people's lives. This means being a responsible energy company that operates with care for people and the environment.

Our strategy is underpinned by Shell's outlook for the energy sector and the need to adapt to substantial changes in the world. A rising global population and rising standards of living should continue to drive growth in demand for energy for decades to come.

At the same time, there is a transition under way to a lower-carbon energy system with increasing customer choice and potential price volatility.

Increased transparency

This report helps answer questions from shareholders, governments and non-governmental organisations about what the energy transition means for Shell. It follows talks with the Financial Stability Board's Task Force on Climate-related Financial Disclosures, that is calling on companies to be more open about climate-related risks and opportunities.

I see this move towards greater transparency as an excellent opportunity to demonstrate Shell's strength and resilience in this period of profound change.

This report has two main aims: to show our financial and portfolio resilience in the short and medium term to 2030, and to explain how we are preparing to adapt for the longer term.

As you will read here, we assess the financial resilience of Shell's business until the end of the next decade against a range of oil prices, which we have determined based on assumptions about economic growth, government policies, consumer choices and technology developments.

And we use our scenarios analysis to look further into the future, where there is far more uncertainty. In this future, consumer choice, government policy and technological advances will influence the development of the energy system in ways that will be far reaching but impossible to predict with precision.

Lower-carbon mix

If society is to meet the aims of Paris, we believe it will have to stop adding to the stock of CO_2 from energy in the atmosphere by 2070. That will require the world to significantly reduce the amount of CO_2 produced for each unit of energy used by 2050.

Shell plans to keep pace and catch up with society's progress towards the Paris goals. That will likely mean we need to reduce the Net Carbon Footprint of our energy products by around half by the middle of the century.

We have many ways to achieve this ambition. They include reducing emissions from our own operations, and changing the mix of products we sell to our customers.

This will drive change across our portfolio. It is likely to mean more renewable power, biofuels, and electric vehicle charging points; supplying more natural gas for power, industry and transport; helping further advance technology to capture and store carbon safely underground; and helping develop natural carbon sinks like forests and wetlands to help compensate for those emissions that society will find harder to avoid.

We are already making investments in these areas. And we expect to do more. We also expect to continue to invest in sustaining oil and gas supply to meet growing demand for energy around the world.

Achieving society's goals

I am hopeful that the world can achieve the goals of the Paris Agreement. I believe society has the scientific knowledge, and that it is technically possible to achieve a world where global warming is limited to well below two degrees Celsius.

In fact, many changes are happening already. We see a rising number of electric vehicles in some countries, and a greater use of renewable energy to power homes and businesses.

However, these steps will not be enough on their own. This is a long-term journey. There are tough challenges ahead that society will need to address because the transition will require enormous levels of investment, and profound changes in consumer behaviour.

Shell is also on a journey. We cannot know exactly how this transition will play out, or how long it will take. But it could mean significant changes for Shell in the long term. We will learn, and adapt our approach over time.

Understanding what climate change means for our company is one of the biggest strategic questions on my mind today. In answering that question, we are determined to work with society and our customers. We will help, inform and encourage progress towards the aims of the Paris Agreement. And we intend to continue to provide strong returns for shareholders well into the future.

BEN VAN BEURDEN
CEO

Executive **SUMMARY**

This report describes Shell's understanding of the transition to a lower-carbon energy system[2]. It explains how we are driving our business strategy in the context of climate-related risks and opportunities. It presents why we are confident that Shell is resilient to the changes that may take place and how we intend to thrive by supplying the types of energy our customers will need through the transition. It also contains our response to the recommendations of the Financial Stability Board's Task Force on Climate-related Financial Disclosures.

2 This report is an update to the 'Shell: Energy Transitions and Portfolio Resilience' report (2016).

Chapter 1
TOWARDS A LOW-CARBON FUTURE describes the importance of energy to support growth and prosperity. It highlights the societal challenge to provide more energy while reducing carbon emissions. Shell supports the Paris Agreement to tackle climate change.

Consumers, companies and governments will face tough choices, and the path towards lower-carbon energy will vary by country and sector. Shell sees commercial opportunity in the drive to provide more and cleaner energy.

Chapter 2
SHELL SCENARIOS explains how we navigate uncertainties in the energy system by developing scenarios. It gives highlights from our three main scenarios, called *Mountains*, *Oceans* and *Sky*. They describe a wide range of possible outcomes for the energy system and show we expect demand for oil and gas to be higher in 2030 than today.

Sky shows the most rapid transition to lower-carbon energy. It represents a challenging but technically possible and economically plausible pathway for the world to achieve the temperature goal of the Paris Agreement. Under this scenario, changes in energy demand emerge in the 2020s, and materially impact the energy system in the 2030s and beyond.

In all three scenarios, investment in new oil and gas production will remain essential to meet society's ongoing demand for oil and gas for decades to come.

Chapter 3
OUR RESILIENCE IN THE MEDIUM TERM, TO 2030 demonstrates our ability to remain competitive and resilient even in *Sky*, our scenario that shows the most rapid transition to lower-carbon energy. We present the sources of our resilience to potential changes in the energy system. These include our strategy to reshape the company, the diversity and quality of our portfolio of businesses and geographic footprint, and our strong financial framework.

We describe our active portfolio management that will grow our business in areas that we expect to be important in the energy transition, while reducing costs and improving our CO_2 performance. We illustrate our capacity to generate free cash flow and the sensitivity of our cash flow to oil prices ranging from $40 to $100 per barrel and to government-led CO_2 costs. And we explain our capital discipline, capital flexibility and intent to maintain a strong balance sheet to provide further resilience.

We conclude there is a low risk of Shell having stranded assets, or reserves that we cannot produce economically, in the medium term.

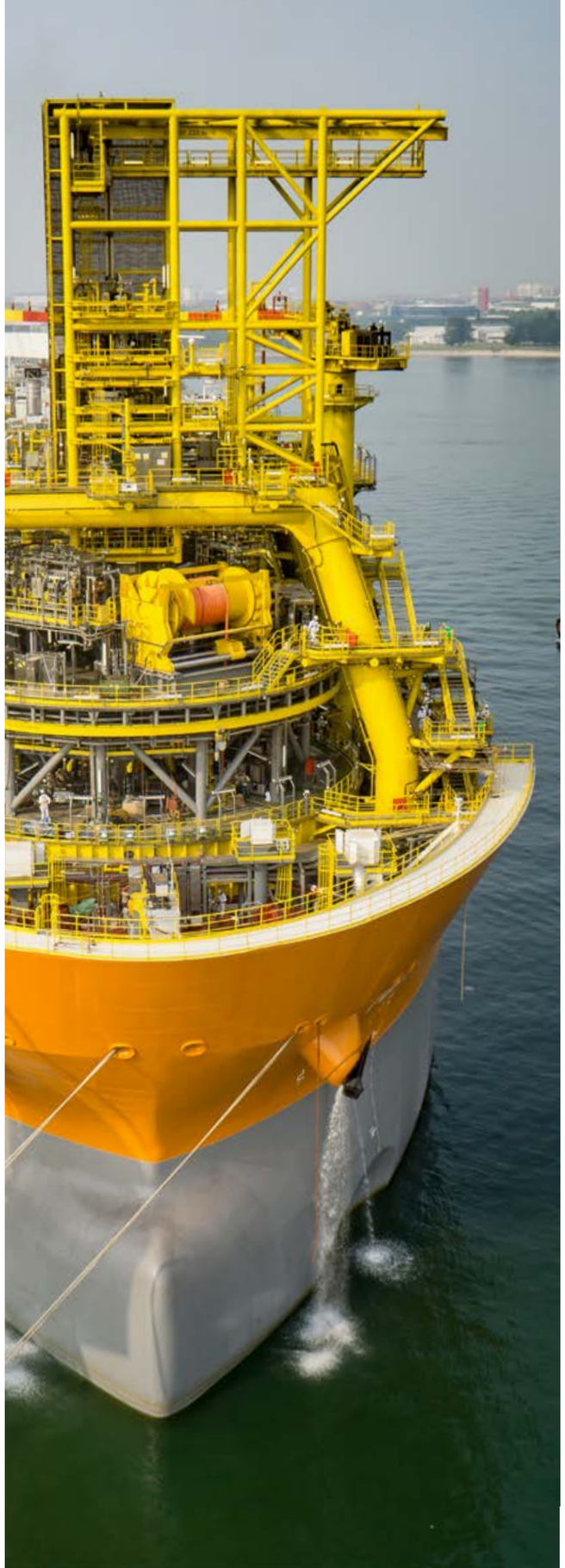
Chapter 4
CHANGING OUR PORTFOLIO IN THE LONG TERM, BEYOND 2030 describes Shell's intent to move in step with society towards a lower-carbon future. It describes our ambition to halve the Net Carbon Footprint of the energy products we sell by 2050. This will mean reducing emissions from our operations, but most of the reductions will come from changing the portfolio of products we sell.

We outline the ways we could achieve this ambition. These include selling more natural gas compared to oil, selling more biofuels, selling more electricity, developing more carbon capture and storage (CCS) capacity and employing nature-based solutions, such as planting forests or restoring wetlands to act as carbon sinks.

Chapter 5
SHELL'S ACTIONS TODAY provides examples of how we are already active in many of the growth areas that will drive our continued success and resilience. It describes how we are managing operational emissions including methane, growing our existing businesses in areas such as liquefied natural gas and investing in new businesses such as new fuels, electric-vehicle charging and providing electricity to homes.

Chapter 6
WORKING WITH OTHERS illustrates the ways we are collaborating and sharing our knowledge with the many different actors in society. We aim to help inform and accelerate the policy, technology and societal changes that will be necessary to achieve a successful transition.

This section also explains that we see a government-led price on carbon as an essential tool for reducing emissions.



This is one of a series of Shell publications that contain information about our view of climate change, the energy transition and our company strategy.

The Financial Stability Board - TCFD
The Task Force on Climate-related Financial Disclosures (TCFD) is a global initiative to get companies across all sectors to assess climate-related risks and opportunities. It recommends that companies disclose information in four areas: governance, strategy, risk management, targets and metrics. Shell supports the work and objectives of the TCFD. In this report, we provide information investors need to assess our strategy and performance.

Shell discloses TCFD-relevant information through different channels:

- This is our second report on energy transitions. It describes our strategy to remain resilient and thrive through climate-related risks and opportunities.
- The Shell Annual Report/20-F provides further information on our governance and risk management of climate change.
- The annual Shell Sustainability Report publishes relevant climate-related emissions performance data.
- Periodic Shell scenario publications share our analysis and understanding of the ways the energy system could evolve over the long term.

Our company website contains further relevant information such as equity emissions performance data, executive speeches, feature articles and news items. We have mapped Shell´s 2018 disclosures against the TCFD's recommended categories in the appendix at the end of this report (see page 77).

Towards a **LOW-CARBON FUTURE**

1.

Society today faces a challenge on an unprecedented scale: how to meet increasing energy needs while reducing carbon emissions.

As societies grow and people pursue a higher quality of life, demand for energy increases. It fuels economies, homes, schools, industry, transport and construction. It's the vital ingredient in the products and services many of us take for granted in our everyday lives.

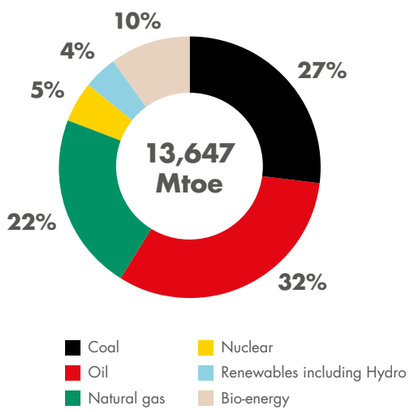
Today's energy system is the result of many decades of choices by consumers, energy suppliers and governments. Societies want energy that is reliable, widely available and affordable. As a result, hydrocarbons account for more than 80% of the energy mix.

Now society faces one of its toughest challenges ever: how to provide more energy to a growing world population, while also reducing the greenhouse gas emissions that contribute to climate change and to air pollution, which affect people around the world.

Addressing this fundamental challenge must include providing energy to the 1.1 billion people who have no access to electricity, or the 3 billion people[3] who still rely on solid fuels like firewood or dung for cooking and heating.

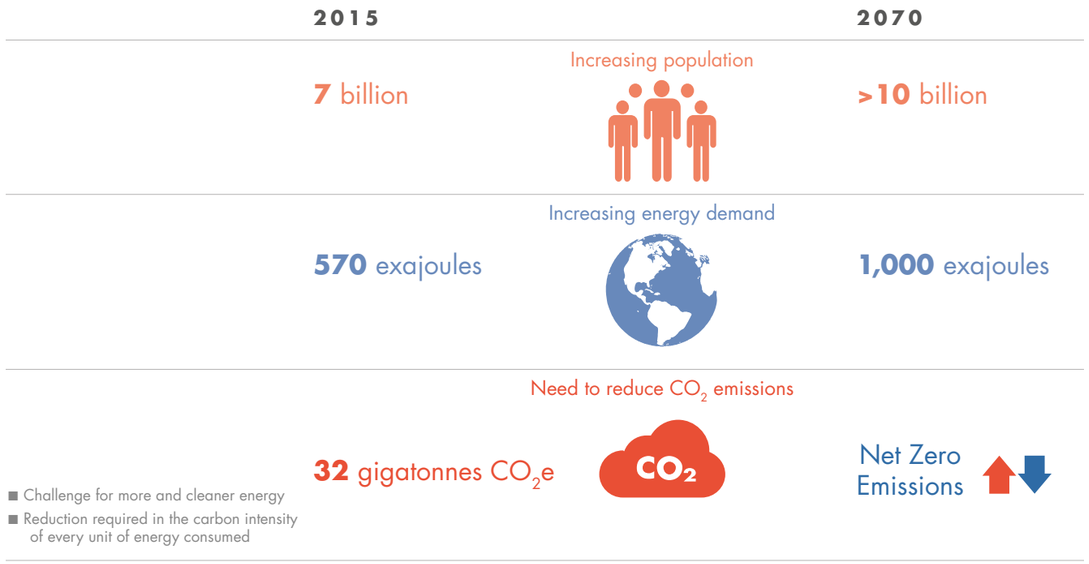
3 Source: The World Health Organization.

IEA KEY ENERGY STATISTICS 2017



Mtoe = Million tonnes of oil equivalent
Source: International Energy Agency, 2017.

SOCIETAL CHALLENGE



Sources: Population – UN world population projections, energy consumption. 2015 – IEA World Energy Outlook (WEO) 2017, 2070 outlook – Shell scenarios analysis from A Better Life with a Healthy Planet CO_2 emissions: 2015 – IEA WEO 2017: 2040 – IEA WEO 2017 Current policies scenario; 2017 – Shell scenario analysis from A Better Life with a Healthy Planet.

Way forward

Governments took a great stride forward in 2015, when they came together in Paris to reach a landmark agreement to tackle climate change. Shell welcomes and supports the Paris Agreement and the ambition to limit the global rise in temperatures to well below two degrees Celsius (2°C) above pre-industrial levels.

It is an ambition that will depend on unprecedented collaboration between governments, companies and society, and crucially, realism about the challenges ahead. It requires a transformation in the way energy is produced, distributed and used.

Capital investment measured in trillions of dollars over decades will be necessary to finance both new sources of energy, and to adjust existing infrastructure. It will also be necessary to change how energy is consumed, as a vast range of capital assets that consume energy – from homes, domestic appliances, vehicles, machinery and entire industries – will need to be adapted or replaced.

The solutions will vary by economic sector. Some, like clothes and food manufacturing, require low-temperature processes and mechanical activities, which electricity is well suited to deliver. These can therefore be powered by low and zero carbon sources of power, including renewable energy.

Other sectors, such as the iron, steel, cement, plastic and chemical industries, and certain types of transport, currently rely on the unique ability of hydrocarbons to provide extremely high temperatures, chemical reactions or dense energy storage. Today, many of these cannot be electrified at all, or only at a prohibitively high cost.

The solutions will also vary by geography. Different countries have different needs depending on local circumstances: their development priorities, types of economy, domestic energy resources, ability to invest and national energy policies.

As a result, the transformation of the energy system will move at different paces and produce different outcomes and different energy mixes in different sectors and countries. It will require trade-offs by energy consumers, companies and governments. It will require willingness to make hard choices.

This is the reality of the change needed across the world to meet the aims of Paris. It is a transition that will span decades. For companies, it will create both risks and opportunities.

Shell is an active player in and has embraced the transformation of the energy system. We see commercial opportunity in participating in the global drive to provide more and cleaner energy solutions.

2.

Shell uses scenarios to stretch our thinking and consider events that may only be remotely possible.

It is impossible to predict with precision how future energy systems will evolve, because there are too many unknowns. Unknowns about how technologies will develop, about the types of energy consumers will choose, about the energy policies governments will implement.

Shell develops scenarios[4] to navigate such uncertainty and to inform and test our business decisions. They are not forecasts or business plans. They describe what could happen, under certain circumstances.

4 www.shell.com/scenarios

Today, our three main scenarios are called *Mountains*, *Oceans* and – our most recent – *Sky*. One of the variables they explore is the type and level of collaboration between governments, businesses and energy users and the impact this has on the energy system.

For example, in *Mountains*, strong governments and powerful economic actors work together to create stability and maintain their own interests. This enables big initiatives like the deployment of carbon capture and storage (CCS) at scale or the building of widespread gas and hydrogen infrastructure.

In contrast, in *Oceans*, competitive markets and a strong private sector are the main engines of change. There is major technology innovation, but big coordinated initiatives are more difficult to achieve. Energy needs are increasingly delivered through a patchwork of initiatives.

Both *Mountains* and *Oceans* deliver net-zero emissions[5] (NZE) from the energy system by the end of the century. But they fall short of the temperature goal of the Paris Agreement.

Sky builds on this earlier work and assumes that society takes actions so as to meet the Paris goal. It requires unprecedented and sustained collaboration across all sectors of society, supported by highly effective government policy.

In *Sky*, the world reaches net-zero CO_2 emissions from the energy system by 2070 and achieves the goal of the Paris Agreement to limit the rise in temperatures to well below two degrees Celsius (2°C).

Like *Mountains* and *Oceans*, *Sky* adopts an approach grounded in the reality of the current economic policy development mechanisms. But it then progressively becomes driven simply by the goal to achieve NZE by 2070.

HIGH HURDLES

Sky is a technologically, industrially and economically possible route to achieving the goals of the Paris Agreement. It is ambitious and challenging to deliver. The magnitude of change needed under *Sky* is apparent in some of the main developments in different sectors.

Electricity: The share of electricity in final energy consumption rises from 18% today to 26% by 2030 and grows to as much as 50% by 2060. Renewable energy overtakes fossil fuels such as oil, gas and coal as the primary source of energy in the 2050s. The world uses hardly any fossil fuels in the power sector after 2060. The share of nuclear in the global electricity mix remains steady at around 10% to 2070. A new addition to the sector is generation from biomass combustion, which is linked with CCS to offer an important carbon sink.

Mobility: The percentage of internal combustion engines (ICE) in passenger cars falls from 100% in 2010 to around 75% by 2030. By 2050, it is impossible to buy a new passenger vehicle powered by an ICE anywhere in the world.

Industry: *Sky* assumes that industrial applications are electrified where possible. To provide the negative emissions required to achieve net-zero emissions from the energy system, *Sky* requires the construction of around 10,000 large CCS plants by 2070, compared to fewer than 50 in operation in 2020.

Land use: *Sky* achieves net-zero global deforestation by 2070. In addition, an area the size of Brazil being reforested offers the possibility of limiting warming to 1.5°C, the ultimate ambition of the Paris Agreement.

Hydrogen: The share of hydrogen in total final energy consumption rises from less than 1% before 2040, to 6% by 2070. It is used as a high-density and storable energy source in transport and industry. Importantly in *Sky*, it is produced from water electrolysis using mainly renewable power.

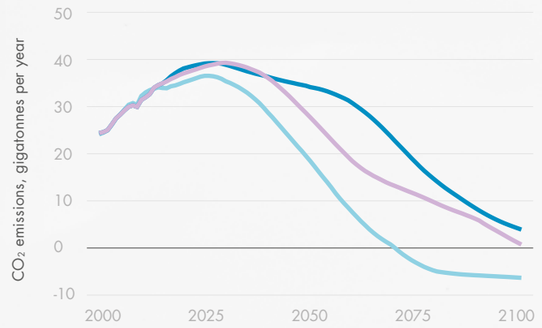
In *Sky*, these changes begin to emerge during the 2020s and accelerate over time. Some sectors, countries or even cities move more rapidly than others. Globally, these early developments begin to make a material impact on the energy system in the 2030s.

5 Net-zero emissions means that any CO_2 from energy emitted into the atmosphere is balanced by extracting CO_2 elsewhere so that the total stock of CO_2 stops growing – an essential step to tackling climate change. Extracting CO_2 from the atmosphere can be done using technologies such as CCS or by nature itself.

SHELL AND ENERGY SCENARIOS

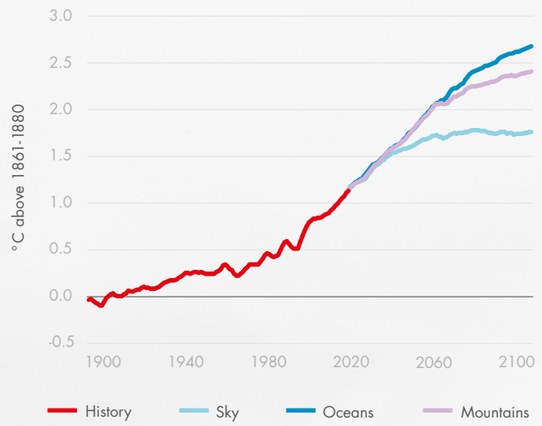
For over four decades, Shell has developed scenarios to deepen our strategic thinking and consider the future. Today, the Shell scenario team comprises energy experts, modellers, economists, political scientists and social analysts. We share and regularly test our thinking and modelling with expert institutes, including the International Energy Agency (IEA) based in Paris, France, the Massachusetts Institute of Technology (MIT) Joint Program on the Science and Policy of Global Change (Cambridge, USA) and the Energy Information Administration (Washington, USA). MIT has used our energy model profiles to calculate the global warming trajectories for our scenarios. They publish their findings independently[6]. Their evaluation concludes that the central estimate of the global temperature rise in the *Sky* scenario is 1.75°C above pre-industrial levels with an 85% chance of remaining below 2°C.

WORLD ENERGY RELATED CO_2 EMISSIONS



Source: Shell analysis.

GLOBAL AVERAGE SURFACE TEMPERATURE RISE



Source: MIT.

6 For MIT's findings for *Mountains*, *Oceans* and *Sky*, see: https://globalchange.mit.edu/publications/joint-program (report numbers 291 and 330).

Growth in energy demand

In all our scenarios, energy demand grows during the century as the global population increases to more than 10 billion and the world becomes more prosperous. They all feature continued long-term demand for oil and gas, alongside rapid growth in renewable sources like wind and solar, and low-emission fuels such as biofuels.

The energy mix varies between regions and countries because of their different starting points, levels of development, types of economy, and energy resources available locally. In north-west Europe, energy demand remains relatively constant and renewables overtake hydrocarbons as the dominant primary energy source.

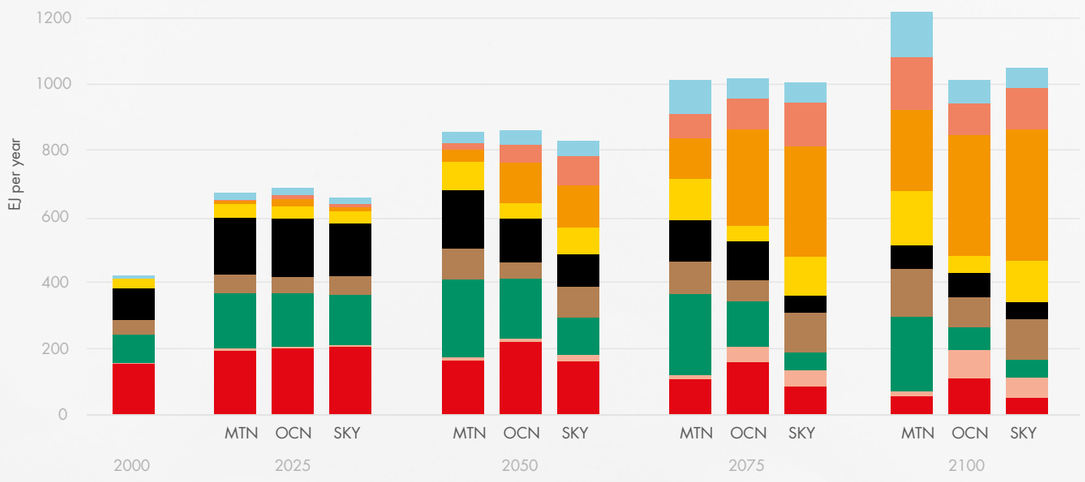
In countries such as China, India and across Africa, all forms of primary energy – including both hydrocarbons and renewable sources – grow strongly from today's base to support industrialisation, build modern economies and raise living standards.

The transition to new sources of energy around the world requires major changes to industrial, commercial and residential infrastructure. This takes time and substantial investment, so the pace of change will build in the 2020s and accelerate thereafter.

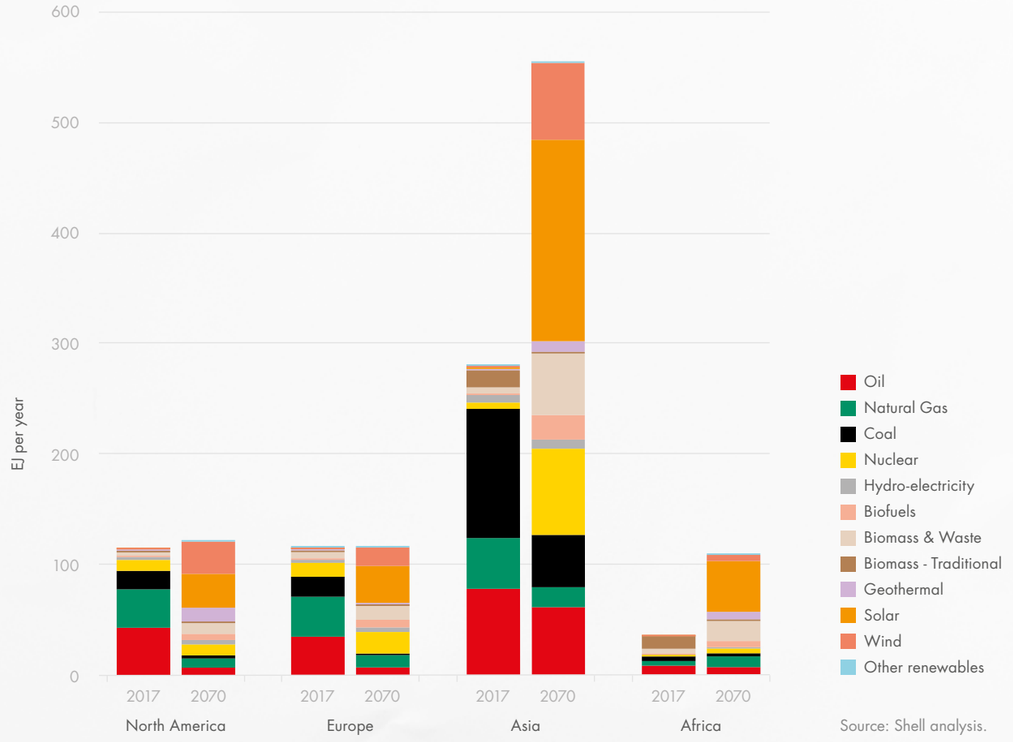
PRIMARY ENERGY BY SOURCE IN THE THREE SCENARIOS

MTN = Mountains
OCN = Oceans

Source: Shell analysis.



PRIMARY ENERGY USE BY GEOGRAPHY



Source: Shell analysis.

Oil and gas demand in Shell Scenarios

The three scenarios result in different outlooks for demand for oil, gas and coal. They all show that demand for oil and gas is higher in 2030 than today, but that the share of oil, gas and coal in the overall energy system falls.

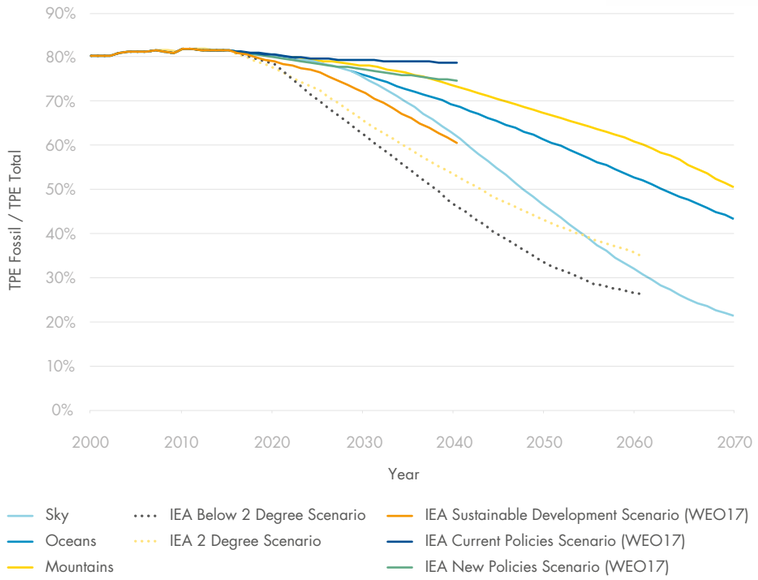
The *Sky* scenario, the most rapid transition, results in the lowest overall demand for oil, gas and coal in the long term. Oil demand grows 1% per year from 2020-25. It peaks around the middle of the decade and then falls by about 1% per year until about 2040.

In 2050, demand for oil is 78 million barrels a day (mb/d) – about 85% of today's oil production. Even in 2070, oil use remains around 50-60 mb/d, because of the continued need for oil in heavy transport, as well as chemical manufacturing.

Gas demand in *Sky* rises 2% per year between 2020-2025 and by 1.5% between 2025-2030. It peaks around the middle of the 2030s and falls by 0.5% per year for the rest of the decade.

In all three scenarios, investment in new oil and gas production will be essential to meet ongoing demand. That's because demand for oil and gas shrinks more slowly than the natural decline in production from existing oil and gas fields under any credible scenario.

OIL, GAS AND COAL: SHARE OF WORLD'S PRIMARY ENERGY



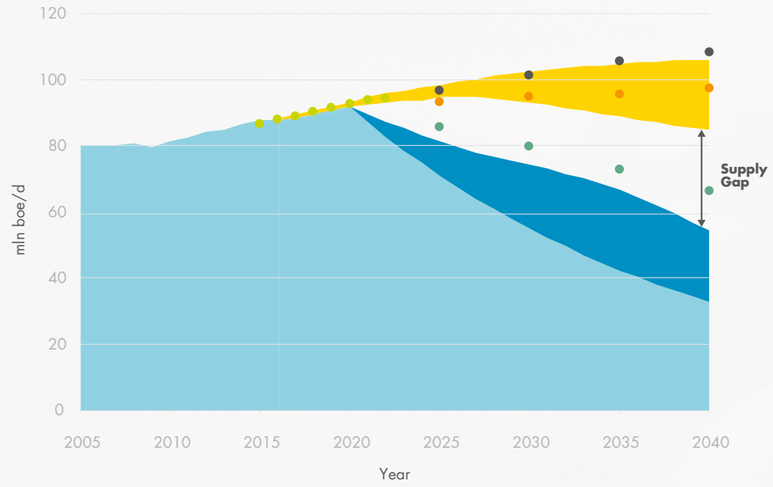
WEO17 = IEA's World Economic Outlook publication

Source: Shell analysis, IEA.

NEED FOR CONTINUED OIL AND GAS INVESTMENT

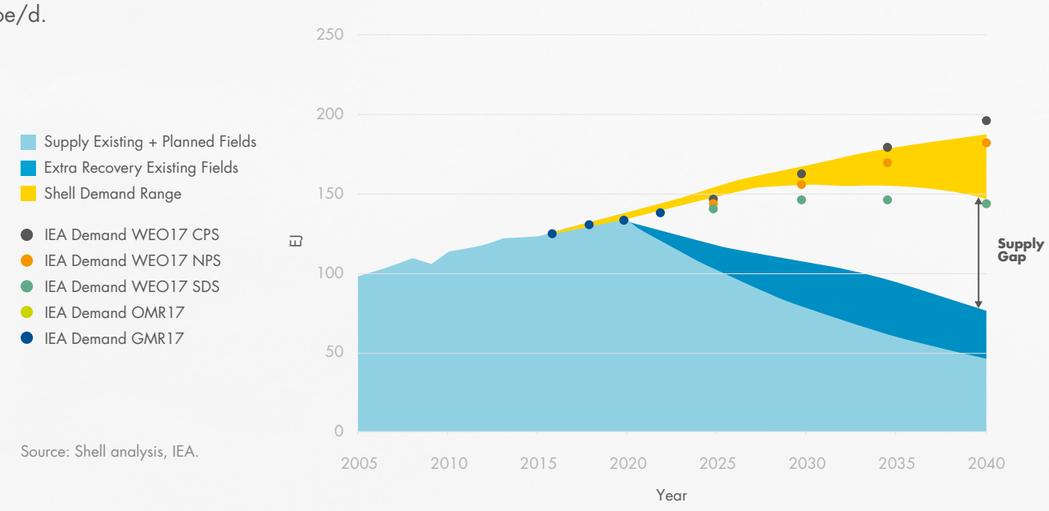
Natural decline in production happens because the pressure and production efficiency in oil and gas reservoirs decreases over time. This makes it increasingly expensive and eventually uneconomic to produce. Such decline rates average 5% per year across the oil and gas industry, according to the IEA. Without ongoing investment to boost production from existing fields, the production decline rate would be about 7% per year, according to the IEA. Over a period of five years, that would translate into about 30 million barrels of oil equivalent per day (mmboe/d) of lost production from the current level of around 95 mmboe/d.

WORLD OIL DEMAND RANGES VS BASE SUPPLY



This chart compares Shell projections of energy demand of our scenarios (in yellow) with those of the IEA (dotted lines). It also shows natural decline in production rates (in blue).

WORLD GAS DEMAND RANGES VS BASE SUPPLY



Source: Shell analysis, IEA.

IEA SCENARIOS

IEA Current Policies Scenario	CPS	An outlook on the basis of just those policies in place
IEA New Policies Scenario	NPS	Derived from the policies already in place and those officially announced
IEA Sustainable Development Scenario	SDS	An integrated approach to achieving internationally agreed objectives on climate change, air quality and universal access to modern energy
IEA Oil Market Report 17	OMR 17	IEA five-year oil market forecast
IEA Gas Market Report 17	GMR 17	Provides a detailed analysis of supply and trade developments, infrastructure investments, and demand-growth forecast through 2022

https://www.iea.org/publications/freepublications/publication/market-report-series-oil-2017.html
http://www.iea.org/bookshop/741-Market_Report_Series:_Gas_2017

3.

OUR RESILIENCE in the medium term, *to 2030*

Shell's strategy, portfolio and strong financial framework give us the sources of resilience to potential changes in the energy system to 2030.

The transition to lower-carbon energy presents opportunities, as well as risks, for Shell. It requires major changes to industrial, commercial and residential infrastructure. This takes time and substantial investment.

We are reshaping our company to provide the energy, and related products and services, that consumers need as society works to meet the goals of the Paris Agreement.

Our strategic ambitions are to be a world-class investment case, to thrive through the energy transition, and to maintain a strong societal licence to operate.

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 expect these will include natural gas, chemicals, electricity, renewable power, and new fuels such as biofuels and hydrogen. We are also growing our oil business, including in deep water and shales, to meet continued demand.

We have a diverse portfolio – both geographically and across different parts of the energy industry. This means we are not dependent on any one country or sector. It also means we can respond to change.

We assess portfolio decisions, including divestments and investments, against potential impacts from the transition to lower-carbon energy. These include higher regulatory costs linked to carbon emissions and lower demand for oil and gas.

At the same time, we plan to maintain a strong financial framework. This means growing free cash flow and creating the financial capacity to provide returns to investors, and to invest in new business models.

It also means reducing costs in our businesses so that we can profitably produce the oil and gas that the world will need for decades to come, even if prices remain low for a long time.

These sources of resilience reduce the risk of stranded assets in our portfolio, a risk we see as low.

We consider the resilience of our portfolio in the medium term by exploring potential ranges in oil prices, and their implications for Shell's cash flows. To ensure that we challenge our thinking, these ranges go beyond the prices implied by our three main scenarios – *Mountains*, *Oceans* and *Sky*.

In the longer term, after 2030, there is far more uncertainty. Here we use scenarios to consider how we could reshape Shell's portfolio of products to meet the changing needs of society, depending on how the pace of transition develops.

SOURCES OF RESILIENCE

PORTFOLIO

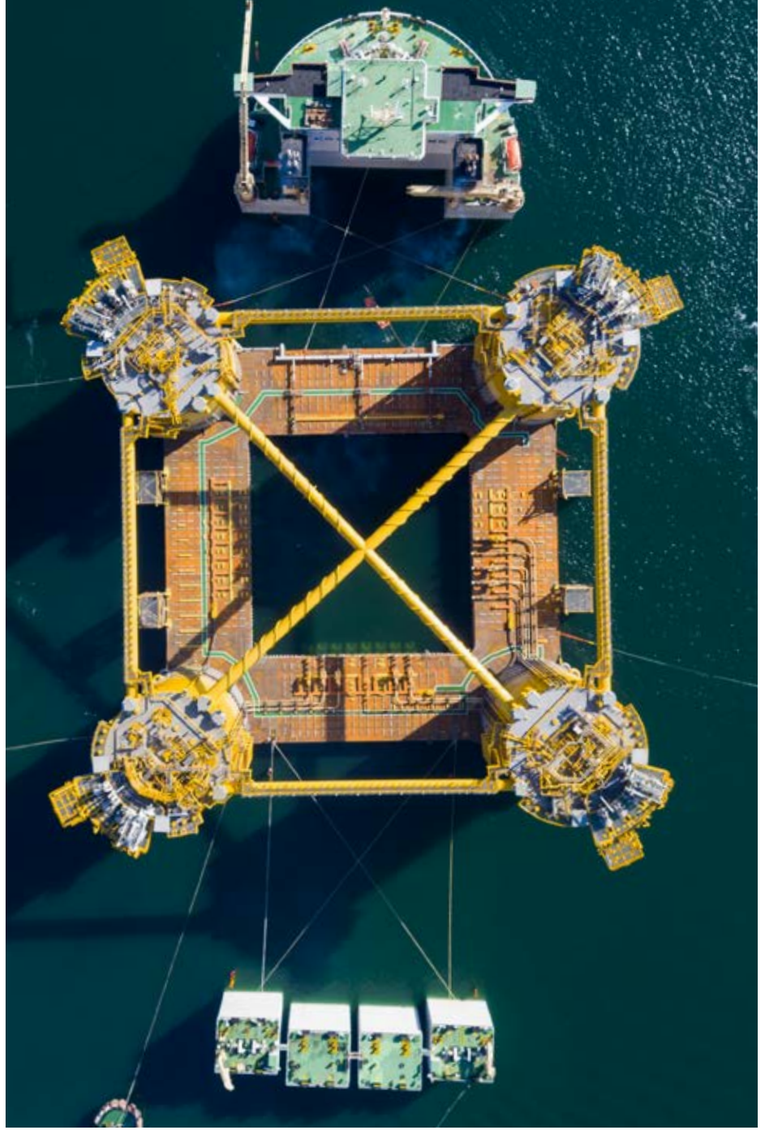
Diverse business segments
The energy system will evolve differently in different countries and economic sectors, and the business risks and opportunities will vary significantly. Our diverse business helps reduce our exposure to unexpected changes in any one sector or country. It also gives us the ability to shift in and out of assets and businesses depending on our outlook.

Our resilience is strengthened by having operations in many parts of the energy system, as demonstrated by our seven strategic themes: Conventional Oil and Gas, Deep Water, Shales, Integrated Gas, Oil Products, Chemicals and our recently created New Energies business, that focuses on power and new fuels.

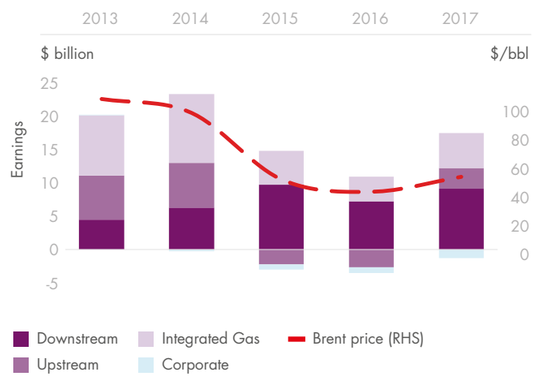
These businesses range from the primary extraction of energy and its processing, to the eventual sale to customers, giving us flexibility to manage risk and returns as the energy system evolves.

We have demonstrated the strength of our integrated model. In the past three years, our Downstream business, which includes chemicals, marketing, and refining and trading, generated strong earnings.

This helped offset the impact of the downturn in oil and gas prices on our Upstream and Integrated Gas businesses. It also demonstrated how each part of the energy system can be impacted differently by shifts in demand, supply and commodity prices.



OUR PORTFOLIO DIVERSITY PROVIDES RESILIENCE THROUGH PRICE CYCLES



Source: Shell analysis.

Geographic diversity
Our global business has operations in more than 70 countries, giving us a wide geographic reach. This exposure is spread across countries at different stages in their economic development and transition to lower-carbon energy, reducing our exposure to potential rapid changes in any one country.

In 2017, 19 countries accounted for about 80% of Shell's cash flow from operations. These included Australia, Brazil, Canada, Nigeria, Qatar and the USA. We expect a similar spread in our sources of cash flow from operations in the coming decade.

During this time, we expect to see a reduction in demand for oil and gas in some countries, as well as rapid growth in others. For example, our *Sky* scenario shows that demand for oil starts to decline globally after 2025 but still grows in some countries, including India and China until the middle of the century.

We are adapting the products we offer to match the different needs of our customers in different countries.

Active portfolio management

We are reshaping our portfolio by growing our Integrated Gas, Chemicals, and New Energies businesses. These are the areas where we could see the highest increases in demand over the next decade as the world transitions to lower-carbon energy.

We took an important step in the reshaping of our portfolio with the acquisition of BG Group in 2016. This acquisition accelerated our growth in Integrated Gas where we expect more demand as gas is the cleanest-burning hydrocarbon when used to generate electricity. The acquisition also increased our positions in deep water, especially in Brazil.

We are expanding in the power market because we expect the energy system to increasingly electrify in the coming decades. And we expect the power sector to shift toward lower-CO_2 electricity generated by gas and renewables.

We are investing in areas such as wind power generation in the Netherlands and the supply of power to retail customers in the UK. This takes advantage of our existing gas and power trading capabilities while building new business models for the future.

We are also adjusting our businesses to meet changing demand in different countries. For example, we are offering hydrogen and electric-vehicle charging, in addition to liquefied natural gas (LNG) and biofuels, in European markets such as Germany where we see a faster transition to lower-carbon energy.

And we plan to grow the number of retail sites in countries such as China, Mexico, India, Indonesia and Russia where we see demand for oil products growing in the next decade.

We assess our portfolio decisions, including divestments and investments, against potential impacts from the transition to lower-carbon energy. These include higher regulatory costs linked to carbon emissions and lower demand for oil and gas.

The portfolio changes we are making reduce the risk of having assets that are uneconomic to operate, or oil and gas reserves that are uneconomic to produce because of changes in demand or CO_2 regulations.

DEMAND IMPACT UNDER *SKY* FOR DIFFERENT ENERGY PRODUCTS

Compound annual growth rates (CAGR) for the defined period in time.

	World				India				US			
	2020-2025	2025-2030	2030-2040	2040-2060	2020-2025	2025-2030	2030-2040	2040-2060	2020-2025	2025-2030	2030-2040	2040-2060
Coal	+0.3%	-0.6%	-1.7%	-2.8%	+5.8%	+2.5%	+1.6%	-1.0%	-3.4%	-4.4%	-7.8%	-3.8%
Gas	+2.1%	+0.9%	-0.5%	-3.3%	+5.4%	-1.4%	-3.3%	-0.3%	+1.0%	-0.8%	-1.2%	-3.7%
Oil[1]	+0.9%	-0.9%	-0.9%	-1.6%	+4.8%	+2.6%	+2.7%	+1.2%	-1.4%	-3.5%	-4.3%	-4.7%
Biofuels	+2.5%	+1.2%	+9.6%	+5.5%	+5.0%	+9.0%	+11.7%	+16.5%	-1.9%	-6.4%	+13.1%	+0.9%
Oil products*	+1.0%	-0.8%	-0.2%	-0.7%	+5.2%	+2.6%	+3.2%	+1.8%	-1.4%	-3.6%	-3.0%	-3.4%
consumed by road transport	+0.9%	-1.1%	-0.4%	-1.6%	+5.5%	+2.9%	+3.7%	+2.1%	-1.5%	-4.3%	-3.7%	-5.0%
consumed by aviation	+1.6%	+0.9%	+3.0%	+2.1%	+7.2%	+5.1%	+7.4%	+5.9%	-0.3%	-1.3%	+1.1%	+0.8%
consumed by marine	+1.2%	+0.8%	+0.7%	-0.0%	+19.7%	+12.9%	+5.5%	-0.5%	-0.6%	-1.0%	-0.8%	-1.1%
consumed by industry	+1.5%	-2.7%	-6.4%	-11.5%	+4.7%	+0.1%	+0.6%	-6.7%	0.0%	-3.3%	-7.7%	-24.5%
used for (petro)chemicals	+2.1%	+1.3%	+0.8%	+0.2%	+5.5%	+3.6%	+2.3%	+0.8%	-0.2%	-1.5%	-2.6%	-6.9%
Hydrogen	+29.7%	+25.9%	+17.6%	+12.6%	+32.4%	+8.0%	+14.2%	+16.6%	+32.3%	+32.5%	+23.3%	+9.4%
Solar PV	+20.3%	+19.0%	+10.3%	+6.0%	+17.5%	+16.1%	+9.5%	+11.2%	+19.0%	+24.0%	+10.2%	+3.1%
Solar Thermal	+8.1%	+8.3%	+8.3%	+4.9%	+22.2%	+12.0%	+4.3%	+6.4%	+2.6%	+5.1%	+19.9%	-1.5%
Wind	+11.3%	+9.5%	+10.1%	+5.4%	+20.2%	+12.8%	+8.8%	+4.0%	+3.4%	+6.6%	+10.8%	+6.8%

1 Oil demand excludes refinery gains, biofuels and synthetics.

* The demand for liquid hydrocarbon fuels is used as a proxy for oil products demand. By 2030, a minor fraction (less than 5%) of the liquid hydrocarbon fuels will come from biofuels alongside crude oil. By 2060, this will be close to 25% on average globally (more than 10% in India and close to 40% in the USA).

Source: Shell analysis.

Reducing our CO_2 intensity

Managing our CO_2 performance is an important part of our long-term resilience. We consider CO_2 performance when we take decisions about our portfolio.

For example, our petrochemicals complex in Pennsylvania, USA will use a co-generation facility to produce both heat and electricity for the plant, as well as surplus electricity that will be exported to the grid at a lower CO_2 intensity than the regional average.

The plant will also have a highly efficient ethylene cracker which will result in top-quartile CO_2 intensity, according to benchmarking specialists Solomon. We expect the plant to begin commercial production early in the next decade.

In Canada, we are including measures to reduce carbon emissions in plans for our Groundbirch project, a tight shale gas operation in British Columbia. These include using electricity instead of natural gas for the processing plant, using gas instead of diesel to power drilling and using solar energy to power pumps.

We actively consider the use of carbon capture and storage (CCS) to reduce emissions from our projects. Where CCS is not economically feasible at current CO_2 prices, we design some projects to be available for CCS retrofits in the future.

Shell standards require that operating assets with CO_2 emissions of more than 50,000 tonnes of CO_2 equivalent per year create greenhouse gas (GHG) management plans that seek to improve our CO_2 performance. These plans provide clarity on investment options to reduce CO_2 intensity in each of our assets, and have allowed us to identify and prioritise opportunities across our portfolio.

STRONG FINANCIAL FRAMEWORK

We are managing our financial framework to preserve our sources of resilience. Shell's financial strength and access to capital give us the ability to reshape our portfolio and to lead and respond as demand changes. It also allows us to withstand volatility in oil and gas markets.

This strong financial framework is based on growing free cash flow, continued capital discipline and capital flexibility, and a strong balance sheet.

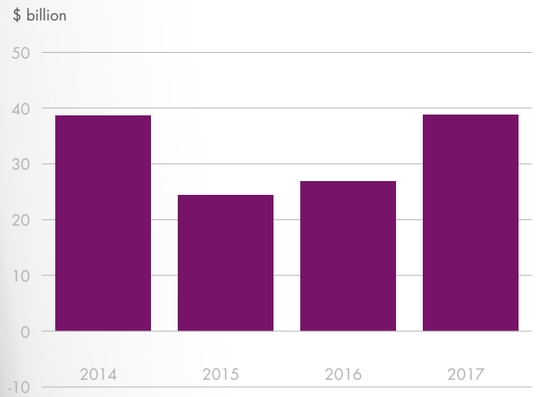
Growing free cash flow

We are confident we can continue to grow our organic free cash flow with revenues from projects that are coming onstream and further operational and cost efficiencies.

We expect to generate organic free cash flow[7], the cash available after capital investment, of between $25 billion and $30 billion per year in 2020 at $65 per barrel, in money-of-the-day terms. This excludes the cash we generate from divestments as we seek a financial framework that is based on the strength of the underlying business cash flows. Organic free cash flow should be well in excess of our debt and dividend payments.

7 Organic free cash flow is defined as free cash flow excluding inorganic capital investment and divestment proceeds.

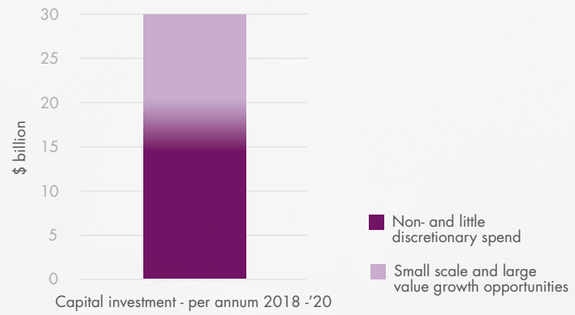
CASH FLOW FROM OPERATIONS EXCLUDING WORKING CAPITAL



CAPITAL INVESTMENT

$ billion (per annum)	2018 – 2020
Oil products	4-5
Conventional oil + gas	4-5
Integrated gas	4-5
Deep water	5-6
Chemicals	3-4
Shales	2-3
New energies	1-2
Total	**25-30**

CAPITAL INVESTMENT



Source: Shell.

Capital discipline and flexibility

Over recent years, we have improved our capital discipline. There are two elements to our approach:

- Applying more stringent resilience criteria to capital allocation decisions, by seeking lower break-even prices and shorter payback periods (the time it takes for Shell to fully recover its capital investment) from our projects;
- Improving our project delivery capability to more consistently achieve our cost and schedule targets and to improve the capital efficiency of our investment portfolio.

For example, all projects in conventional oil and gas with a planned final investment decision (FID) over the next two years have a forward-looking break-even price of below $40 per barrel[8] (see section on Upstream).

We are also looking for projects with shorter payback periods, such as our shales investments in the USA, Canada and Argentina, and our Oil Products investments in Mexico and India.

This strategy is producing strong returns even at a time of lower oil prices. Our cash flow from operations when oil prices were $54 per barrel in 2017 is in line with the cash flow from operations we achieved when oil prices were $99 per barrel in 2014.

Our capital discipline gives us greater flexibility for investments in the future. For example, we have reduced annual capital investment by $22 billion[9], from $46 billion in 2013 to $24 billion in 2017. We will maintain our annual capital investment range of between $25 billion and $30 billion until 2020, with the option to go below the lower end of the range but with the communicated commitment to not go above the higher end.

Discretionary capital spending provides us with the flexibility to respond to volatility in energy markets. In the remaining period to 2020, we expect around 30% of our capital spending to be discretionary, meaning that we have flexibility in how we spend it; whether to grow the value of our existing businesses, or to invest in new businesses.

We expect the size of our discretionary spending to grow in the early 2020s. This will happen as more of our strategic themes move from growth priorities, which require high levels of capital investment, to cash engines, which require less capital and generate more cash.

We see our Deep Water strategic theme moving from a growth priority to a cash engine by 2020, for example.

Strong balance sheet

A strong balance sheet allows Shell to manage volatility in oil and gas markets, including the flexibility to access debt markets if we need to. Shell plans to maintain a strong balance sheet by reducing and maintaining gearing levels to 20% or below, compared to around 25% at the end of 2017.

8 The forward-looking breakeven price for pre-FID projects is calculated based on all forward-looking costs associated with pre-FID projects in our development portfolio. Accordingly, this typically excludes exploration & appraisal costs, lease bonuses, exploration seismic and exploration team overhead costs. The forward-looking breakeven price for pre-FID projects is calculated based on our estimate of resources volumes that are currently classified as 2C under the Society of Petroleum Engineers' Resource Classification System. As these pre-FID projects are expected to be multi-decade producing projects, the less than $40 per barrel projection will not be reflected either in earnings or cash flow in the next five years.

9 This excludes the acquisition of BG Group in 2016.

RESILIENCE IN PRACTICE

STRESS TESTING OUR PORTFOLIO

To assess our financial resilience in the short and medium term to 2030, we look at the sensitivity of our cash flow to changes in oil prices, and to changes in the cost of CO_2 emissions. We expect that the risks associated with the energy transition will ultimately be reflected in the price of oil and gas, and therefore this is the basis for stress testing our portfolio.

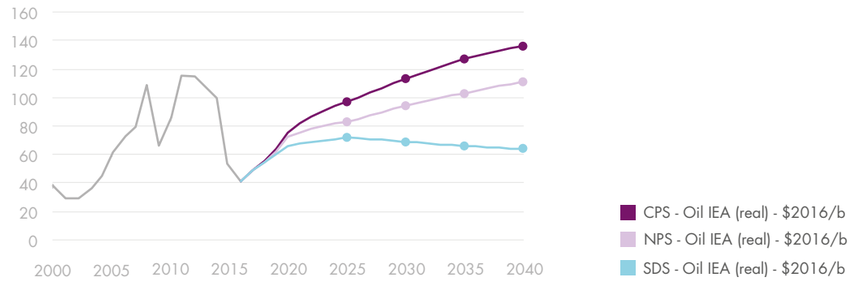
Our scenarios show a range of possible outcomes for the energy system based on factors including growth in demand, the development of new technologies, world politics and government policy.

Given this range of outlooks, we consider a range of between $40 and $100 per barrel of oil to 2030 to be likely. We have used our assumptions about the future cost of supply (the price at which it makes economic sense to produce resources) as the floor for our range.

Prices could move above or below this range. However, when oil prices fall, levels of industry investment tend to decline, which could lead to reduced production. Eventually, higher prices could be needed to support new investment in production to meet demand.

We therefore think it is unlikely that oil prices would remain at the lower end of our price range for several years.

AVERAGE IEA CRUDE OIL IMPORT PRICE BY SCENARIO[10]

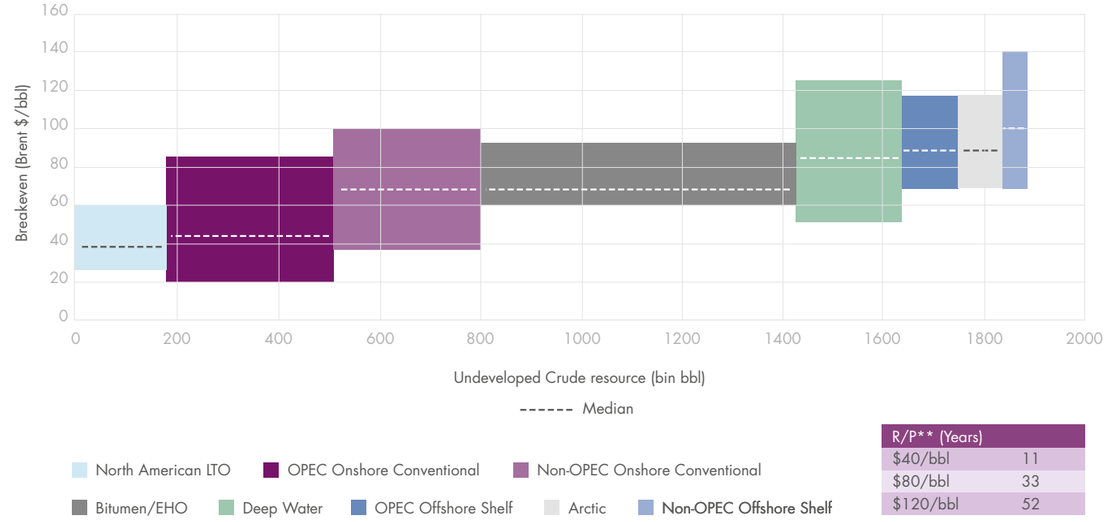


Source: IEA WEO 2017.

For comparison, the average Brent price for the last five years has been around $70 per barrel. The IEA's most rapid transition scenario – the Sustainable Development Scenario – indicates an average oil price of $68[11] per barrel in the period to 2030. The IEA's Current Policies Scenario, that models current and announced energy policies, indicates an average price of $90[11] per barrel for the same period.

Today, around 60% of our Integrated Gas portfolio is linked to oil prices. Based on our view of possible future oil prices, we consider a range of between $6 and $12 per million British thermal units (MMBtu) to 2030 for LNG to be a plausible price for Asian markets, where we sell around 60% of our LNG.

INDUSTRY UNDEVELOPED RESOURCES BREAKEVEN COST CURVE RANGES (INCLUDING YTF*)



R/P** (Years)	
$40/bbl	11
$80/bbl	33
$120/bbl	52

* YTF: Yet To Find
** R/P is Undeveloped Resource volume divided by the current production rate, which gives an indication of future development potential compared to needs. It excludes volumes from already developed fields.
Source: Wood Mackenzie, Rystad Energy, IHS, EIA, NEB (Canada), IEA and Shell internal data/analysis.

10 Actual 2017 oil prices averaged $54 per barrel and actual prices for the first three months of 2018 averaged $66 per barrel (source: US Energy Information Administration).

11 The IEA oil price reflects the "weighted average import price among IEA member countries". Source World Economic Outlook 2018.

Sensitivity to oil prices
Assuming we meet the conditions in our operational plans, especially with regards to production and costs, we estimate that to 2027, a $10 per barrel change in oil prices would be expected to have a roughly $6 billion impact per year on our cash flow from operations. This is an indicative estimate and not a prediction.

Based on this assumption, if the oil price fell from around $65 per barrel today to $40 per barrel money-of-the-day, our cash flow from operations would be expected to decrease by $15 billion per year.[12]

Similarly, if the oil price rose to $100 per barrel money-of-the-day, our cash flow from operations would be expected to rise by $21 billion per year.[12]

In addition to the resilience of our cash flow from operations, we are also managing the resilience of our organic free cash flow by actively managing the upper levels of our expected capital investment.

The capital investment levels included in our business plan offer sufficient flexibility to be reduced by $5-10 billion per year, without materially impacting the long-term sustainability of our business.

Our financial framework could sustain a potential reduction of up to $15 billion per year in organic free cash flow, according to our estimates. Some of the ways we could respond to this shortfall include reducing capital investment to below $25 billion, further reducing operational expenditure, increasing our levels of debt and accelerating divestments.

If prices were to remain below the bottom of our range for more than three to five years, an outcome we think unlikely, we would consider making further strategic, portfolio and financial framework choices to remain financially resilient.

Conversely, in periods of high oil and gas prices we would use the excess organic free cash flow to strengthen our balance sheet and consider share buybacks.

A **$10** PER BARREL CHANGE IN **OIL PRICES** WOULD BE EXPECTED TO HAVE A ROUGHLY **$6 BILLION IMPACT PER YEAR** ON OUR **CASH FLOW** FROM OPERATIONS

A **$10** PER TONNE INCREASE IN **GLOBAL CO_2 PRICES** WOULD RESULT IN **A REDUCTION OF ABOUT $1 BILLION** IN SHELL'S **PRE-TAX CASH FLOWS**

12 Significant variations in oil and/or gas prices will potentially impact certain operating costs, or result in foreign exchange movements the effect of which are not reflected in this price sensitivity.

LOW RISK OF STRANDED ASSETS

Every year, we test our portfolio under different scenarios, including prolonged low oil prices. In addition, we rank the break-even prices of our assets in the Upstream and Integrated Gas businesses to assess their resilience against low oil and gas prices. These assessments indicate that the risk of stranded assets in the current portfolio is low.

At December 31, 2017, we estimate that around 80% of our current proved oil and gas reserves, will be produced by 2030 and only around 20% after that time. Production that is already on stream will continue as long as we cover our marginal costs.

We also estimate that around 76% of our proved plus probable oil and gas reserves, known as 2P, will be produced by 2030, and only 24% after that time.

Sensitivity to government-led CO_2 prices
At our current CO_2 emission levels, we estimate that a $10 per tonne increase in global CO_2 prices would result in a reduction of about $1 billion in Shell's pre-tax cash flows. By embedding a CO_2 cost in our outlook for cash flow, we are reflecting potential changes and ensuring our cash flow is robust in the face of these changes.

In 2017, we increased the CO_2 costs reflected in our cash-flow projections as part of our planning process, with an impact of a reduction of around $1 billion on a net present value basis.

Between now and 2030, we are confident that our current portfolio is resilient in *Sky*, our most rapid transition scenario. For Shell, this means that we will still produce and sell the oil and gas that society needs, while preparing our portfolio to move more into lower-carbon energy, where this makes commercial sense.

RESILIENCE: HIGHLIGHTS FROM OUR UPSTREAM, INTEGRATED GAS AND DOWNSTREAM BUSINESSES

In the section below, we examine the potential impact of the risks and opportunities related to climate change on our businesses and how we are managing that impact. Each of our businesses has different characteristics and strategies that support their resilience in the period to 2030.

Upstream

Our Upstream business covers three strategic themes: Conventional Oil and Gas, Deep Water and Shales. It manages the exploration for, and the extraction of crude oil, natural gas and natural gas liquids. It also markets and transports oil and gas, and operates the infrastructure necessary to deliver them to market.

In 2030, we expect demand for oil and gas to be higher than today in each of our *Mountains*, *Oceans* and *Sky* scenarios. To meet that demand, we expect to make continued investments in finding and producing oil and gas.

Today, we hold around 8.8 years of proved reserves and 13 years of 2P reserves. We hold between 20 and 26 years of resources (2P plus 2C[13]). As a result, we believe we have the potential to sustain our Upstream business into the 2030s.

We continue to explore for more resources to meet the expected demand for oil that we see in *Sky* in the 2030s. We will continue to develop our projects to be competitive on costs so that we are resilient even if there is excess supply and low oil prices.

We can also tailor our exploration work and investment to meet expected demand and prices for oil and gas.

The recent lower oil prices have been a significant catalyst for improved competitiveness in Shell's Upstream business, which has improved our resilience.

Since 2015, we have reduced costs in Upstream by more than 20%, while increasing production by 20%.

At today's oil price, that means Upstream is generating significant cash flows for the Group, enough to pay taxes and reinvest capital to bring more production on line, while still helping pay dividends and reduce debt. Even if oil prices fell to $40 per barrel, the lower end of our range, Upstream would still generate cash flow from operations.

Break-even prices are an important indicator of the resilience of our Upstream projects. For example, deep-water projects waiting for a final investment decision have an average forward-looking break-even price[14] of below $30 per barrel, providing us with competitive growth opportunities.

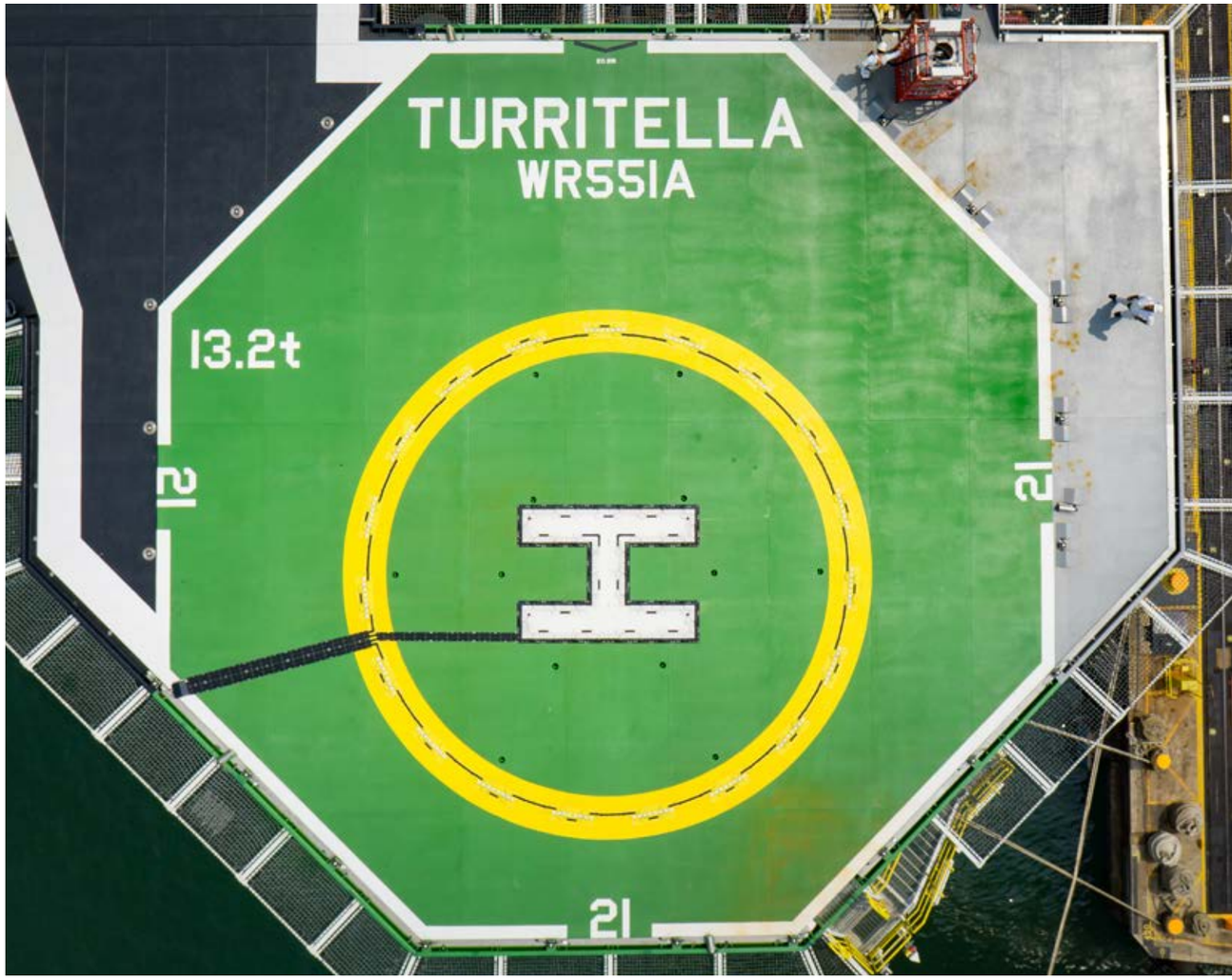
In one project, the Vito deep-water project in the Gulf of Mexico, we reduced overall capital investment costs by 70% compared to our initial concept.

And in the Permian basin in the USA, we have reduced direct field expenses in our shales business by 33% in the last year, and by 60% since 2015.

Design concept for the Vito facility.

13 Contingent Resources are the discovered recoverable petroleum volumes associated with a project that has not yet been deemed technically and commercially mature and thus these resources do not qualify as Reserves.

14 The forward-looking breakeven price for pre-FID projects is calculated based on all forward-looking costs associated with pre-FID projects in our development portfolio. Accordingly, this typically excludes exploration & appraisal costs, lease bonuses, exploration seismic and exploration team overhead costs. The forward-looking breakeven price for pre-FID projects is calculated based on our estimate of resources volumes that are currently classified as 2C under the Society of Petroleum Engineers' Resource Classification System. As these pre-FID projects are expected to be multi-decade producing projects, the less than $30 per barrel projection will not be reflected either in earnings or cash flow in the next five years.



We will continue to assess and adjust investments to sustain our oil and gas resources, with significant flexibility to respond to expected demand, prices and other relevant factors.

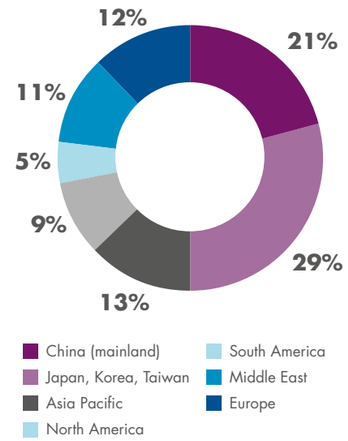
When making investments we consider the following factors to enhance resilience:

- Short-cycle investment and flexibility to allow production to increase or decrease in response to changes in demand or price (for example in Shales);
- Focusing on projects that generate positive cash flow in a short period of time (for example, by adding new wells to existing deep-water fields);
- Improving capital efficiency to lower break-even prices;
- Considering specific performance standards on CO_2 intensity for various asset classes when investing in new assets;
- Deploying technologies to further drive resilience, including the use of CCS and renewables in Upstream assets;
- GHG and energy management to lower CO_2 intensity and potential costs from carbon prices in our operating assets.

Integrated Gas
Our Integrated Gas business manages LNG activities and the conversion of gas-to-liquids (GTL) fuels and other products. It markets and trades natural gas, LNG, crude oil and electricity. It also markets and sells LNG as a fuel for heavy-duty vehicles and marine vessels.

Demand for gas will grow by around 30% by 2030 compared with 2015, with LNG as the fastest-growing segment, according to our *Sky* scenario. This is boosted by gas replacing coal in power generation and industry. Demand for gas peaks around the middle of the 2030s, and falls by 0.5% per year for the rest of the decade.

% TOTAL SALES - GEOGRAPHIC SPLIT



2017 - Shell and JV marketed volumes.

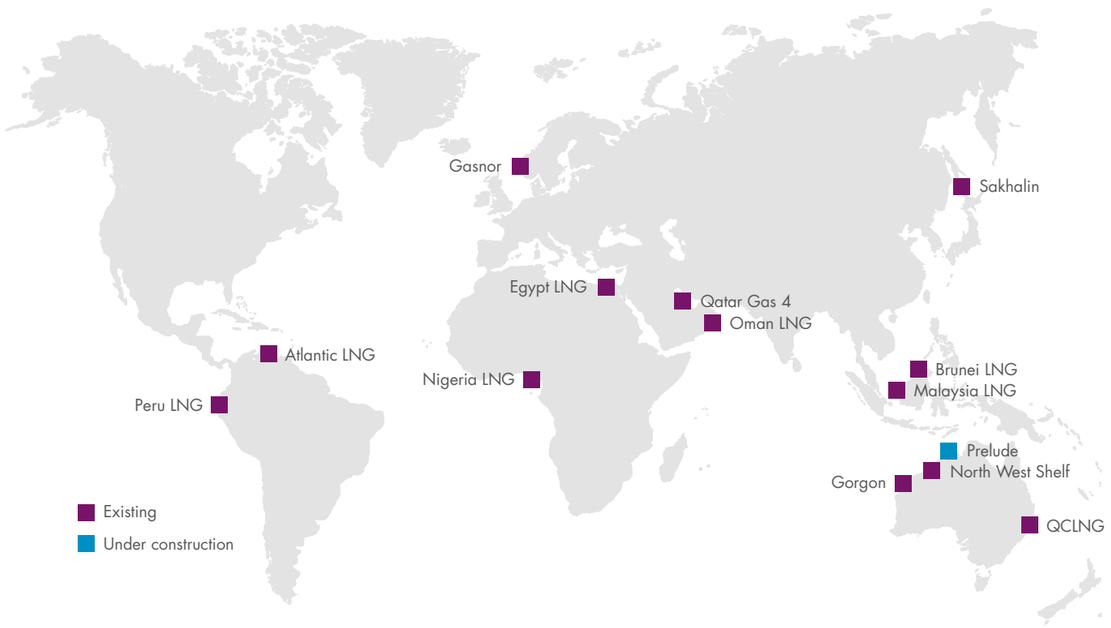
Total demand for LNG grew by 29 million tonnes to 293 million tonnes in 2017, according to our calculations. Based on our current demand projections, we see the potential for a supply shortage in the middle of the 2020s, unless companies commit to new LNG production projects soon.

We expect strong demand for LNG as a fuel for transport. Switching heavy-duty vehicles to LNG can help reduce harmful air pollution. In shipping, for example, natural gas combustion produces up to 80% less nitrogen oxides compared to heavy fuel oil. Natural gas also emits virtually no sulphur dioxide.

Today, the market for LNG as a fuel for transport is around 14 million tonnes per annum (mtpa). If the entire marine and heavy-duty freight sector converted to LNG, it would require 1,200 mtpa of LNG fuel.

We have a globally diversified portfolio of 13 operational LNG plants, and nearly 70 different customers in more than 25 countries, making our Integrated Gas business resilient to variations in regional demand.

WORLD-CLASS LNG SUPPLY PORTFOLIO



LEADING PORTFOLIO

13 liquefaction plants

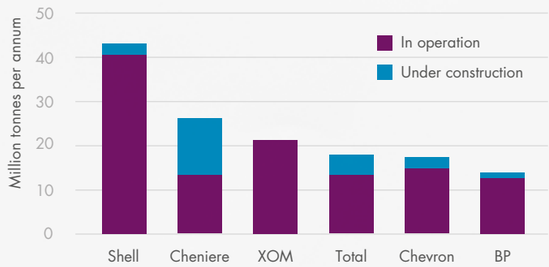
41 million tonnes per annum capacity

95% reliability

Utilisation upside – feedgas availability

Focus on unit cost reduction

LIQUEFACTION CAPACITY BY INDEPENDENT COMPANY



Source: Shell analysis.

Since the acquisition of BG Group, we have reduced underlying operating expenses[15] in Integrated Gas by around 11%, while increasing our sales volumes by 15%. The reliability of our LNG plants has been on average above 95% for the last 3 years. As a result, the forward-delivered cost of LNG from our operational supply sources is below expected pricing levels.

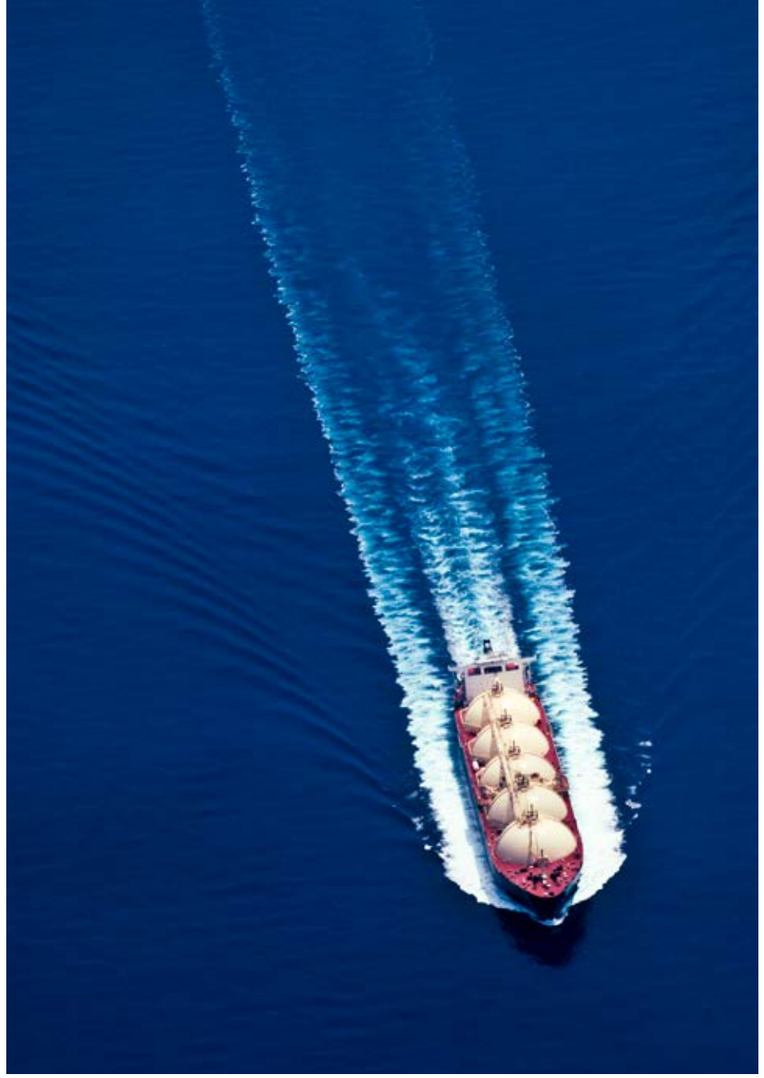
Alongside our existing assets, we are improving the cost competitiveness of our future supply projects. Over the last few years, we have lowered the unit cost of supply[16] of the investment options we hold in our portfolio. We aim to reduce costs to a level that makes any project we execute able to produce and deliver LNG at a price that is competitive in relevant gas markets. This is a necessary condition for any further investments in LNG supply.

Given the long-term nature of gas projects, we usually only develop initially part of the resources, which allows us to tailor our capital investments according to demand in later years. When combined with our trading and optimisation capabilities, this provides flexibility.

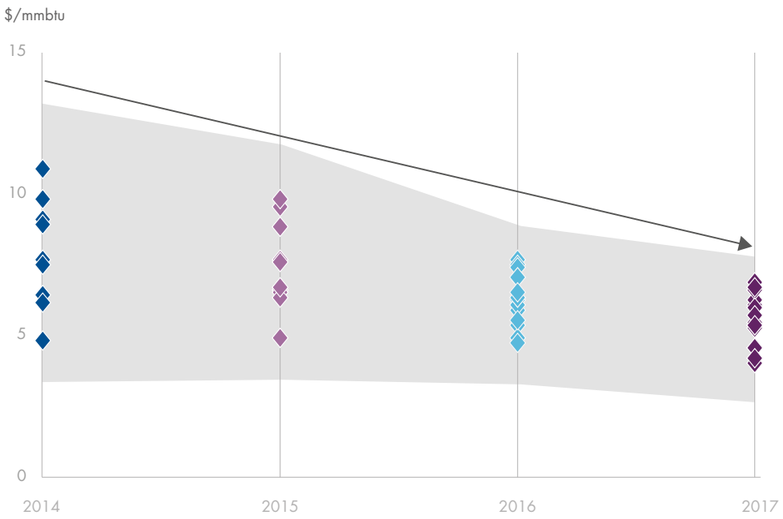
We are increasingly bringing gas and LNG produced by third parties into our portfolio, making our revenues less dependent on equity gas reserves.

Additionally, we are pursuing ways to provide electricity to our facilities from renewable sources to lower CO_2 emissions and increase sustainability, in close collaboration with our New Energies business.

15 Operating expenses excluding New Energies and scope/accounting changes.
16 Cost of supply includes shipping costs, excludes finding costs and fiscal take.



UNIT COST OF SUPPLY FOR FUTURE PROJECTS (PRE-FID)



Note: Diamonds represent the funnel of future supply options in our LNG projects portfolio. Unit cost of supply includes all estimated costs from reservoir to delivery at LNG receiving terminals.
Source: Shell.

NEW ENERGIES

Our Integrated Gas business includes our New Energies strategic theme, which focuses on power and new fuels, two areas where we expect high growth in demand and low impact from CO_2 costs in the coming decades.

We expect our capital investment in New Energies to be between $1 billion to $2 billion a year, on average, until 2020. We expect the largest part of our investments to be in power, where we will invest to gain access to customers, and in generation powered by solar, wind and gas.

The decline in costs of solar and wind generation, along with the electrification of the energy system, make the development of renewable energy resources increasingly attractive for society, and an attractive investment opportunity for Shell.

However, regulatory uncertainty in some power markets could lead to uncertain long-term revenues. To avoid this, we are seeking to invest in projects that are commercially viable today. In addition, we will select the best technology option for each project, depending on the rapidly evolving technology landscape.

Returns are a key part of our investment decisions. For power, we are seeking equity returns of between 8% and 12%. For new fuels, we expect returns on capital similar to those in the Downstream business.

Our power business gives our portfolio resilience to volatility in oil prices because power prices are largely delinked from oil prices, although they are linked to gas, coal and CO_2 prices. Higher CO_2 prices and higher power prices can also generate improved revenues for renewable projects selling power.

We are focusing on expanding in power markets where Shell has an existing customer base, and where the energy transition is expected to offer new opportunities in trading and selling natural gas, renewable power and storage. These include selected markets in North America and Europe. We are also looking at countries with large economies and a fast-growing renewables sector.

Our New Energies business is exploring new fuels for transport, where our activities range from developing advanced biofuels, made from waste and non-food plants, to launching hydrogen refuelling stations and recharging for electric vehicles (EVs).

We describe further opportunities for our New Energies business in Section 5.

Downstream

Our Downstream business comprises two strategic themes: Oil Products and Chemicals. Oil Products activities are marketing, and refining and trading. Marketing includes retail, lubricants, business-to-business, pipelines and biofuels. Chemicals has manufacturing plants and its own marketing network. In trading and supply, we trade crude oil, oil products and petrochemicals.

MARKETING

We expect demand for oil products to grow to 2030. That's because some key sectors such as road freight, aviation and petrochemicals have strong underlying growth in demand, and an expected slower transition away from oil than other sectors.

We expect a faster transition in sectors like passenger cars, as more people switch to EVs (see box on EVs).

In 2017, our marketing business represented around 50% of Downstream's earnings. We expect marketing to deliver an incremental $2.5 billion in earnings per year by 2025.

Earnings from our Marketing business[17] are well spread and in 2017 were split between the Americas (44%), East Asia (23%), and the European Union and Africa (33%).

This diversity is important because it gives us exposure to different regional economic cycles and to the different pace of energy transition in each region.

RETAIL

By 2025, we aim to achieve 40 million daily customers and 55,000 sites around the world, compared to 30 million daily customers in 44,000 sites around the world in 2017. Around half our new sites will be in fast-growing markets such as China, India, Indonesia, Mexico and Russia.

We are making our retail business resilient to potential changes in demand for oil. For example, we plan to increase the contribution of non-fuel retail sales to margins in our Shell-operated retail network to 50%, from about 35% today. This means adding more than 5,000 convenience stores in our network by 2025.

We also plan to increase the portion of our fuels business that comes from low-emission energy solutions to 20% by 2025, from around 7% today.

We have opened more than 20 charging locations – called Shell Recharge – for EVs in the UK and the Netherlands. Together with IONITY, an operator of high-powered charging networks, we plan to offer 500 charge points across 10 European countries, starting with 80 of our biggest service stations in the next two years.

17 This excludes pipelines.

ELECTRIC VEHICLES AND IMPACT ON LIQUID FUELS

Shell's *Mountains*, *Oceans* and *Sky* scenarios show a rise in demand for electric vehicles (EVs) in the next few decades.

This trend is fastest in *Sky*, where more than half of global new passenger car sales are electric by 2030. By 2050, consumers in this scenario will not be able to buy an internal combustion engine (ICE) anywhere in the world.

As a result, the number of ICE cars will fall over time and the number of passenger kilometres driven on electricity will rise rapidly.

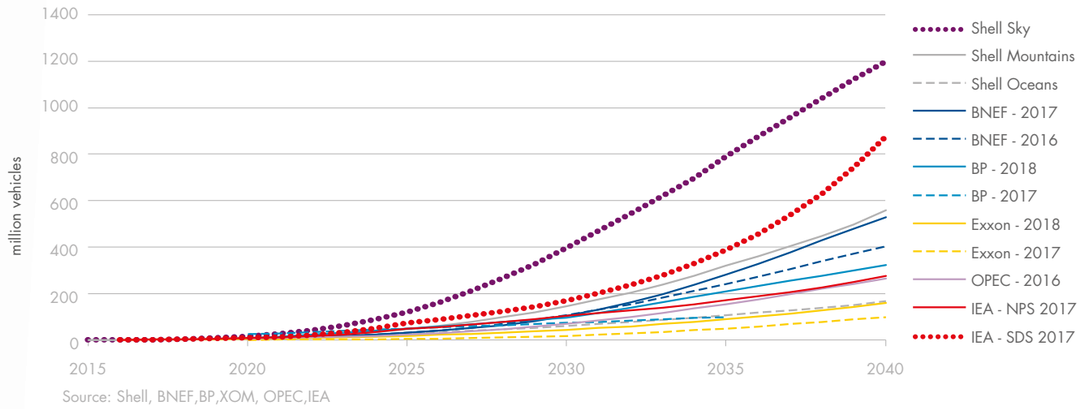
Combined with the impact of better mileage of the remaining ICE cars, this means global consumption of liquid hydrocarbon fuels in the passenger segment falls by 1.5-2 million barrels per day by 2030 compared with today.

This transition will happen at different paces in different parts of the world. In the *Sky* scenario, 100% of new car sales will be electric by 2030 in places such as China and Western Europe, and by 2035 in North America and some other parts of the Asia Pacific region.

Other countries, including India and those in Africa, take longer to make the change. This is partly due to the time it takes to build the power infrastructure required in those countries where the grid is still underdeveloped.

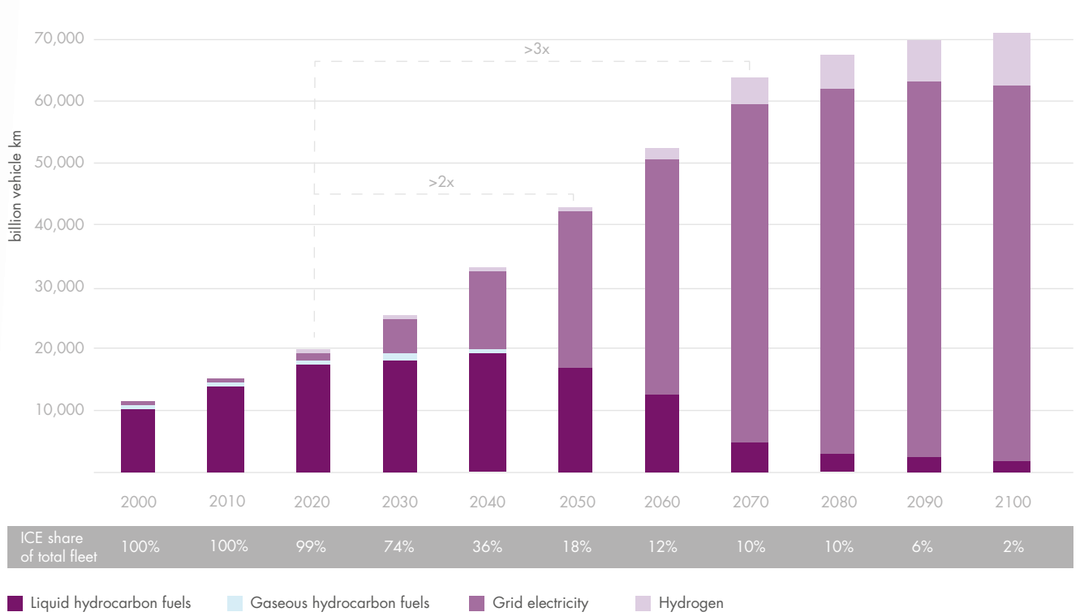
18 The Organisation for Economic Co-operation and Development.

WORLD ELECTRIC VEHICLES FLEET IN *SKY*



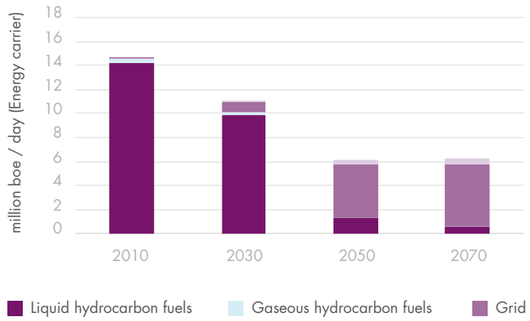
Source: Shell, BNEF,BP,XOM, OPEC,IEA

ENERGY SERVICE BY CARRIER FOR PASSENGER TRANSPORT (ROAD) IN *SKY*

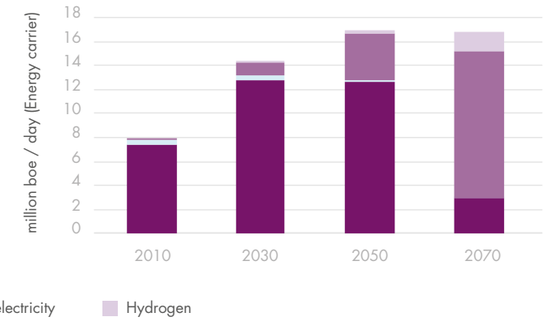


ENERGY CONSUMPTION FOR PASSENGER TRANSPORT (ROAD) IN *SKY*

OECD[18]



NON OECD



Liquid hydrocarbon fuels · Gaseous hydrocarbon fuels · Grid electricity · Hydrogen

Competitive refineries

We have taken significant steps to improve the financial performance and competitiveness of our refineries to increase our resilience to potential changes in demand.

Over the past 15 years, we have reduced our refinery site interests from 51 sites with capacity of 4.4 million barrels per day, to 18 sites with equity refining capacity of nearly 3 million barrels per day. We sell more than 6 million barrels of products to our customers.

We have focused on retaining increasingly complex refineries, which offer crude-grade flexibility, proximity to trading centres and strong integration with Chemicals manufacturing assets. Some smaller and less complex refineries in key markets still offer value in combination with the marketing business they supply.

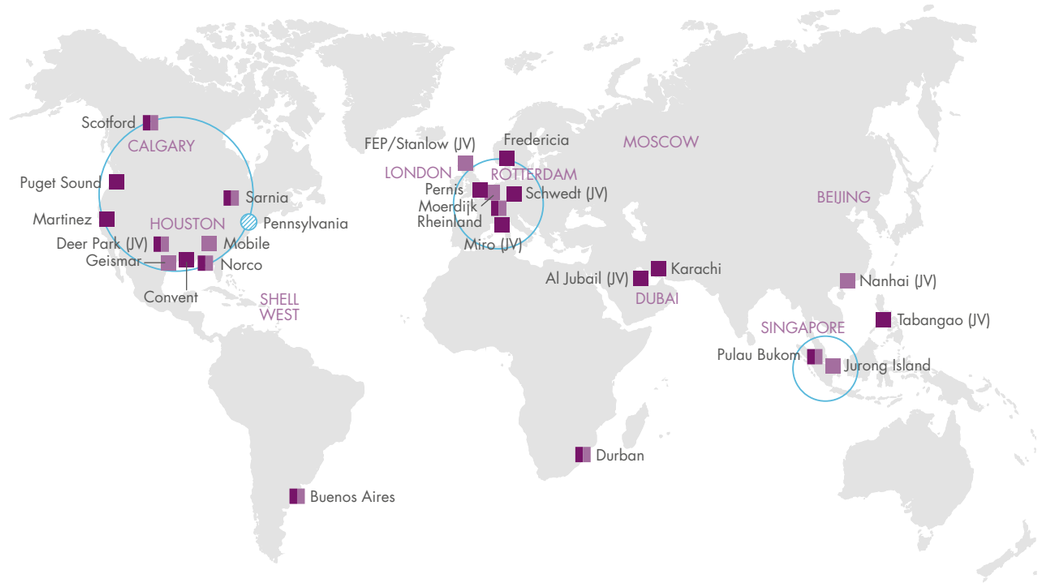
Our integrated refining, trading and chemical assets around the world allow us to capture margins as they shift from region to region. Our three main trading hubs are now in the USA, Singapore and the Netherlands.

Our global portfolio of refineries has a wide geographic spread, reducing exposure to individual markets.

We are reducing the CO_2 intensity of some refineries. For example, by installing energy efficient equipment, improving heat integration and using higher efficiency electric motors. At our site in Fredericia, Denmark, we also sell excess heat to our neighbours, heating 21,000 homes.

Over many decades, Shell has built a deep knowledge and strength in trading a range of products, not only oil and gas, but also CO_2, power, biofuels, hydrogen and other commodities. This capacity will serve as a strong foundation to trade new products and commodities as demand and the energy mix evolves through the transition.

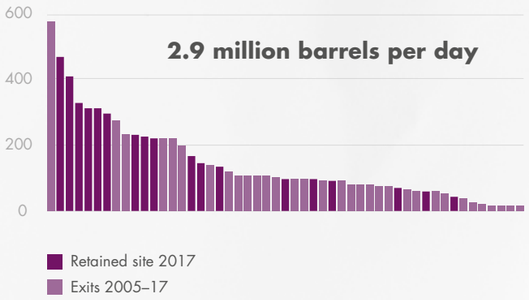
GLOBALLY INTEGRATED REFINING, CHEMICALS AND TRADING WITH HUB LOCATIONS AND ADVANTAGED MARKETS



Source: Shell.

CONSOLIDATED FOOTPRINT

Refinery capacity in thousand barrels per day (100%)



Source: Shell.

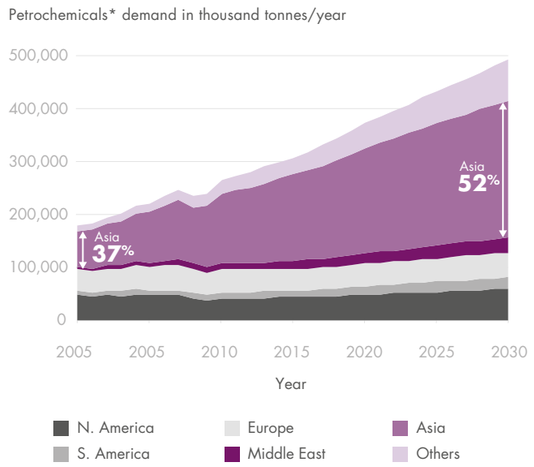
Chemicals

We plan to increase earnings in our Chemicals business from $2.6 billion in 2017 to between $3.5 billion and $4.0 billion per year by 2025.

We expect strong demand growth for chemicals in the medium term, mostly because of economic growth and demand for the everyday products that petrochemicals help produce. Chemicals can also help deliver some of the materials that will help the energy transition – such as high-performance insulation for homes and light plastic parts in cars and planes that can help save energy. Petrochemicals are also ingredients for components in energy-efficient lighting and low-temperature detergents.

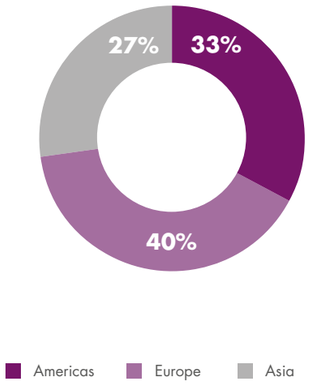
Since 1998, we have reduced the number of chemicals production sites from 133 to15. Our global asset portfolio now offers both a regional balance and a balanced feedstock exposure. This ensures our resilience in a range of volatile market environments.

CHEMICALS DEMAND OUTLOOK



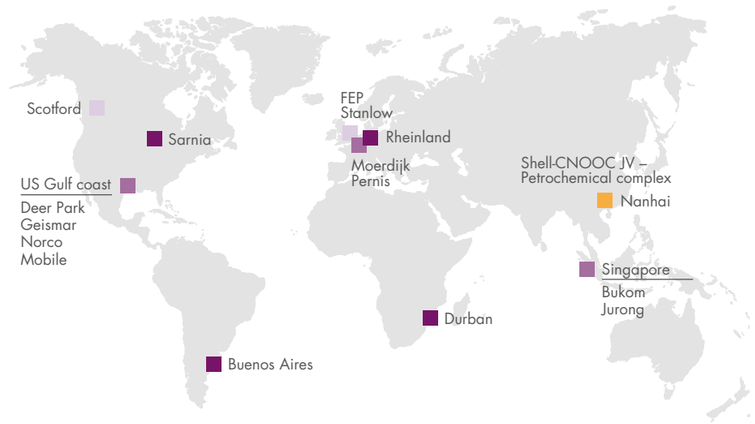
*Cracker base chemicals (aromatics, derivatives, ethylene, propylene and isobutylene). Source IHS/Shell analysis.

CAPACITY* IS REGIONALLY BALANCED



* Base chemicals capacity (C2+C3+bz); portfolio includes Shell operated (12) and non-operated (3)

PORTFOLIO CONSOLIDATED FROM 133 LOCATIONS IN 1998 TO 15 TODAY



Source: Shell.

EIGHT CORE MARKETS FOR THE CHEMICAL INDUSTRY

Consumer
Clothing, furniture, toys

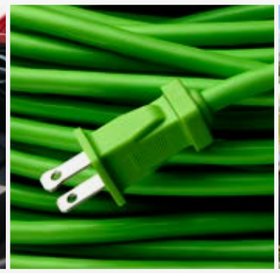
Construction
PVC pipes, plywood, insulation

Packaging
Bottles food packaging, crates

Agriculture
Fertilizer

Electronics
Phone casings, resins

Transportation
Upholstery, car body parts



Durables & industrial
Wiring, cables, hoses

Energy and water
Fuel additives, water treatment

Earnings from our Chemicals business are split between Asia (44.5%), the European Union and Africa (38%), and the Americas (17.5%).

We are taking steps to improve the CO_2 performance of some of our chemicals plants, by improving their reliability and installing more efficient equipment. We are also developing a solar power plant at our Moerdijk chemicals site in the Netherlands. The power produced will be used by the Moerdijk site.

And in Singapore, the combined heat and power plant at our Bukom refinery and chemical plant is saving more than 200,000 tonnes of CO_2 per year.

CHANGING OUR PORTFOLIO in the long term *after 2030*

4.

The transition to lower-carbon energy will feature enormous change in the types of products consumers need. It will also bring major commercial opportunities for companies who supply those products.

Shell intends to thrive as the world transitions to lower-carbon energy. One important way we will do this is by reducing the Net Carbon Footprint of our energy products. Our ambition covers not just emissions from our own operations but also those produced by customers when they use the energy products we sell.

Reducing our Net Carbon Footprint

We plan to reduce the Net Carbon Footprint of our energy products in step with society's progress. We have applied our own unique Net Carbon Footprint methodology, using our *Sky* scenario analysis and the IEA's Energy Technology Perspectives 2017 as inputs. This has identified the reduction in the Net Carbon Footprint of the energy system needed to achieve a reasonable chance of limiting global warming to well below two degrees Celsius (2°C).

Based on this analysis, we believe society will have to achieve net zero additional CO_2 equivalent emissions from energy by 2070. That will likely require the world to reduce the amount of CO_2e produced for each unit of energy consumed from today's level of around 74 grams to around 43 grams of CO_2e per megajoule by 2050[19].

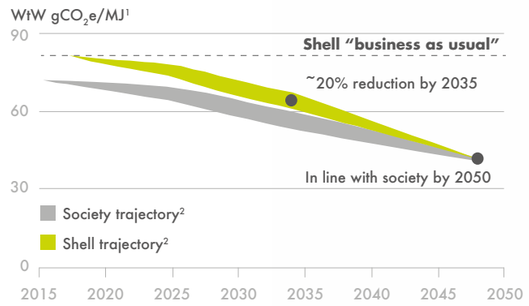
By 2050 we intend to match the Net Carbon Footprint of the global energy system. To achieve this we need to go even faster than society because our starting point is higher. It will likely mean we need to reduce the Net Carbon Footprint of our portfolio of energy products by around half from its current value of around 83 grams of CO_2e per megajoule, to around 43 grams of CO_2e per megajoule by the middle of the century. We plan to reduce our Net Carbon Footprint by around 20% by 2035 as an interim measure.

Shell has a higher starting point today than society's average because our portfolio has a different energy mix compared to the overall energy system. That's mostly because we do not have the large quantities of nuclear power, hydro power, renewables and large-scale primary biomass that the global energy system has.

Critically, our plan covers the full energy life cycle of our products, making it unique in the energy industry. It includes not only emissions from the production of energy products, but also those from their consumption, where around 85% of the emissions associated with our energy products occur.

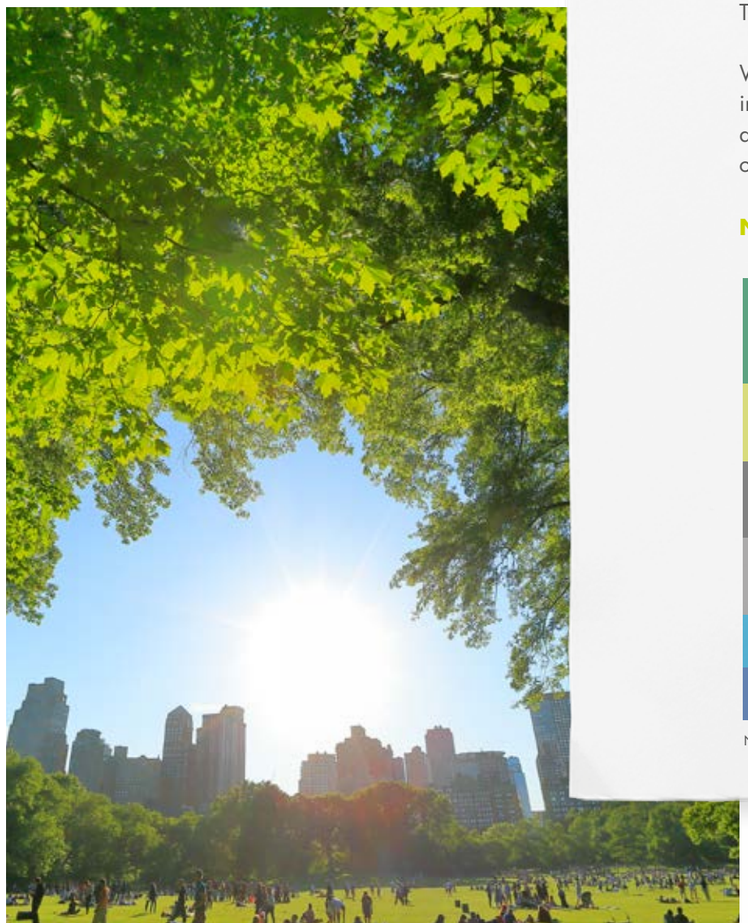
19 Based on Shell analysis of IEA scenario data. The results of using our methodology may differ from other commonly referenced approaches which cover a different scope. We are confident that Shell's Net Carbon Footprint ambition is consistent with the aims of the Paris Agreement and is an appropriate approach to address the activities of a company like Shell.

AMBITION FOR NET CARBON FOOTPRINT[1]



1 Net Carbon Footprint measured on an aggregate "well to wheel" or "well to wire" basis, from production through to consumption, on grams of CO_2 equivalent per megajoule of energy products consumed; chemicals + lubricants products are excluded. Carbon Footprint of the energy system is modelled using Shell methodology aggregating life-cycle emissions of energy products on a fossil-equivalence basis. The methodology will be further reviewed and validated in collaboration with external experts.

2 Potential society trajectory includes analysis from Shell scenarios estimate of Net Zero Emissions by 2070 and IEA Energy Technology Perspectives 2017; potential illustrative Shell trajectory.



CALCULATING OUR NET CARBON FOOTPRINT

Shell's Net Carbon Footprint (NCF) methodology is bespoke and unique. It covers the total greenhouse gas (GHG) emissions associated with the production, processing and consumption of the energy products Shell sells. This includes direct emissions from Shell operations, as well as those caused by third parties who supply energy for our production. It includes the hydrocarbons we procure from other producers, refiners and manufacturers that we incorporate into our supply chain, and the emissions from the consumption of these products by our customers.

The calculation includes biofuels and electricity products, as well as emissions that we offset by using carbon capture and storage (CCS), or natural sinks such as forests and wetlands. It does not include non-energy products such as chemicals and lubricants. This is because they are not intended to be burned, which releases CO_2.

We express our Net Carbon Footprint as grams of CO_2 equivalent produced for each unit of energy delivered. This includes methane and other greenhouse gases.

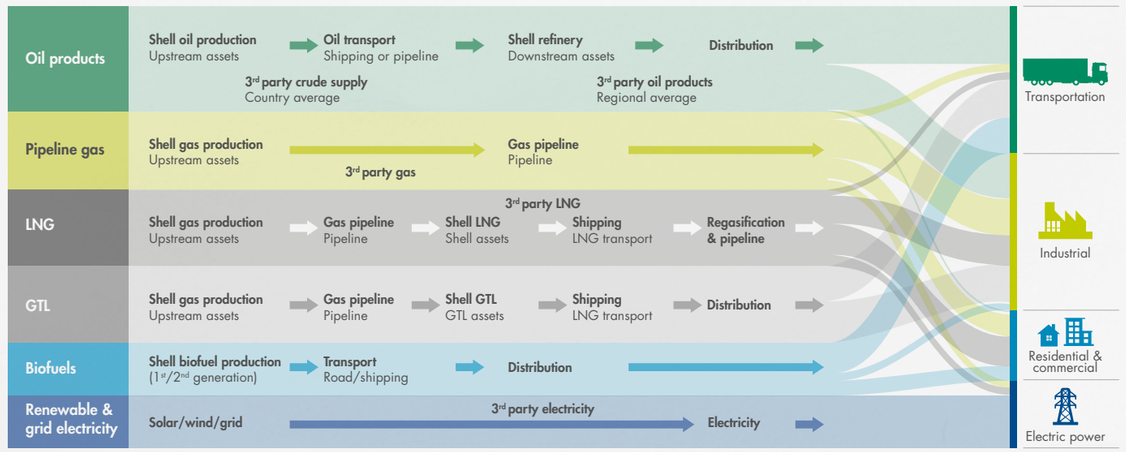
We developed the Net Carbon Footprint methodology in-house at Shell and have designed it to reflect the activities that we are directly involved in and the carbon content of the energy products we sell. Unlike some other approaches, it aggregates and calculates emissions and energy at the point where the energy is delivered to our customers and consumed.

After purchasing our products, some customers will take further steps to reduce emissions such as embedding them in long-life materials, or applying CCS, or improving their own energy efficiency. Because these are outside our control, our NCF methodology excludes these emissions reductions and ascribes no credit for them to Shell unless we are directly involved. For this reason, the relative reductions required to achieve the aims of the Paris Agreement under the NCF methodology will differ from, but are consistent with, IEA projections.

This is a new, and we believe, ground-breaking methodology. We are working with respected experts from independent organisations to review and validate our approach.

We will report our Net Carbon Footprint numbers every year. We will review Shell's progress against society's progress every five years, and revise our ambition accordingly. We will assess this progress by reviewing updated commitments from countries in their nationally determined contributions under the terms of the Paris Agreement, as well as updated scenarios that see the world limiting global warming to 2°C or lower.

NET CARBON FOOTPRINT



Net Carbon Footprint also includes the use of natural sinks and carbon capture usage and storage, not shown in diagram.

Big ambitions

Reducing our Net Carbon Footprint will require us to reduce emissions from our own operations. But most of the reductions will come from changing our portfolio to supply customers more products that produce lower emissions. We will do this in ways that make commercial sense for Shell, in response to changing consumer demand and in step with society's progress.

To give some sense of the scale of the ambition, these are some of the changes that reducing our Net Carbon Footprint to match the energy system by 2050 could mean for our business.[20] And it could mean doing not just one, but all of them.

- Selling the output from 200 large offshore wind farms the size of our planned Borssele wind farm in the North Sea.
- Changing the proportion of gas in the total amount of oil and gas we produce, so that natural gas increases from 50% to 75%.
- Selling the fuel produced by 25 biofuel companies the size of our joint venture Raízen in Brazil.
- Selling enough electricity on our forecourts around the world to meet three times the total demand for power in the Netherlands.
- Developing the capacity of 20 CCS plants the size of our Quest CCS plant in Canada.
- Planting forests the size of Spain to act a carbon sink for emissions that still exist.

These examples reflect Shell's size and scale in the overall energy system: Shell produces around 1.5% of the world's total energy and we sell about 3% of the total energy consumed. They also provide a sense of the far greater ambition that society has set itself in the Paris Agreement.

20 Note: these are illustrative of the type of activities that Shell might employ, where they make commercial sense, to manage the Net Carbon Footprint of the portfolio of energy products it sells.

SHELL ASKED EXPERTS TO REVIEW OUR METHODOLOGY

Sonia Yeh

PROFESSOR IN TRANSPORT AND ENERGY SYSTEMS, *Chalmers University of Technology, Gothenburg, Sweden.*

It is encouraging to see Shell make the commitment to reduce its Net Carbon Footprint by half by 2050. This goal is ambitious, it shows leadership within the industry, and it will inspire others to follow. But it will take robust strategic planning to realise this ambition within the bounds of Shell's other corporate responsibilities as the world's energy system continues to transform.

To support its ability to do this, Shell has initiated a transparent process to account for net carbon emissions, using state-of-the-art tools for energy and emissions tracking. These steps give a clear signal that Shell is committed to reaching its emissions goal.

Lewis Fulton

DIRECTOR, SUSTAINABLE TRANSPORTATION ENERGY PATHWAYS PROGRAMME, *Institute of Transportation Studies, University of California, Davis, USA.*

I'm not aware of any other energy company that is trying to track its Net Carbon Footprint including the products it sells. That's a big step for a company selling mostly carbon-based products and I'd like to see more companies taking this approach.

The methodology is very thorough in the way it tracks carbon molecules through the system. It's a tough job. Today, no data set in the world is robust enough to fully support this work. What's important, though, is that Shell is creating a baseline that will allow it to measure its progress over the next 30 years. That really puts Shell in the hot seat.

Michael Wang

MANAGER OF THE SYSTEMS ASSESSMENT GROUP, ENERGY SYSTEMS DIVISION, *Argonne National Laboratory, Chicago, USA.*

It's good to see that Shell plans to proactively track its progress in reducing its GHG footprints every year. It is the right timing to take this action because of the global trend of significantly reducing GHG emissions towards a low-carbon future. Obviously, achieving meaningful GHG reductions takes time because technology deployment and transition take time. Thus, it will take at least until 2035 to see clear trends in the energy system's GHG reductions.

Note: Shell is paying Chalmers University and the University of California, Davis for their review of our Net Carbon Footprint methodology. Shell is paying Mr. Wang of the Argonne National Laboratory directly. In all cases, the opinions expressed above are solely those of the academics.

Shell's Actions **TODAY**

5.

We are active in many of the areas that will help reduce our Net Carbon Footprint and contribute to the energy transition.

These include managing emissions from our operations, supplying customers with lower-carbon products and developing technologies like carbon capture and storage (CCS) that will be critical in the future.

REDUCING EMISSIONS FROM OUR OPERATIONS

We are taking action to manage the emissions from our own operations and the emissions from the energy we use in our operations.

Greenhouse gas (GHG) management plans

Our GHG and energy management plans for our facilities and projects help drive our emissions performance through a range of actions. These include improving the schedules for equipment maintenance, installing more energy-efficient equipment and considering the potential for CCS in the design of our new and largest projects.

GHG and energy management plans must include the sources of GHG emissions, as well as a forecast of expected emissions at the site for at least 10 years.

To assess the resilience of new projects, we consider potential costs associated with GHG emissions when evaluating all new investments.

This means projects may be stopped at an early planning stage if the GHG emissions are expected to be too high, or a design may be altered to reduce GHG emissions.

REDUCING EMISSIONS

In Integrated Gas, at our Pearl GTL plant in Qatar, we are using heavy paraffin synthesis off-gas as a fuel to power the plant. This fuel had previously been flared. Using it in this way has helped us reduce our overall emissions by 700,000 tonnes of CO_2 each year.

We are expanding the deployment of solar photovoltaics (PV) in our operations. For example, in California, USA, Shell is delivering a PV project to provide on-site solar power to the Stockton fuels distribution terminal.

Shell is also developing a solar power plant at its Moerdijk chemicals site in the Netherlands, with construction planned to begin in 2018. The project will provide an approximate peak capacity of 20 megawatts (MW) of renewable power.

Shell has a 34% share in Petroleum Development Oman, which is building a one-gigawatt solar thermal plant – one of the largest ever. It will make energy production in Oman less carbon-intensive by using sunlight to generate 6,000 tonnes a day of steam needed in day-to-day operations.

Emissions performance
In 2017, we changed the company's bonus scorecard so that 10% was dependent on GHG management. This was based on various emissions targets covering 60% of the company portfolio. In 2018, we will increase that to cover close to 90% of the portfolio.

For 2017, we selected scorecard measures focused on three business areas: refining, chemical plants and flaring in Upstream assets. For 2018, we will keep refining and chemicals metrics and emissions coverage in Upstream and Integrated Gas will be measured on an intensity basis and expanded beyond flaring.

TACKLING METHANE EMISSIONS

Methane is the main component of natural gas. As one of the largest producers of oil and natural gas in the world, Shell is tackling methane emissions, a more potent greenhouse gas than CO_2. We are working with governments, the oil and gas sector and regulators to manage and reduce the amount of methane that is released into the atmosphere.

We use advanced technology to detect and reduce fugitive (unintended) methane emissions at some of our facilities, including using infrared cameras at sites in the USA, Canada, the Netherlands and Tunisia.

We also collaborate on next-generation detection technologies to improve monitoring. In 2017, Shell launched a methane detector pilot in our oil and gas exploration asset in Alberta, Canada. The pilot is part of the Methane Detectors Challenge, a collaboration between the Environmental Defense Fund, oil and gas companies, US-based technology developers and other experts.

In 2017, methane emissions from Shell-operated ventures accounted for less than 5% of Shell's overall greenhouse gas emissions.

Ending routine gas flaring and channelling flared gas
Shell's policy is to reduce any routine flaring or venting of associated gas at our operations to a level as low as technically and commercially viable. We also aim to minimise operational flaring required for safety reasons.

All our facilities must be designed to export, use or reinject associated gas that is produced, and all facilities must meet strict performance criteria.

BASRAH GAS COMPANY

Basrah Gas Company (BGC, Shell interest 44%) is a joint venture with Iraq's South Gas Company and Japan's Mitsubishi. It captures gas that would otherwise be flared from three non-Shell-operated oil fields in southern Iraq for use in the domestic market.

In 2017, BGC processed an average of 676 million standard cubic feet of gas each day from these fields to produce electricity.

SUPPLYING MORE PRODUCTS THAT PRODUCE LOWER EMISSIONS TO CUSTOMERS

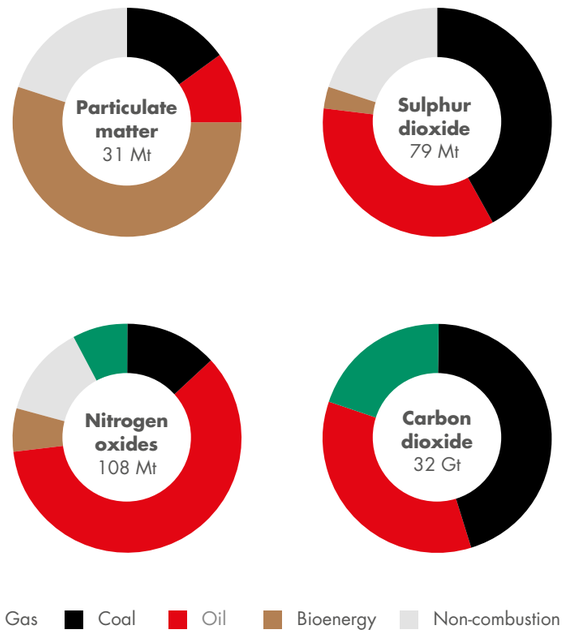
Shell produces and sells a wide range of low-emission energy products, technologies and services that can contribute to reducing overall emissions from the energy system.

Selling more natural gas for power, transport and industry

Growing the share of natural gas in our portfolio compared to oil is one of the most important ways we can reduce the Net Carbon Footprint of our energy products and help contribute to reducing overall emissions from the energy system.

Gas-fired electricity generation can reduce GHG emissions and air pollution by displacing coal-fired generation and supporting the integration of renewables into the energy mix.

EMISSIONS OF AIR POLLUTANTS AND CO_2 BY ENERGY TYPE (IEA)



Data are for 2015: Mt = million tonnes, Gt = gigatonnes

Source: IEA analysis

That's because gas emits between 45% and 55% lower greenhouse gas emissions than coal when used to generate electricity, according to the International Energy Agency.

In addition, modern natural gas plants emit less than one-tenth of the sulphur oxides, nitrogen oxides, particulate and heavy metals that coal does when used to generate power – and so can help improve local air quality. Natural-gas fired power plants also consume less than 50% of the water needed for coal-fired power generation.

Today, natural gas makes up around 50% of Shell's portfolio. We are the world's largest marketer of liquefied natural gas (LNG) among the independent oil and gas companies, with positions in Japan, Korea, Taiwan and China.

GAS FOR TRANSPORT

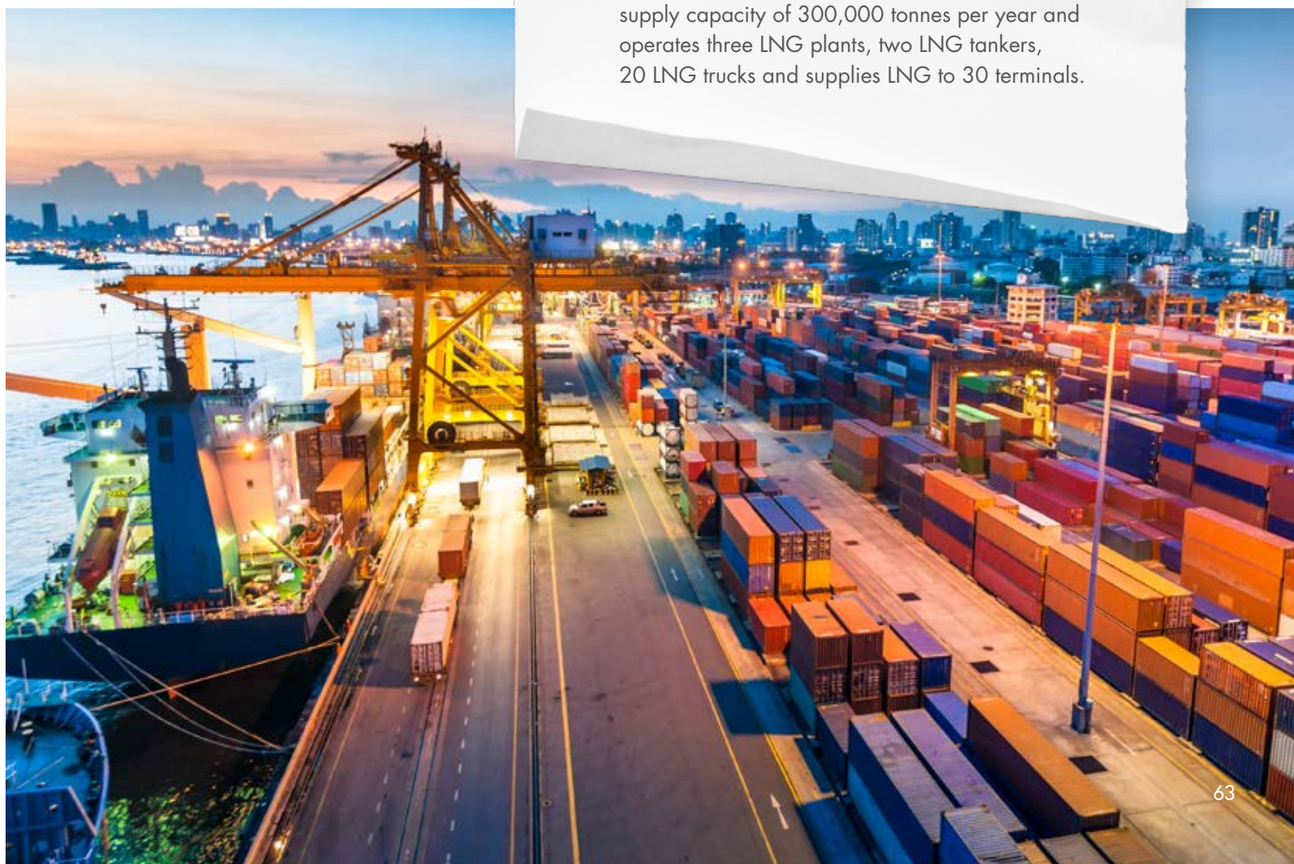
Shell is developing a business in LNG fuel for transport. Switching from diesel and heavy-fuel oil to LNG could be an effective way to reduce GHG emissions and reduce air pollution from trucks and ships.

We have created a network of six LNG truck refuelling stations in the Netherlands, for example. One of the stations, located on the premises of Albert Heijn – one of the largest Dutch supermarket chains – is used by 150 LNG-fuelled delivery trucks a day.

In 2016, Shell signed an agreement with Carnival Corporation, the world's biggest cruise operator, to supply LNG to fuel two of the world's largest passenger cruise ships. And in 2017, Shell finalised an agreement to provide LNG fuel for two additional Carnival cruise ships based in North America.

We were the first customer of new LNG-for-transport infrastructure at the Gas Access To Europe terminal at the port of Rotterdam in the Netherlands.

In addition, Shell has acquired Gasnor, a Norwegian company, which provides LNG fuel for ships and industrial customers. It has an LNG supply capacity of 300,000 tonnes per year and operates three LNG plants, two LNG tankers, 20 LNG trucks and supplies LNG to 30 terminals.



Growing our power business

Electricity, including from renewable sources, will be a large part of Shell's future as the world moves to lower-carbon energy. We want it to become the fourth pillar of our business, alongside oil, gas and chemicals.

We are involved in every step of the oil and gas market, and we intend to apply this same model to electricity. We want to work back from the customer including the supply of electricity to end users, buying and selling it, and producing the electricity.

We currently produce electricity through renewable projects in the USA, and in Europe. We have decades of experience trading electricity and we supply it wholesale to energy retailers. In the USA, we have consistently been ranked in the top three power wholesalers over the past decade.

We manage over 10,000 MW of power across North America – of which over one-third comes from renewable producers.

In 2017, we expanded our capability to supply electricity directly to industrial and commercial customers through the MP2 Energy deal, which gave us direct access to large-scale industrial and commercial markets in Texas and the north-east USA.

In 2017, we agreed to acquire First Utility, a leading independent energy provider to 825,000 households in the UK.

In addition, we want to improve access to electricity in the developing world. We will help to bring a reliable flow of electricity to those who do not have it, by investing in companies that operate mini-grids and provide access through secure, pay-as-you-go systems.

In early 2018, for example, we agreed to jointly invest in Husk, a company based in India, that supplies electricity to rural areas in Asia and Africa.

Investing in electric mobility

In line with our ambition to sell more and cleaner energy, we are expanding into supplying electricity for transport. In 2017, Shell acquired Netherlands-based NewMotion, a company with one of Europe's biggest networks of electric vehicle (EV) charging points.

NewMotion operates more than 30,000 private electric charge points located in homes and offices in the Netherlands, Germany, France and the UK. It also provides 100,000 registered charge card users access to over 50,000 public charge points across 25 countries in Europe.

Shell is also introducing electric charging points on forecourts in the UK, with 10 in 2017. We are building a connected network of fast charging points across Shell retail stations in the Netherlands. And in 2017, we signed an agreement with high-powered charging network operator IONITY to offer faster charge points across 10 European countries.

Shell is also offering customers smart-charging technology, which helps integrate EVs into the power grid at times when overall demand is at its lowest. This would be beneficial for the power grid and cheaper for the customers charging their vehicles.

The system was trialled in three pilot projects in the UK, Germany and the USA. We are now looking for opportunities on a larger scale to use this expertise.

Developing conventional and advanced biofuels

Biofuels today make up around 3% of global transport fuels and we expect their share to grow as the world shifts to lower-carbon energy. Shell is one of the world's largest producers of biofuels made from sugar cane, through our joint venture in Brazil called Raízen.

Raízen (Shell interest 50%) produces low-carbon biofuel from sugar cane. This Brazilian sugar cane ethanol can emit around 70% less CO_2 compared with gasoline, from cultivation of the sugar cane to using the ethanol as fuel. In 2017, Raízen produced around 2 billion litres of low-carbon ethanol from Brazilian sugar cane.

Shell is also one of the largest blenders and distributors of biofuels worldwide. We purchase biofuels to blend into our fuels to comply with country regulations and mandates.

IN **2017**, WE USED AROUND **9 BILLION LITRES OF BIOFUEL** IN THE PETROL AND DIESEL WE **SOLD**

In 2017, we used around 9 billion litres of biofuel in the petrol and diesel we sold. We market biofuels in many countries including the USA, Brazil, European Union countries, Turkey, Thailand, Malaysia, the Philippines, Argentina and Canada.

DEVELOPING ADVANCED BIOFUELS

We are active in the development of advanced biofuels made from alternative feedstocks such as waste and cellulosic biomass from non-food plants.

In 2015, Raízen opened its first advanced biofuels plant at its Costa Pinto mill in Brazil. In 2017, the plant produced 10 million litres of cellulosic ethanol from sugar-cane residues. It is expected to produce 40 million litres per year once fully operational.

In Bangalore, India, we have built a demonstration plant that will turn waste – including food, cardboard, plastics and paper – into petrol or diesel that can power cars. This provides the final stage of the R&D process we will need to see if it is successful to scale up and support the commercialisation of this waste-to-fuel process.

The process has been developed by a USA-based research centre, the Gas Technology Institute, and is called IH2.

The IH2 process uses heat, hydrogen and catalysts to convert large molecules of the sort found in waste into smaller fragments. Oxygen and other contaminants are removed to create two pure elements: hydrogen and carbon. The two are then combined to create hydrocarbon molecules: petrol, diesel and jet fuel.

Expanding the role of CCS and CCUS

Some sectors cannot be easily electrified, either because their processes rely on extremely high temperatures, or because they require the carbon contained in fossil fuels to drive chemical reactions.

Industries that produce iron, steel and cement, as well as other sectors such as aviation, shipping and long-distance freight will therefore see fossil fuels play a core role for decades to come.

CCS is a critical technology to help reduce CO_2 emissions from large industrial facilities and power plants. It is a combination of existing technologies that capture and store CO_2 deep underground, preventing its release into the atmosphere. Sometimes the captured CO_2 is used, instead of being stored, in a process called carbon capture, use and storage (CCUS). In the oil and gas industry, for example, it can be injected into ageing oil fields to enhance the volume of oil recovered. It can also be used as a feedstock in industrial processes.

There are currently 21 large-scale CCS projects in operation or under construction globally, with a combined capacity to capture around 40 million tonnes of CO_2 each year.

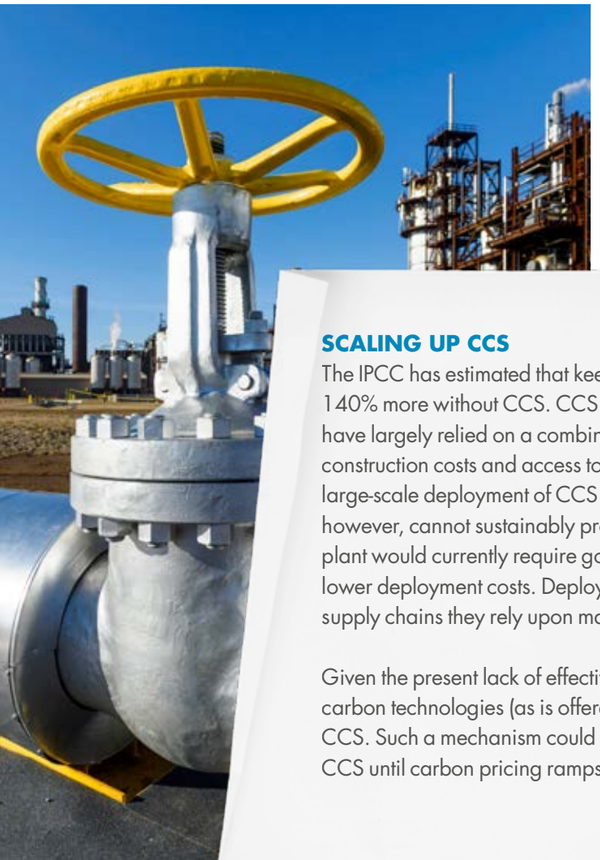
In partnership with the Canadian government and our joint-venture partners, Shell operates the Quest CCS project in Alberta that captures and stores CO_2 from the Scotford Upgrader. The Upgrader turns bitumen into synthetic crude oil using hydrogen. In less than two years, Quest has captured and safely stored more than 2 million tonnes of CO_2.

CCS technology developed by Shell Cansolv, a subsidiary of Shell, is used at the power station Boundary Dam in Saskatchewan, Canada. It is SaskPower's largest coal-fired power station and a significant source of power for the region. Both sulphur dioxide and CO_2 are captured from the power station. We continue to support SaskPower to improve the application of the technology.

At the Technology Centre Mongstad (TCM), Shell, together with the Norwegian government, Statoil and Sasol, will undertake further research and development into CCS technology to help reduce its costs. In 2017, we reaffirmed our commitment to participate in continued testing at TCM until 2020.

In October 2017, Shell entered a CO_2 storage partnership in Norway to continue the development of carbon storage on the Norwegian continental shelf. The project is part of the Norwegian authorities' efforts to develop full-scale CCS in Norway.

Meanwhile, in Australia, Shell is involved in the Gorgon CO_2 injection project, which will be the world's largest CCS operation when completed. Gorgon CCS will separate and reinject between 3.4 million and 4 million tonnes of reservoir CO_2 each year. Over the life of the project, it is expected that around 100 million tonnes of CO_2 will be captured and stored.



SCALING UP CCS

The IPCC has estimated that keeping to a 2°C pathway would cost global society approximately 140% more without CCS. CCS is a capital-intensive technology. To date, individual CCS projects have largely relied on a combination of major capital grants from government to underpin construction costs and access to a modest cost on CO_2 for on-going commercial viability. The very large-scale deployment of CCS required to achieve net-zero emissions from the energy system, however, cannot sustainably proceed on the back of such grants. Commercial viability for a CCS plant would currently require governments to place a more meaningful cost on CO_2 emissions and lower deployment costs. Deployment costs will likely decline as more CCS plants are built and the supply chains they rely upon mature.

Given the present lack of effective government-led carbon pricing systems, financial support for low-carbon technologies (as is offered to renewables in many countries) could be extended to include CCS. Such a mechanism could encourage the continuation of CCS R&D and deployment to scale up CCS until carbon pricing ramps up to levels sufficient to support commercial deployment.

RESEARCH AND DEVELOPMENT

We continue to invest in research and development (R&D) to improve the efficiency of our products, processes and operations, and to commercialise technologies for the transition to a low-carbon energy future. In 2017, we spent $922 million on R&D.

We operate a global network of technology centres, with major hubs in Houston, the USA; Amsterdam, the Netherlands; and Bangalore, India. Thousands of employees across the network work on R&D projects that seek, for example, to turn natural gas into more efficient and cleaner fuels, unlock oil from rock layers thousands of metres below the sea surface, and reduce Shell's Net Carbon Footprint.

R&D projects often involve collaborations with public or private entities, including universities, government laboratories, technology start-ups and incubators. For example, in 2017 we agreed to support research by the Energy Biosciences Institute in the USA into using biochemical processes to store or deliver energy, or to synthesise high-value chemicals.

Most of our research focuses on the near term, to help our existing businesses reduce capital and operating costs, and to enhance customer products and services. This research also focuses on ways to lower energy consumption. For the long term, we aim to quickly acquire deeper insights into the science and engineering that underpins new energy technologies that can help create a lower-carbon future.

Our open innovation programmes include:

Shell GameChanger

This programme works with start-ups and businesses on unproven early-stage ideas with the potential to impact the future of energy. We provide companies with support, expertise and seed funding, while they maintain the independence to make their own decisions.

Shell Technology Ventures

This is our corporate venturing arm. It invests in companies that are developing promising technologies that complement Shell's businesses – mainly in oil and gas, new energies and information technology.

Shell TechWorks

Based in Massachusetts, the USA, Shell TechWorks accelerates the adoption of proven technologies from other industries and applies them to the oil and gas sector. Founded in 2013, the programme has collaborated with companies, universities, research institutes and start-ups to help develop and deploy technology quickly and cost-effectively.

NATURAL SOLUTIONS TO REDUCING EMISSIONS

Natural ecosystems such as forests and wetlands play a critical role in capturing and storing carbon and can make a vital contribution to limiting global warming. Article 5 of the Paris Agreement acknowledges the importance of these natural sinks to help balance the GHG emissions created from other sources.

One example of our efforts to reduce the emissions associated with the use of our products is in the Netherlands, where we offer companies the opportunity to compensate for the emissions associated with the use of their vehicles.

The service calculates and compensates for CO_2 emissions from fuel used in vehicles, emissions that are difficult or expensive for companies to avoid, helping them reduce the environmental impact of their operations. We continue to explore opportunities to expand this service to customers in other countries.

Today, this initiative supports third-party projects, including the Kasigau Corridor project in Kenya, which was developed by project development and management company Wildlife Works. The Kasigau Corridor project protects 500,000 acres of a threatened area of forest, while preserving biodiversity and wildlife habitat.

Shell will explore opportunities to make investments to develop its own nature-based projects as a key contribution towards achieving our Net Carbon Footprint ambition. We are also calling on governments to recognise and ensure the eligibility of these nature-based emission reductions in their carbon pricing mechanisms, including under the Paris Agreement, to support this emerging and necessary market.

Working with **OTHERS**

6.

Shell's work with organisations around the world helps us learn from others and share our knowledge and experience.

The challenge of tackling climate change can only be met through unprecedented collaboration. Shell is working in close partnership with governments, other companies, our customers and wider society. We aim to learn from others and help inform and accelerate the policy, technology and societal changes that will be necessary to achieve a successful transition.

Joris Thijssen (Director, Greenpeace Netherlands), Mark Rutte (Prime Minister of the Netherlands), Marjan van Loon (President Director of Shell Netherlands) and Hans de Boer (Chairman VNO-NCW) at the National Climate Summit 2016.

TCFD
The publication of this report follows our discussions with the Task Force on Climate-related Financial Disclosures (TCFD) about increasing transparency to help investors understand climate-related risks and opportunities.

We continue to work with the TCFD to help develop best practices for reporting linked to climate change. To that end, we have joined the Oil and Gas Preparer Forum, initiated by the TCFD and convened by the World Business Council for Sustainable Development, an advocacy association. The forum´s objectives include encouraging companies to consider the use of scenarios in an uncertain world, and to recognise a range of possible outcomes and trajectories.

Collaborating with countries
We work with some governments to explore pathways that can help them move towards a prosperous, low-carbon future.

In the Netherlands, for example, we are working with policymakers and industry representatives to help the government meet its target of reducing GHG emissions by 80-95% by 2050. This will require significant shifts in the way energy is produced and consumed across the economy.

In 2016, Dutch energy company Eneco, the Port of Rotterdam, German engineering group Siemens, Dutch contracting company Van Oord and Shell initiated a coalition to accelerate the energy transition in the Netherlands. Together, we called on the Dutch government to prioritise the international climate goals set during the climate summit in Paris in 2015 and decide on a long-term policy framework to support them. Today, this coalition has more than 50 member companies.

Together with China's Development Research Centre of the State Council, Shell has also been looking at how natural gas could boost economic development, improve air quality and help China's progress towards the commitments it made in Paris.

World Resources Institute
We are working with the World Resources Institute (WRI), a global research organisation, to review and further develop our GHG aspirations. We have also recently joined the WRI's Corporate Consultative Group to learn from and share best sustainability practices with other members.

European power
In September 2017, Shell joined a coalition of renewables, natural gas and technology organisations calling for the introduction of an emission performance standard (EPS) linked to capacity remuneration mechanisms in the European Commission's Clean Energy for All Europeans package. This EPS would exclude coal from capacity payments across the European Union and send a signal to investors to switch from coal to gas and renewables.

Carbon pricing
Shell has long recognised the importance of government-led carbon pricing systems as an essential tool for reducing emissions.

We are supporting the World Bank's Carbon Pricing Leadership Coalition that is made up of governments, businesses and organisations with the long-term objective of achieving a government-led carbon price throughout the global economy. We also participate in the International Emissions Trading Association (IETA), a non-profit business organisation created in June 1999 to establish an international framework for trading in GHG emission reduction credits.

We have long supported the European Union's Emissions Trading Scheme and have worked with policymakers, industry groups and non-governmental organisations to support the recent reform of the system after 2020.

Climate Leadership Council
Launched in 2017, the Climate Leadership Council is an international policy institute that promotes a government-led strategy to lower emissions by returning the income from a nation's carbon taxes directly to its citizens through "carbon dividends".

Shell is a founding member along with other companies including ExxonMobil, Total, BP, Unilever and P&G, and non-governmental organisations Conservation International and The Nature Conservancy.

Currently active in the USA and the UK, the council is planning to expand to Germany, China and India.

Energy Transitions Commission
In 2015, Shell helped establish the Energy Transitions Commission (ETC) which aims to accelerate change towards low-carbon energy systems that enable robust economic development and limit the rise in global temperature to well below 2°C.

The ETC brings together leaders representing a wide range of sectors and interests: investors, energy companies, innovators, industrial energy users, non-profit organisations and research institutes. As of October 2017, the ETC had 29 members. It is chaired by Lord Adair Turner and Dr Ajay Mathur. Chad Holliday serves as Shell's Commissioner.

Oil and Gas Climate Initiative
We are a member of the Oil and Gas Climate Initiative (OGCI), which aims to increase the ambition, speed and scale of companies' individual initiatives to reduce their greenhouse gas footprint and explore new business models and technologies. OGCI focuses on carbon capture, utilisation and storage (CCUS), methane detection and reduction, as well as energy efficiency.

Hydrogen Council
In January 2017, Shell and other companies launched the Hydrogen Council, a global coalition of chief executives working to raise the profile of hydrogen's role in the transition to a low-carbon energy system. The council seeks to accelerate investment in the development and commercialisation of the hydrogen and fuel-cell sectors. It provides recommendations to ensure appropriate conditions are in place to facilitate the deployment of hydrogen technologies. Shell is already part of a cross-industry consortium developing around 400 hydrogen refuelling stations in Germany. We have several hydrogen stations in the USA and the UK.

The council comprises 18 CEOs of energy, transport and industrial multinationals. In January 2017, the council published a report: "How hydrogen empowers the energy transition" which further details hydrogen's potential. In November 2017, the group launched a second report, called "Hydrogen, scaling up," outlining a path to greater hydrogen deployment and its role in the energy transition.

Environmental and social issues
As a member of IPIECA, the global oil and gas industry association for environmental and social issues, we take part in discussions on topics including biodiversity, climate change and resettlement.

Reducing flaring
Shell has been an active member of the World Bank-sponsored Global Gas Flaring Reduction Partnership since 2002. This public-private partnership helps reduce flaring by working to find alternative uses for gas that would otherwise be flared.

As part of the partnership, in 2015 we signed up to the World Bank's Zero Routine Flaring by 2030 initiative. This aims to ensure all stakeholders, including governments and companies, work together to identify ways to use gas from oil production, for example, to generate electricity for local communities.

Reducing methane emissions
In late 2017, Shell joined seven other energy companies in signing a Guiding Principles document. These principles aim to help reduce methane emissions from the production and use of natural gas.

In December 2017, Shell agreed to join the Environmental Partnership which aims to voluntarily reduce methane emissions in the USA in areas including leak detection and repair, replacement or upgrade of equipment.

CLOSING COMMENT

It's impossible to predict exactly how the transition to lower-carbon energy will play out, but we expect it will mean profound changes for the energy system over the long term.

We are confident that Shell is resilient to those changes, and that we can thrive by continuing to supply the types of energy our customers need.

Our strategy to reshape the company, the diversity and quality of our portfolio, and our strong financial framework all contribute to the resilience of our company.

We are growing our business in areas that we expect to be important in the energy transition, while reducing costs and seeking to improve our CO_2 performance.

Looking further into the future, we have set the ambition to bring down the Net Carbon Footprint of our energy products by around half by 2050, in step with society's progress towards meeting the goals of the Paris Agreement.

This will drive change across our portfolio. It is likely to mean more renewable power, biofuels, and electric vehicle charging points; supplying more natural gas; helping advance technology to capture and store carbon safely underground; and helping develop natural carbon sinks like forests and wetlands.

We are making investments in these areas today and we expect to do more. We also expect to continue to invest in finding and producing the oil and gas that the world will need for decades to come.

APPENDIX TO THE EXECUTIVE SUMMARY

This table shows where to find Shell disclosures that are related to recommendations by the Task Force on Climate-related Financial Disclosures (TCFD) in Shell reports, publications and websites.

TCFD RECOMMENDATION	DISCLOSURE
GOVERNANCE: **Disclose the organisation's governance around climate-related risks and opportunities.**	
a) Describe the Board's oversight of climate-related risks and opportunities.	**Annual Report** (page 62-63): "Our governance and management of climate change risks and opportunities" section, including references to the Report's sections "Corporate governance" (page 82) and "Directors' Remuneration Report" (page 94)
b) Describe management's role in assessing and managing climate-related risks and opportunities.	**Annual Report** (page 62-63): "Our governance and management of climate change risks and opportunities"
STRATEGY: **Disclose the actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning, where such information is material.**	
a) Describe the climate-related risks and opportunities the organisation has identified over the short, medium and long term.	**Annual Report** (page 65-66): "Our strategy on climate change" **CDP submission**: describes detailed examples
b) Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning.	**Annual Report** (pages 65-66): "Our strategy on climate change" **Shell Energy Transitions Report** (page 24): "Our resilience in the medium term, to 2030"
c) Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	**Shell Energy Transitions Report** (page 50): "Changing our portfolio in the long term, after 2030" ***Sky* Scenario**: describes our scenarios approach
RISK MANAGEMENT: **Disclose how the organisation identifies, assesses and manages climate-related risks.**	
a) Describe the organisation's processes for identifying and assessing climate-related risks.	**Annual Report** (pages 62-63): "Our governance and management of climate change risks and opportunities" **Sustainability Report** section: "About this report"
b) Describe the organisation's processes for managing climate-related risks.	**Annual Report** (pages 62-65): "Our governance and management of climate change risks and opportunities" and "Our portfolio and climate change" **Sustainability Report** sections: "Energy Transition" and "Embedding sustainability into projects"
c) Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organisation's overall risk management.	**Annual Report** (page 82): "Controls and procedures" **Sustainability Report** section: "Sustainability at Shell"
METRICS AND TARGETS: **Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities, where such information is material.**	
a) Disclose the metrics used by the organisation to assess climate-related risks and opportunities, in line with its strategy and risk management process.	**Sustainability Report** sections : "Environment data" and "Our Executive scorecard"
b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	**Greenhouse gas webpage**: www.shell.com/ghg provides our performance data on Scope 1, 2 and 3 **Shell Energy Transitions Report** (page 24): "Our resilience in the medium term, to 2030"
c) Describe the targets used by the organisation to manage climate-related risks, opportunities, and performance against targets.	**Annual Report** (pages 65-66): "Our strategy on climate change"

DISCLAIMERS

This report contains data and analysis from Shell's new *Sky* Scenario. Unlike Shell's previously published *Mountains* and *Oceans* exploratory scenarios, the *Sky* Scenario is targeted through the assumption that society reaches the Paris Agreement's goal of holding global average temperatures to well below two degrees Celsius (2°C). 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. 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 and investors should not rely on them when making an investment decision with regard to Royal Dutch Shell plc securities.

Additionally, it is important to note that Shell's existing portfolio has been decades in development. While we believe our portfolio is resilient under a wide range of outlooks, including the IEA's 450 scenario (World Energy Outlook 2016), it includes assets across a spectrum of energy intensities including some with above-average intensity. While we seek to enhance our operations' average energy intensity through both the development of new projects and divestments, we have no immediate plans to move to a net-zero emissions portfolio over our investment horizon of 10-20 years. Although, we have no immediate plans to move to a net-zero emissions portfolio, in November of 2017, we announced our ambition to reduce the Net Carbon Footprint of the energy products we sell in accordance with society's implementation of the Paris Agreement's goal of holding global average temperature to well below 2°C above pre industrial levels. Accordingly, assuming society aligns itself with the Paris Agreement's goals, we aim to reduce our Net Carbon Footprint, which includes not only our direct and indirect carbon emissions, associated with producing the energy products which we sell, but also our customers' emissions from their use of the energy products that we sell, by 20% in 2035 and by 50% in 2050.

Also, in this report we may refer to "Shell's Net Carbon Footprint", which includes Shell's carbon emissions from the production of our energy products, our suppliers' carbon emissions in supplying energy for that production and our customers' carbon emissions associated with their use of the energy products we sell. Shell only controls its own emissions but, to support society in achieving the Paris Agreement goals, we aim to help and influence such suppliers and consumers to likewise lower their emissions. The use of the terminology "Shell's Net Carbon Footprint" is for convenience only and not intended to suggest these emissions are those of Shell or its subsidiaries.

CAUTIONARY NOTE

The companies in which Royal Dutch Shell plc directly and indirectly owns investments are separate legal entities. In this report "Shell", "Shell group" and "Royal Dutch Shell" are sometimes used for convenience where references are made to Royal Dutch Shell plc and its subsidiaries in general. Likewise, the words "we", "us" and "our" are also used to refer to Royal Dutch Shell plc and subsidiaries in general or to those who work for them. These terms are also used where no useful purpose is served by identifying the particular entity or entities. ''Subsidiaries'', "Shell subsidiaries" and "Shell companies" as used in this report refer to entities over which Royal Dutch Shell plc either directly or indirectly has control. Entities and unincorporated arrangements over which Shell has joint control are generally referred to as "joint ventures" and "joint operations", respectively. 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.

This report contains forward-looking statements (within the meaning of the U.S. Private Securities Litigation Reform Act of 1995) concerning the financial condition, results of operations and businesses of Royal Dutch 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 Royal Dutch 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 Royal Dutch 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; and (m) changes in trading conditions. No assurance is provided that future dividend payments will match or exceed previous dividend payments. All forward-looking statements contained in this report are expressly qualified in their entirety by the cautionary statements contained or referred to in this section. Readers should not place undue reliance on forward-looking statements. Additional risk factors that may affect future results are contained in Royal Dutch Shell's 20-F for the year ended December 31, 2017 (available at www.shell.com/investor and www.sec.gov). These risk factors also expressly qualify all forward looking statements contained in this report and should be considered by the reader. Each forward-looking statement speaks only as of the date of this report, [insert date]. Neither Royal Dutch Shell plc nor any of its subsidiaries undertake any obligation to publicly update or revise any forward-looking statement as a result of new information, future events or other information. In light of these risks, results could differ materially from those stated, implied or inferred from the forward-looking statements contained in this report.

We may have used certain terms, such as resources, in this report that United States Securities and Exchange Commission (SEC) strictly prohibits us from including in our filings with the SEC. U.S. Investors are urged to consider closely the disclosure in our Form 20-F, File No 1-32575, available on the SEC website www.sec.gov.