



bp



Responding to the dual challenge

BP Sustainability Report 2018



Advancing energy to
improve people's lives



Introduction from Bob Dudley

As the world demands more energy to fuel increasing prosperity and provide people with a better quality of life, it also demands energy delivered in new ways, with fewer emissions. For the energy sector, this dual challenge is the defining issue of our times.

At BP we're not daunted by this challenge. In fact, we see the possibilities it presents, and continue to make bold changes across the group as part of our commitment to advancing a low carbon future.

The world needs more energy but produced and used in cleaner, better ways. This is reflected in our strategy to grow advantaged oil and gas in the upstream; market-led growth in the downstream; pursuing low carbon growth opportunities and modernizing the group. It also informs how we work.

Our low carbon ambitions

Our 'reduce, improve, create' framework focuses the whole of BP on reducing emissions in our operations, improving our products, and creating low carbon businesses. We are backing this up with clear targets and I am pleased to report we made good progress in 2018. To maintain the momentum, we are now incentivizing around 36,000 employees who are eligible for an annual cash bonus to play a role by linking their reward to one of our emissions reduction targets.

Consistent with the Paris goals

We firmly believe our strategy is consistent with the climate goals of the Paris Agreement and have welcomed a resolution from a group of institutional investors for a range of additional reporting. This will help further understanding of how our strategy is consistent with the Paris climate goals.

Collective action

We have a role to play in solving the dual challenge but can't do it alone. Everyone, from consumers to corporations to governments, needs to take responsibility. That's why we're working with partners and a number of organizations across the industry, including the Oil and Gas Climate Initiative (OGCI). Now representing 30% of global oil and gas production, the OGCI is supporting efforts to tackle methane emissions and create opportunities for carbon capture, use and storage.

Safe, responsible and fit for the future

We remain focused on operating responsibly and safety continues to be our number one priority. While we welcome the improvement seen in our key safety measures in 2018, our attention is always on caring for the people behind the numbers. This extends to wherever we operate around the world, and you'll find updates in this report on some of our activities to respect the communities in which we work.

Only by operating as a responsible and reliable business do we earn the trust of investors and society more widely – trust that is essential for BP to fully play its part in advancing a low carbon future and human progress.



Bob Dudley, group chief executive, BP
10 April 2019



How we run our business

From the deep sea to the desert, from rigs to retail, we deliver energy products and services to people around the world.

We provide customers with fuel for transport, energy for heat and light, power for industry, lubricants to keep engines moving and the petrochemicals products used to make everyday items such as paints, clothes and packaging.

We have a diverse portfolio across businesses, resource types and geographies. Having upstream, downstream and renewables businesses, along with well-established trading capabilities, helps to mitigate the impact of commodity pricing cycles. Our geographic reach gives us access to growing markets and new resources, as well as diversifying exposure to geopolitical events. We are helping to meet the dual challenge of society's need for more energy while reducing emissions through our 'reduce, improve, create' framework (see page 10).

► Our role in society

The energy we produce helps support economic growth and improve quality of life for millions of people. We strive to be a world-class operator, a responsible corporate citizen and a great employer.

We believe the societies and communities we work in should benefit from our presence. We aim to create positive, meaningful and sustainable impacts in those communities through our social investments.

We contribute to economies around the world by employing local people, helping to develop national and local suppliers, and through the funds we pay to governments from taxes and other agreements.

 See Society on page 41.

Business model foundations

Safe and reliable operations

We strive to create and maintain a safe operating culture where safety is front and centre. This is not only safer for people and the environment – it also improves the reliability of our assets.

 See Safety on page 30.

Talented people

We work to attract, motivate, develop and retain the best talent the world offers and equip our people with the right skills for the future. Our performance and ability to thrive globally depend on it.

 See Our people and ethics on page 56.

① Finding oil and gas



② Developing and extracting oil and gas

Creating value

① Finding oil and gas

New access allows us to renew our portfolio, discover additional resources and replenish our development options. We focus our exploration activities in the areas that are competitive in the portfolio, and develop and use technology to reduce costs and risks.

② Developing and extracting oil and gas

We develop the resources that meet our return threshold and produce hydrocarbons that we then sell to the market or distribute to our downstream facilities. Our upstream pipeline of future projects gives us choice about which we pursue.

We also seek to grow or extend the life of existing fields – such as our Clair Ridge project, which is helping unlock additional resources from the Clair field in the UK North Sea.

③ Transporting and trading

We move oil and gas through pipelines and by ship, truck and rail. We also trade a variety of products including oil, natural gas, liquefied natural gas, power and carbon products, as well as derivatives and currencies. BP's traders serve more than 12,000 customers across some 140 countries in a year. Our customers range from independent power producers to utilities and municipalities. We are the largest trader of natural gas in North America.

We use our market intelligence to analyse supply and demand for commodities across our global network.

Technology and innovation

New technologies help us produce energy safely and more efficiently. We selectively invest in areas with the potential to add greatest value to our business, now and in the future, including building lower carbon businesses.

 See Creating low carbon businesses on page 24.

Partnerships and collaboration

We aim to build enduring relationships with governments, customers, partners, suppliers and communities in the countries where we operate.

 See Engaging with our stakeholders on page 67.

Governance and oversight

Our risk management systems and policy provide a consistent and clear framework for managing and reporting risks. The board regularly reviews how we identify, evaluate and manage risks.

 See Governance and risk management on page 63.

③ Transporting and trading



④ Manufacturing and marketing



⑥ Venturing

⑤ Generating renewable energy

④ Manufacturing and marketing fuels and products

We produce refined petroleum products at our refineries and supply distinctive fuels and convenience retail services to consumers. Our advantaged infrastructure, logistics network and key partnerships help us to have differentiated fuels businesses and deliver compelling customer offers, including lower carbon products.

Our lubricants business has premium brands and access to growth markets. It also leverages technology and customer relationships, all of which we believe gives us competitive advantage. We serve automotive, industrial, marine and energy lubricant markets across the world.

In petrochemicals our proprietary technology solutions deliver leading cost positions compared to our competitors. In addition to our own petrochemicals plants, we work with partners and license our technology to third parties.

 See page 18.

⑤ Generating renewable energy

We have been investing in renewables for many years. Our focus is on biofuels, biopower, wind energy and solar energy. We operate a biofuels business in Brazil, using one of the world's most sustainable and advantaged feedstocks to produce renewable ethanol and power. We also provide renewable power through our significant interests in onshore wind energy in the US, and we develop and deploy technology to drive

efficiency. And in solar energy we target the growing demand for large-scale solar projects worldwide through Lightsource BP.

 See page 26.

⑥ Venturing

We invest in small high-tech companies to help accelerate and commercialize new technologies, products and business models. Our focus is on five areas that are core to our strategy for advancing the energy transition: advanced mobility, bio and low carbon products, carbon management, digital transformation and power and storage.

 See bp.com/venturing.

Our key issues

We conduct a materiality review to evaluate the issues that matter most to our stakeholders and our business.

Who we've engaged with

In preparing this report, we met with around 100 different organizations including investors, non-governmental organizations and business partners, who collectively represent some of our main stakeholder groups.



How we assess the issues

→ **We prioritize** the issues according to how important they are to our stakeholders and how they could impact BP's ability to deliver its strategy.

→ **We validate** this with representatives from our group risk, environment, human rights and society, government and political affairs, upstream, downstream, policy and technology teams, as well as our board-level safety, ethics and environment assurance committee.

→ **Our material issues** tend to be relatively consistent year to year. Carbon capture, use and storage, as well as diversity and inclusion, were issues that gained greater prominence in 2018.

What we report

We include issues in our *Sustainability Report* if we assess them as being of high or medium importance in terms of stakeholder interest and potential business impact.



The energy transition

Our role in advancing the energy transition	7
Greenhouse gas emissions	14
Energy efficiency of our products	18
Future mobility and electric vehicles	21
Carbon capture, use and storage	23
Renewable energy	26

Safety

Process safety	31
Personal safety	32
Security (including cyber)	33

Human rights

Rights of people in communities	37
Labour rights and modern slavery	38
Security and human rights	40

Society

Social contribution	42
Community engagement	48
Revenue transparency	49

Environment

Decommissioning	51
Sensitive areas and biodiversity	52
Hydraulic fracturing	53
Water	54
Air emissions	55

Our people and ethics

Diversity and inclusion	57
Skills and capability	60
Business ethics	61
Public policy and lobbying	62

Governance and risk

Board oversight	64
Managing risks in our operations	66

The energy transition

The world needs more energy but with fewer emissions. BP is playing an active role in meeting this dual challenge.

Q

How is the transition to a lower carbon economy changing BP?

A

Our strategy embraces the transition and is intended to be flexible and resilient to change. Since launching our low carbon ambitions in 2018 we've seen real momentum across BP to reduce our own emissions, improve our products to help customers lower their emissions and create low carbon businesses. The focus on the role we play in the energy transition is helping to drive tangible actions towards delivering a cleaner, better energy future.

Dominic Emery, vice president,
group strategic planning, BP



Our role in advancing the energy transition

Our strategy is designed to grow shareholder value while also helping to meet the dual challenge. We believe it is consistent with the climate goals of the Paris Agreement, which calls for the world to rapidly reduce greenhouse gas emissions in the context of sustainable development and eradicating poverty.

► Our strategic priorities



Growing advantaged oil and gas in the upstream

Invest in more oil and gas, producing both with increasing efficiency.



Market-led growth in the downstream

Innovate with advanced products and strategic partnerships.



Venturing and low carbon across multiple fronts

Pursue new opportunities to meet evolving technology, consumer and policy trends.



Modernizing the whole group

Simplify our processes and enhance our productivity through digital solutions.

Recent steps

2019

Included our sustainable emissions reduction target in the annual bonuses of eligible employees.

2018

Launched our low carbon ambitions in our 'reduce, improve, create' framework and our Advancing Low Carbon programme.

See pages 10 and 28.

2017

Set out our strategy designed to grow shareholder value under a range of scenarios, while also helping to meet the dual challenge of providing more energy with fewer emissions.

A key element of our strategy is our 'reduce, improve, create' framework, which focuses on reducing greenhouse gas emissions in our own operations, improving our products to help our customers and consumers lower their emissions, and creating low carbon businesses.

We believe we are uniquely placed to lead in advancing the energy transition:

- We are actively managing our portfolio to remain resilient in a changing world, and believe we have enough flexibility in our portfolio to reshape our business and balance sheet in around 10 years. This enables us to monitor changing trends, consumer preferences and legislation, and provides us with optionality to adjust our portfolio and adapt to the future.
- Our approach to the energy transition is grounded in the experience we've gained since we first called for action on the threat of climate change more than 20 years ago.
- We have the skills and expertise, and are already in action to meet our low carbon ambitions.

A shared challenge

To meet the Paris goals, we believe the world must take strong action on a range of fronts:

- Reducing emissions rather than promoting one energy source as the answer.
- Improving energy efficiency.
- Using and deploying new technologies, such as carbon capture, use and storage.
- Putting a price on carbon to help drive action in an efficient and cost-effective way.

In 2019 we are supporting a resolution from a group of institutional investors to describe in our corporate reporting how our strategy is consistent with the Paris goals. Subject to shareholder approval for the resolution at our annual general meeting we will provide more information on this in future reports.

The changing energy mix

The *BP Energy Outlook* explores the forces shaping the global energy transition out to 2040 and the key uncertainties surrounding that transition. Insights from the Outlook help shape our strategic thinking.

The demand for energy continues to grow – largely driven by increasing prosperity in fast-growing developing economies. In the evolving transition scenario, the rate of this growth however is slower than in the previous 20 years, as the world increasingly learns to produce more with less energy. Despite this, a substantial proportion of the world's population in 2040 could live in countries where the average energy consumption per person is relatively low.

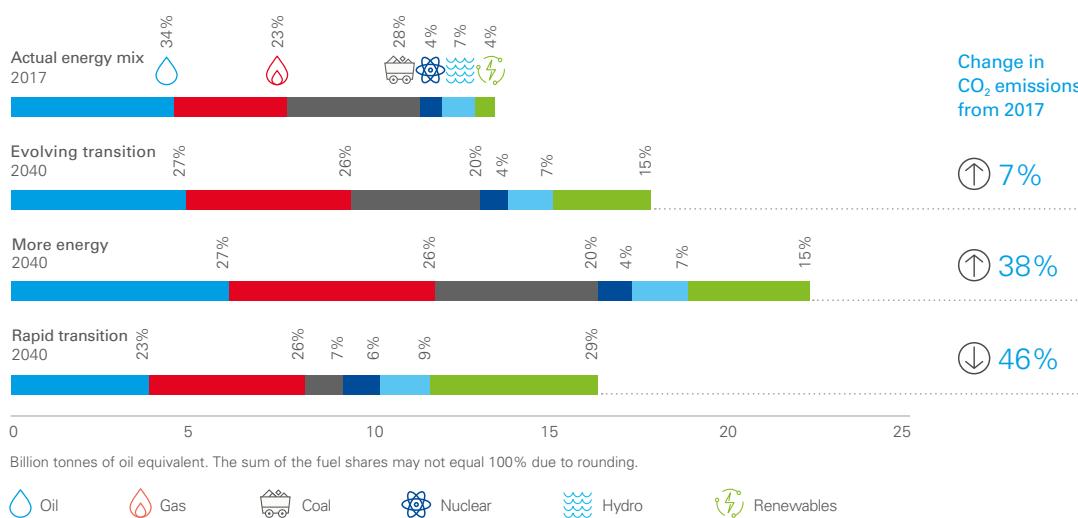
Renewables are now the fastest-growing energy source in the world today and in our evolving transition scenario we estimate that they could account for 15% of all energy consumption in

2040 – and in other scenarios more. That said, oil and gas could meet at least 50% of the world's energy needs in 2040 – even in a scenario consistent with the Paris goals, with the share of gas growing, aided by increasing use of carbon capture, use and storage.

Gas offers a cleaner alternative to coal for power generation and can lower emissions at scale. It also provides a valuable partner for renewables intermittency, delivers heating at the high temperatures required by industry and is increasingly used in transportation. Across our scenarios, gas grows robustly, overtaking coal as the second-largest source of energy by 2030.

Oil demand grows for the next 10 years in our evolving transition scenario, before gradually levelling out due to factors such as accelerating gains in vehicle efficiency and greater use of biofuels, natural gas and electricity. The largest source of oil demand growth is the non-combusted use of oil, for example as a feedstock for petrochemicals.

Energy consumption – 2040 projections



Evolving transition

This scenario assumes that government policies, technology and social preferences continue to evolve in a manner and speed seen over the recent past.

More energy

This scenario sees more countries with energy consumption per person closer to levels in advanced economies.

Rapid transition

This scenario is consistent with the Paris goals and is broadly similar to the reduction in carbon emissions in the IEA's Sustainable Development Scenario.

 See bp.com/energyoutlook for more information on our projections of future energy trends and factors that could affect them out to 2040.

Calling for a price on carbon

We believe that well-designed carbon pricing provides the right incentives for everyone – energy producers and consumers alike – to play their part in reducing emissions. It makes energy efficiency more attractive and makes low carbon solutions, such as renewables and carbon capture, use and storage, more cost competitive.

A fifth of the world's greenhouse gas (GHG) emissions are now covered by carbon pricing systems. We expect around two thirds of BP's direct GHG emissions will be in countries subject to emissions and carbon policies by 2020.

We think a well-designed price on carbon is the most efficient way to reduce GHG emissions and we have set out our carbon pricing principles at bp.com/carbonpricing. They include our view that a price on carbon should:

- Apply to all quantifiable GHG emissions in all sectors of the economy on a CO₂ equivalent basis.
- Pre-empt future and replace existing regulations that overlap or duplicate the carbon price.
- Prevent the shifting of emissions and jobs from one country or jurisdiction to another.

Our internal carbon price

We use a carbon price when evaluating our plans for certain large new projects and also those for which emissions costs would be a material part of the project. This is currently \$40 per tonne of CO₂ equivalent, with a stress test at a carbon price of \$80 per tonne. Until late January 2019 we used these specific prices in industrialized countries, but have now expanded this to apply globally.

We have engaged with policymakers in Europe, in relation to the EU Emissions Trading Scheme, and in Australia, Canada and China.

While we support well-designed carbon pricing, we are prepared to oppose poorly-designed proposals. We opposed the ballot initiative proposal to introduce a carbon fee in Washington state in the US in November 2018. The poor design of the policy would have harmed Washington's economy without significantly reducing carbon emissions. The terms of the proposal exempted six of the biggest polluters in the state, effectively subsidizing some companies at the expense of others. The ballot initiative was not passed by voters. We continued to work with legislative leaders in the state in 2019 and supported a cap and trade bill, which we believe would work to most effectively lower carbon emissions.

At a global level, we are working with our peers and other companies, governments and civil society to help support the expansion of carbon pricing through the Carbon Pricing Leadership Coalition. And we are a founding member of the US-based Climate Leadership Council, which is considering a carbon tax that would be returned to citizens in the form of dividends.



Our low carbon ambitions

Embedded within our strategy is BP's approach to lower carbon and reducing emissions. We call it our 'reduce, improve, create' framework.

We have set targets and aims to reduce emissions in our operations, improve our products to help our customers reduce their emissions, and create low carbon businesses. We are already in action and have made progress in 2018 towards these ambitions.

We'll review these regularly so we can keep them up-to-date with changes in our portfolio, protocols and other factors.

Reducing

emissions in our operations

Zero

net growth in operational emissions out to 2025

3.5Mte

of sustainable GHG reductions by 2025

Targeting methane intensity of

0.2%

Our progress in 2018

Zero

net growth in operational emissions

→ Achieved zero net growth in operational emissions with no offsets required.

 See page 14.

2.5Mte

of sustainable GHG reductions since the beginning of 2016

→ Implemented actions such as using waste heat to generate steam at our Whiting refinery in the US.

 See page 13.

0.2%

methane intensity

→ Reduced our total methane emissions by more than 10% – a large part of this was due to operational changes in Angola.

 See pages 14 and 15.

Improving

our products



Provide lower emissions gas



Develop more efficient and lower carbon fuels, lubricants and petrochemicals



Grow lower carbon offers for customers

Creating

low carbon businesses



Expand low carbon and renewable businesses



\$500 million invested in low carbon activities each year



Collaborate and invest in the OGCI's \$1bn+ fund for research and technology

- Started up the landmark Shah Deniz 2 development in Azerbaijan, which will bring new supplies of gas to Europe.

See page 22.

- Collaborated with Neste to explore opportunities to increase the supply of sustainable aviation fuel.

- Launched Castrol GTX ECO, an oil range that uses a base oil blend of at least 50% re-refined base oil, in the US.

- Offered customers globally the opportunity to purchase PTAir Neutral, the world's first certified carbon neutral PTA.

See page 76.

- Gave UK drivers the option to offset the CO₂ emissions from the fuel they buy from us, through our BPme fuel payment app.

- Expanded our BP Target Neutral carbon offsetting programme for car dealerships in Mexico and Singapore.

- Established a solar presence in five new countries through our partnership with Lightsource BP.

See page 27.

- Acquired Chargemaster – operator of the UK's largest electric vehicle charging network.

\$500m invested

- Supported low carbon businesses such as FreeWire for mobile rapid electric vehicle charging and Voltaware, a company that has developed a monitoring system to track energy consumption.

See page 25.

- Worked with the Oil and Gas Climate Initiative to progress the UK's first commercial full-chain carbon capture, use and storage project.

See page 23.

- Supported OGCI Climate Investments, which included investments in satellite technology to measure GHG emissions from industrial facilities.

advancing low carbon

Our accreditation programme for lower carbon activities.

See page 28.

See bp.com/targets for specific information on our targets and aims.

Reducing

emissions in our operations

Q

What progress are you making against your emissions reduction targets?

A

In 2018 across BP we achieved zero net growth in operational emissions, a methane intensity of 0.2%, and 2.5Mte of sustainable greenhouse gas (GHG) emissions reductions activity since the beginning of 2016. The response from BP employees to our tangible and measurable targets has been tremendous. They are generating new ideas to reduce our emissions all the time. To help them continue this, in 2019 we announced \$100m of funding for new emissions reductions projects in our upstream operations.

Gordon Birrell, chief operating officer, production, transformation and carbon, Upstream, BP



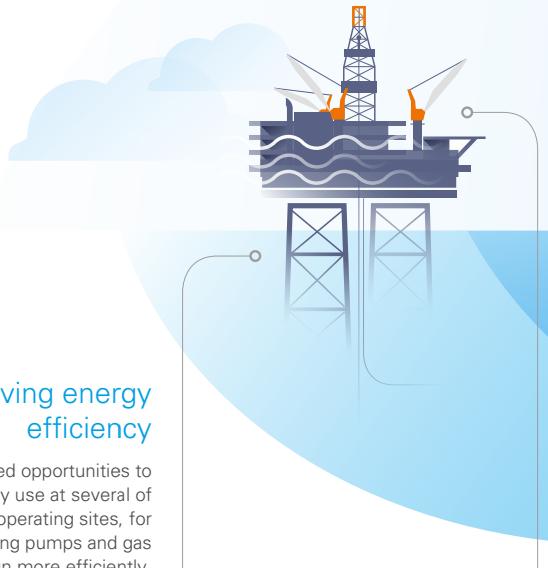
We are working to improve the efficiency of our operations.

We have set a target of 3.5 million tonnes of sustainable GHG emissions reductions by 2025. This includes actions taken by our businesses to improve energy efficiency and reduce methane emissions and flaring – all leading to permanent, quantifiable GHG reductions. We are already well on the way to meeting this target with 2.5Mte of reductions achieved since the beginning of 2016. From 2019 progress against the target will be a factor in determining bonuses for around 36,000 employees, as well as executive directors.

To ensure that as our business grows, our carbon footprint does not, we'll offset any net increase in emissions above baseline levels that's not covered by sustainable reductions activity out to 2025.



See bp.com/targets for the specifics of these targets.



Improving energy efficiency

We implemented opportunities to reduce energy use at several of our upstream operating sites, for example tuning pumps and gas turbines to run more efficiently.

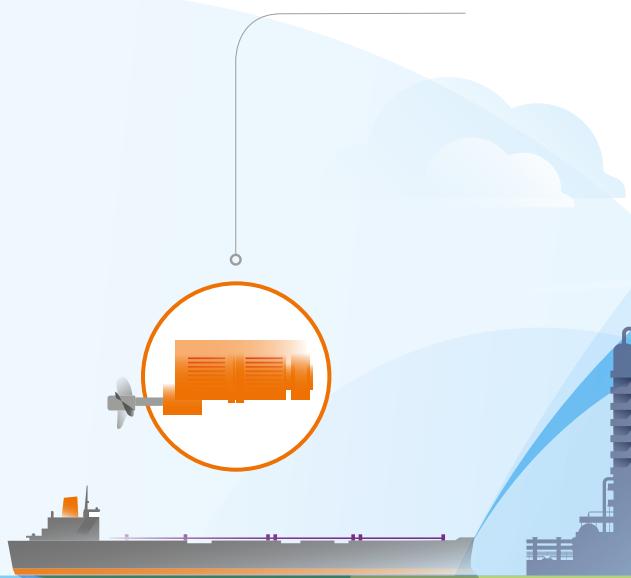
Reducing flaring

We've implemented changes to the way we operate our offshore plant to significantly reduce the amount of gas we flare in Angola.



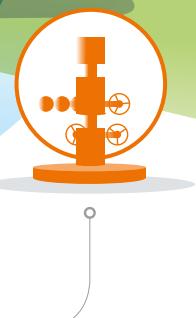
Reducing fuel consumption

We've introduced three liquefied natural gas carriers with more efficient engines.



Monitoring methane emissions

We used drone-mounted cameras to measure methane emissions from our equipment at our gas operations in the US and Oman.



Using green hydrogen

We piloted the use of green hydrogen, which is made exclusively from renewable energy sources, at our Lingen refinery in Germany.



Using waste heat recovery

We installed equipment to generate steam from exhaust gas at our Whiting refinery in the US. This reduces the amount of steam generated from our boilers, which in turn reduces the amount of fuel burned and associated GHGs.



Reducing carbon emissions

We replaced gas turbines that drive compressors with ones powered by electricity at our production facility in Prudhoe Bay in the US.

Our GHG emissions performance

We saw a decrease in our direct greenhouse gas emissions in 2018.

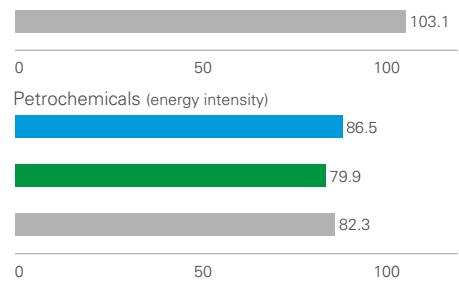
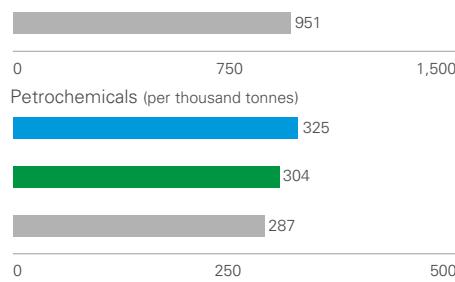
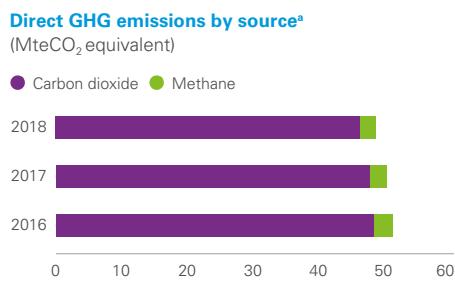
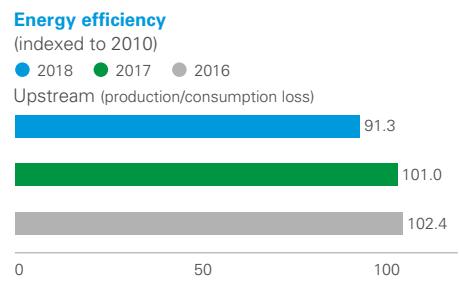
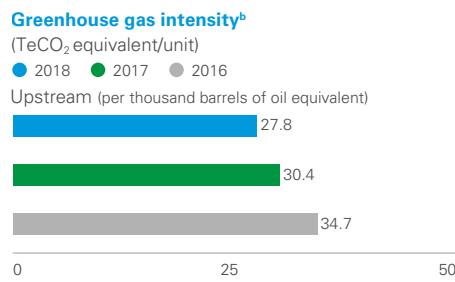
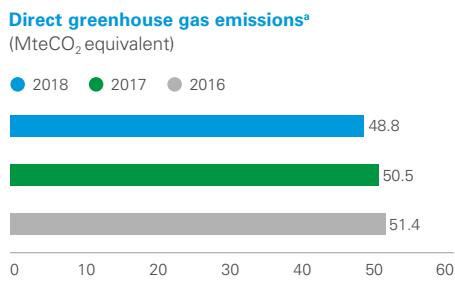
This was primarily due to actions taken by our businesses to reduce emissions in areas such as flaring, methane and energy efficiency.

Other factors contributing to the decrease included operational changes, such as lower throughput at some of our downstream sites in Germany and increased gas being captured and exported to the liquefied natural gas facility in Angola, as well as the divestment of some of our North Sea assets.

We saw a large decrease in the total volume of flaring – the controlled burning of gas during oil and gas production – in our upstream business. This was driven predominantly by reduced flaring at our assets in Angola, Asia Pacific and the North Sea.

We are aiming for zero routine flaring by 2030, as part of an initiative by the World Bank.

We also track GHG intensity, which is the quantity of GHGs emitted per a defined unit of production or processing. In 2018 we saw an improvement in our upstream GHG intensity, mostly due to an overall reduction in GHG emissions due to flaring reductions, increased operational reliability and the completion of start-up activities.



^aComprises 100% of emissions from activities that are operated by BP.

^bBP's equity share data comprises 100% of emissions from subsidiaries and the percentage of emissions equivalent to our share of joint arrangements and associates, other than BP's share of Rosneft.

Leading the methane challenge

We are taking action to minimize methane – the primary component of natural gas – from entering the atmosphere.

Methane has a shorter lifespan in the atmosphere than carbon dioxide but has been assigned a higher global warming potential. Every methane molecule that we can keep in the pipe helps keep atmospheric concentrations down, which is why we are targeting a methane intensity of 0.2%. This refers to the amount of methane emissions from BP's upstream oil and gas operations as a percentage of the gas that goes to market from those operations. Our methodology is aligned with the Oil and Gas Climate Initiative's (OGCI) methane intensity target.

Methane regulation

We support well-designed regulations on methane emissions that complement voluntary efforts by companies. In the US, we support federal regulation of methane emissions to eliminate overlap between different government agencies and state authorities.

Using technology to improve data reliability

We've been using hand-held infrared cameras to detect small leaks before they become larger ones for several years. Improvements in technology now make it possible to quantify the emissions that these infrared cameras detect, helping us to better target and prioritize our responses. We piloted this technology in Azerbaijan and the US in 2018 and plan to deploy the cameras more widely in 2019. This will help us to quantify emissions with greater accuracy from more of our sites around the world.

We are also in the process of deploying gas cloud imaging cameras that have the capability to continuously monitor our facilities and identify new leaks earlier than when they are identified during routine inspections. The camera quantifies the leak and sends an automated alert to the control room.

By reducing the time taken to respond we can reduce the total amount of methane emitted. The first unit will be installed at our Khazzan gas field in Oman and builds upon our experience of using gas cloud imaging technology at our Whiting refinery.

In our US onshore gas business, we're using drone-mounted sensors to help us inspect our equipment, which can cover multiple well pads more efficiently than hand-held devices. And through OGCI we are investigating the use of satellite technology to measure GHG emissions from industrial facilities and aerial surveys of sources of methane emissions.



Continuous monitoring and aerial surveillance can revolutionize global methane mitigation. BP can extend its technology leadership by rapidly deploying solutions and sharing best practices with key joint venture partners.



Ben Ratner, senior director, EDF+ Business, Environmental Defense Fund

Reducing emissions

From upgrades in mature production fields to the design of new projects, we're working to reduce our operational methane emissions. For example, our Khazzan site has a central processing facility, which means there's no need for processing equipment at each well site. Fewer processing sites lowers the potential for emissions. We conducted drone surveys in 2018 that demonstrated that the Khazzan plant is operating according to its low methane emissions design.

Of our 16 major projects scheduled to be delivered between 2019 and 2021, nine are gas. For BP-operated projects, we consider GHG emissions reduction opportunities from the design stage.



Working with others

We are taking a leadership role in addressing the methane challenge – in our operations and through our work with our peers, non-governmental organizations (NGOs) and academic institutions.

→ Oil and Gas Climate Initiative

OGCI has set a collective methane intensity target for member companies of 0.25% by 2025, with an ambition to bring that down to 0.20%. This compares with a baseline of 0.32% in 2017.

→ Methane Guiding Principles

We have endorsed five principles for reducing methane emissions across the gas value chain. The principles were developed by a coalition of industry, institutions, academics and NGOs.

→ Oil and Gas Methane Partnership

Working with industry, NGOs and governments, this initiative – part of the Climate and Clean Air Coalition – aims to minimize methane emissions from global oil and gas upstream operations by sharing good practice and information.

→ The Environmental Partnership

Our US onshore gas business has signed up to this American Petroleum Institute initiative, in which more than 55 member companies are working together to reduce methane emissions and to share information on technology deployment.

→ Carbon Mitigation Initiative

We're supporting Princeton University in its work to improve scientific understanding of the global methane cycle.

► Methane roundtables

We convened stakeholder roundtables in London, Washington and Beijing in 2018 to discuss actions to tackle methane emissions. More than 100 people participated from industry, universities and NGOs. Participants discussed approaches to continuous monitoring and measurement at production sites, as well as actions to reduce methane emissions across the value chain.

Tackling methane in our US onshore gas business

We are one of the largest natural gas producers in the US and have been taking action to reduce methane emissions for many years.



1999

Used enhanced automation to reduce methane emissions during a process in which we periodically remove liquids that have accumulated in a well.



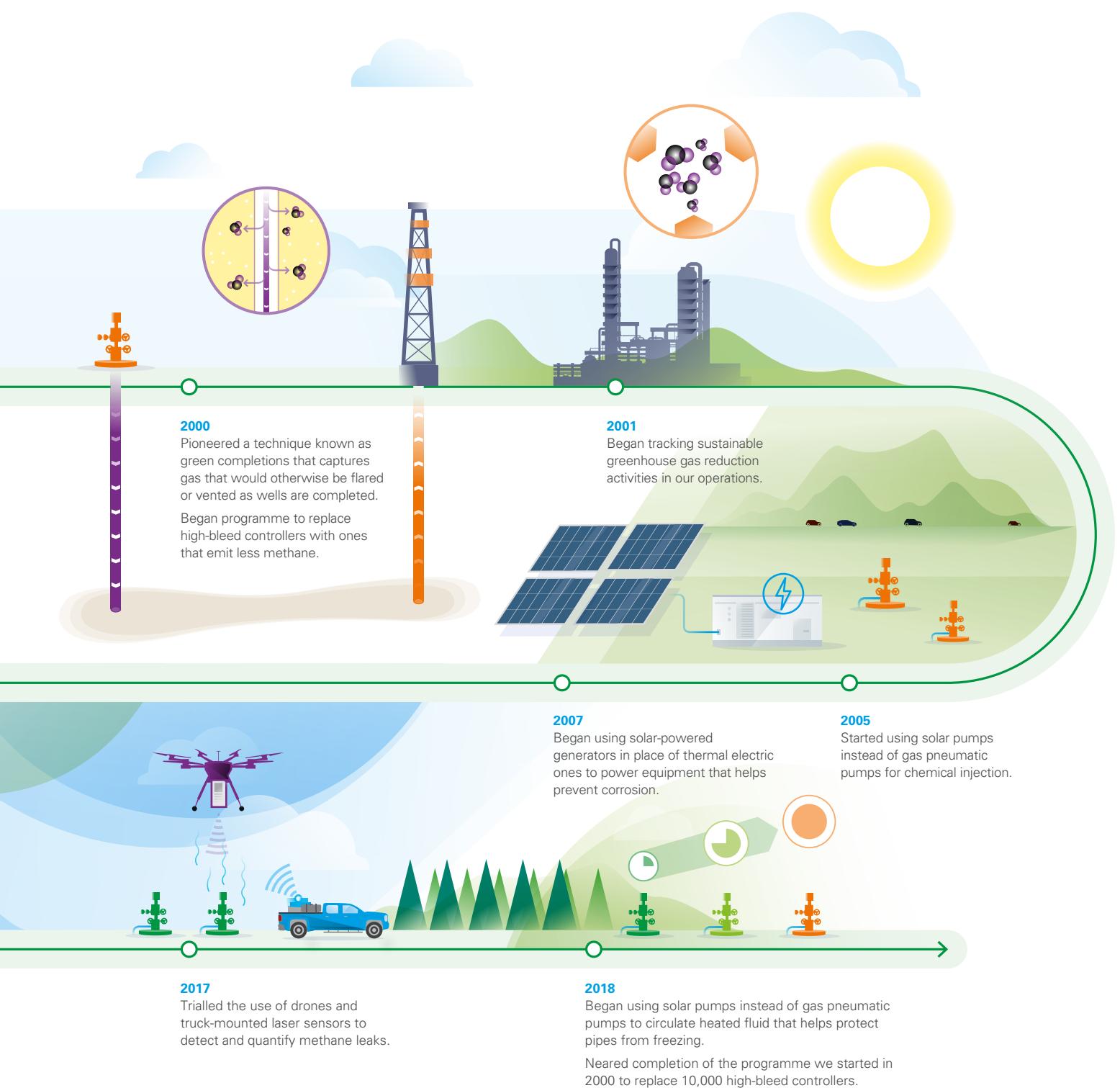
2009

Introduced a carbon price in our investment decisions for certain large projects.



2015

Completed our first multilateral well. Drilling multiple horizontal wells from one vertical wellbore requires less equipment than drilling individual wells from multiple well pads. This reduces the potential for leaks from equipment.



Improving

our products

Q

What is BP doing to help consumers lower their emissions?

A

BP's global portfolio of products includes fuels and lubricants that help improve engine efficiency and reduce emissions and we're seeking to expand the range of options we offer. For example, we supply BP Biojet to our airline customers in certain markets. For the past 13 years we've also been helping consumers take action on their emissions through our carbon offsetting programme, BP Target Neutral. So far, we've created more than 20 different carbon neutral products and services across the aviation, commercial transport and automotive industries.

Andrea Abrahams, global director,
BP Target Neutral



We provide customers with fuel for transport, energy for heat and light, power for industry, lubricants to keep engines running and the petrochemicals products used to make everyday items such as paints, clothes and packaging.

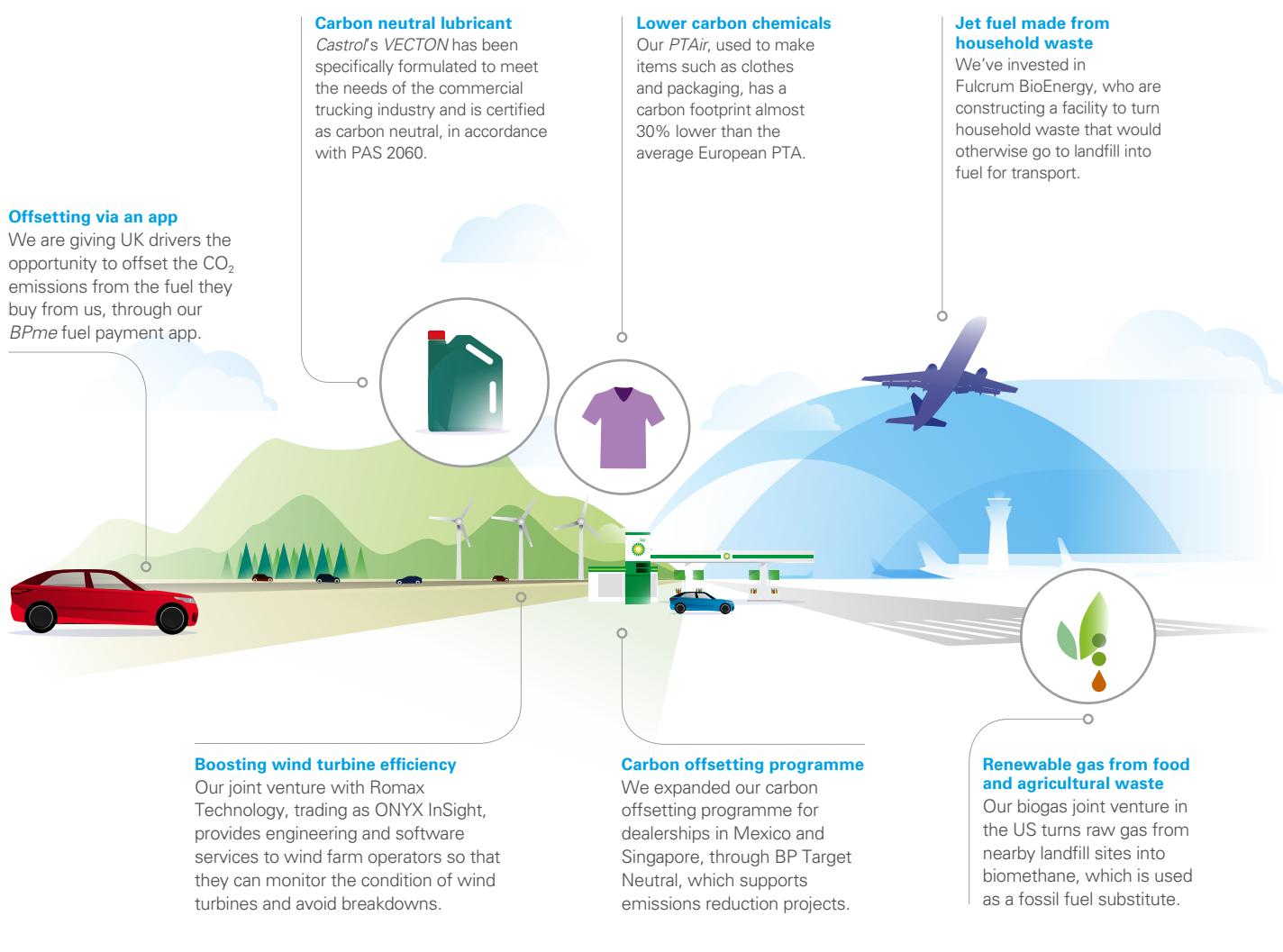
Three quarters of cars on the road in 2040 could still be using internal combustion engines, based on recent trends. It's estimated that cars with conventional engines could be nearly 50% more efficient by 2040 than they are today. So gains in fuel and vehicle efficiency are tremendously important in reducing greenhouse gas emissions.

That's why we are always looking for a wide variety of ways to innovate with fuels, lubricants and chemicals that can help our customers and consumers lower their emissions.

Many of our products and services are accredited as part of our Advancing Low Carbon programme. See page 28 for more information.

80-90%

of carbon dioxide emissions from oil and gas products are from their use by consumers in transportation, power plants, industries and buildings.



Plastic waste and the circular economy

We are looking at how we can advance the circular economy – where resources stay in use for as long as possible, with the maximum value extracted in that time, and are then recovered and regenerated at the end.

We see some of the greatest opportunities in the chemicals and plastics sector. We produce purified terephthalic acid, a feedstock used to make items such as beverage and food packaging, as well as fibres for clothing and carpets. To help the world meet its need for sustainable plastics solutions, we are:

- Partnering with Virent and Johnson Matthey to advance the commercialization of Virent's Bioforming process for the production of bio-paraxylene, a key raw material for renewable plastic.

- Developing technologies for chemical recycling that can make previously unrecyclable plastics destined for landfill and incineration infinitely recyclable. We are looking to commercialize the technologies by 2025.

- Reducing plastic in packaging – we've redesigned some of our *Castrol* engine oil packaging in the US to use less plastic, resulting in a reduction of around 1,500 tonnes a year.

We are conducting a study on how the circular economy affects BP and how we might contribute to it, with the aim of identifying opportunities for our existing and future business operations.

Fuelling jets with recycled cooking oil

We fuel more than 6,000 flights around the world every day and are committed to helping our aviation customers meet the International Air Transport Association's target of cutting net carbon dioxide emissions in half by 2050, relative to 2005 levels.

To help achieve this, we are offering customers an aviation fuel – BP Biojet – made using recycled cooking oil which is blended with conventional jet fuel. This helps to reduce greenhouse gas emissions by more than 60% compared with conventional jet fuel.

BP Biojet is currently available at airports in Norway and Sweden and has been used in the US at Chicago O'Hare, one of the busiest airports in the world.

We are also working with Neste, a leading producer of renewable products, and other airline manufacturers to explore opportunities to increase the supply of sustainable aviation fuel for our customers across our global network. We supplied our biojet to Bombardier and Airbus in 2018.



We believe that by 2050, it's unlikely that electric engines will play a significant role in commercial aviation. So the use of sustainable fuels in conventional aircraft can make the biggest impact on emissions.



Tom Parsons, Biojet commercial development manager, Air BP



Future mobility and electric vehicles

The use of electric vehicles (EVs) is expected to increase and by 2040 there could be around 350 million electric vehicles on the road.

We are exploring opportunities to support this growth in demand. Central to this is the provision of a fast and convenient charging network. We're investing in new technologies and infrastructure solutions. We now have more than 6,500 charging points across the UK, thanks to our acquisition of the UK's largest electric charging network, run by BP Chargemaster. And we've invested in:

- Storedot – to support their development of ultra-fast battery charging, which could reduce the time it takes to recharge an EV battery to five minutes.
- FreeWire – whose mobile rapid EV charging technology was piloted successfully at a UK retail site.
- PowerShare – one of China's leading EV charging platforms.

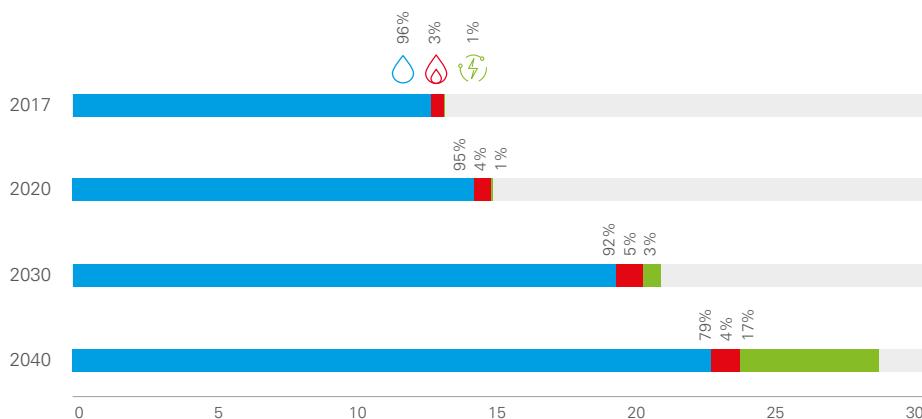


We expect a big shift in EV adoption will start in the early 2020s, when vehicle manufacturers bring on new models, battery range improves, charging times reduce and when the cost of an electric vehicle meets the cost of a combustion engine vehicle.



Roy Williamson, vice president, advanced mobility, BP

Kilometres driven by passenger cars by fuel type



4m+

electric vehicles are now on roads worldwide. Almost half of them are in China.

Producing natural gas

Gas offers a cleaner alternative to coal for power generation and can lower emissions at scale.

Natural gas produces about half as much carbon dioxide (CO₂) emissions as coal when burned for power, which is why expanding its use globally is critical to reducing CO₂ emissions. Gas also emits fewer pollutants, so it is better for air quality.

Gas is an ideal, cost-effective partner to renewable energy sources, such as wind, solar and hydropower, providing a consistent back-up source of power to their variability.

Already widely used for heating homes and businesses, gas can also deliver the high temperatures needed in heavy industries like steel and cement. And it is becoming more accessible around the world thanks to a growing global gas market connected by ship and pipeline.

We are active in finding and producing gas, in addition to its transport, storage and sale. This means we are in a good position as the market continues to grow. And by tackling methane emissions – the main component of natural gas and a potent greenhouse gas – we are helping to make sure that gas is a major lower carbon resource for years to come. See page 15 for more information on the actions we are taking to reduce methane emissions.



Meeting gas demand in Turkey

The Southern Gas Corridor is set to change the energy map of an entire region – connecting gas supplies in the Caspian to markets in Europe for the very first time. We began supplying gas to Turkey in 2018 and gas deliveries to Europe are expected to begin in 2020.

At full production, the Shah Deniz 2 field – located in the Azerbaijan sector of the Caspian Sea – is expected to deliver enough gas to meet the needs of every capital city along the Southern Gas Corridor more than twice over. At its peak, during construction, the project supported 30,000 jobs.



The Trans Anatolian Natural Gas Pipeline is the longest pipeline ever built in Turkey. This is an important achievement; gas from the Caspian Sea means a diversified, cleaner energy source for the country.



Emily Olson, vice president communications and external affairs, Southern Gas Corridor, BP

Carbon capture, use and storage

We believe carbon capture, use and storage (CCUS) has a vital role to play in limiting emissions and helping to meet the objectives of the Paris Agreement. It can significantly reduce emissions from gas power generation and energy-intensive industries that rely on the use of fossil fuels.

Collaboration is needed to make CCUS a reality. The technology has been in use for more than 20 years, but needs governmental support – through carbon pricing and other policy measures – to accelerate its deployment. Through the Oil and Gas Climate Initiative (OGCI), we are identifying the policy mechanisms that could be most effective in scaling up CCUS on a regional basis.

And we are working with OGCI Climate Investments to help progress the UK's first commercial full-chain CCUS project. The Clean Gas Project plans to capture CO₂ from new efficient gas-fired power generation and transport it by pipeline to be stored in a formation under the southern North Sea. The infrastructure would also allow other industries in Teesside to store CO₂ captured from their processes. The project, which is currently undergoing a feasibility study, could be in operation by the mid-2020s.

We've also invested in C-Capture, a company which uses chemicals to remove CO₂ emissions from power stations and industrial facilities.

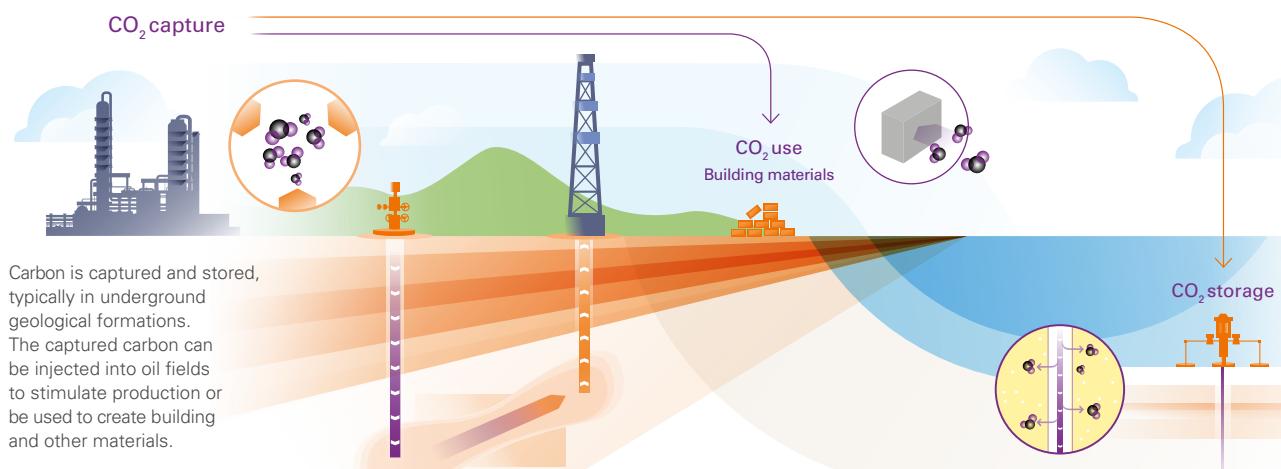
At BP, we are exploring opportunities to deploy CCUS in our own operations and projects. And we are participating in a joint venture in the UAE which uses CO₂ from industrial processes to enhance oil recovery.

► A cost-effective solution

CCUS is often referred to as an expensive technology. While it requires significant upfront investment, the overall cost depends on a number of factors, such as the source of CO₂ to be captured and transportation. Over time, deployment at scale will bring costs down.

With the average CCUS project today capturing at least one million tonnes of CO₂ every year, CCUS offers a cost-effective way to decarbonize many energy-intensive industries and transition to a lower carbon economy. It also delivers socio-economic benefits, helping to create jobs and, in some cases, providing a new source of income – with the CO₂ sold for other uses.

How CCUS works



Q

Why is innovation important to creating low carbon businesses?

A

Renewable energy is growing partly because technology and innovation are making it more efficient and affordable. We see this in solar energy where costs have reduced by over 80% in the past decade and in wind energy where turbine technology has dramatically improved capacity. This is underpinned by robust operating performance, leveraging digital and human capabilities. We are also developing digital platforms which identify ways to generate power more efficiently and how that power can be monitored, stored and traded. And we see opportunities to create innovative lower carbon energy offers by partnering gas with renewables, using gas to complement the intermittency of renewables.

Dev Sanyal, chief executive, alternative energy and executive vice president, regions, BP



BP is growing low carbon and digital businesses to help accelerate and commercialize new technologies, products and business models.

We are investing at least \$500 million a year to support low carbon activities, including our renewables businesses and acquisitions. Around \$200 million of this is used to develop options for new lower carbon businesses in five areas that are core to our strategy for advancing the energy transition. These are areas we believe have the potential to make a real contribution to our future and build resilience in existing operations.

Advanced mobility

We look for opportunities in advanced mobility across the broad themes of new mobility models, electric vehicles, batteries and charging. As part of this, we are investing in technologies to help meet the changing needs of customers across our global network of retail sites.

Mobile charging for electric vehicles

Our investment in FreeWire is helping us respond to demand for electric charging facilities on our forecourts. We successfully piloted the company's mobile rapid charging systems at one of our UK retail sites and are now exploring options to offer FreeWire's charging services elsewhere.

Ultra-fast battery charging

We've invested in StoreDot, a start-up that is developing ultra-fast battery charging technology for the mobile device and industrial markets. We expect the technology to be used in mobile devices by 2020 and will be working with StoreDot to bring this technology to electric vehicles. The company aims to reduce charging times to five minutes – almost as quick as filling a car's tank.





Bio and low carbon products

Demand for lower carbon fuels, industrial materials and other products is growing. The airline industry, for example, has ambitious carbon reduction targets – pledging to cut its emissions in half by 2050, despite anticipated growth in air travel.

From waste to fuel

We invest in Fulcrum BioEnergy, which is constructing the US's first commercial scale waste-to-fuels plant. The facility will incorporate technology developed by BP and Johnson Matthey to help convert household waste, that would otherwise be sent to landfill, into fuel for transport.



Carbon management

We work with organizations that aim to reduce the amount of carbon dioxide released into the atmosphere and apply carbon capture, use and storage.

Capturing carbon

We invest in Carbonfree Chemicals, which has developed technology to capture carbon emissions from industrial processes and turn them into chemicals that can be used to make household products, such as baking soda. We also invest in Solidia Technologies, which has developed technology that has the potential to reduce the carbon footprint of concrete by capturing and storing CO₂ and by using less energy in production.

Enabling carbon offsets

Through our carbon trading business, we help to enable emissions reduction projects that allow businesses and other organizations to offset their carbon footprint. A fifth of the world's greenhouse gas emissions are now covered by carbon pricing systems and we anticipate further growth in this area.



Digital transformation

Digital technologies have the potential to transform the way we work and how we respond to our customers' changing needs. With the pace of change increasing, it is essential to spot the next waves of opportunity and digital developments. Our focus includes blockchain, robotics and cognitive computing – as demonstrated by our investment in artificial intelligence company, Beyond Limits.

Creating connections

Digital platforms can simplify how people access transport solutions. Our investment in Chinese company, PowerShare, supports its work to simplify the charging experience for customers by connecting electric vehicle drivers, charge point operators and power suppliers through its online platforms. And we've invested in Drover, which has developed a virtual marketplace for car sharing that is helping to connect people to a network of rental companies and other fleet partners with under-used vehicles, reducing the need for new vehicles on the road.



Power and storage

Our *Energy Outlook* suggests that, if recent trends continue, three quarters of the growth in world energy demand over the coming decades is in the power sector. New technologies are shaping the way that energy is consumed and managed.

Energy monitoring

We invest in Voltaware, a company that has developed a monitoring system to track energy consumption. Voltaware sensors relay real-time information from individual appliances to a smartphone, so users can adjust their electricity usage, improve efficiency and reduce costs.

Growing our renewables business

BP has been in the renewable energy business for more than 20 years. We remain one of the largest operators among our peers and we're expanding in areas where we see opportunities for growth.

Renewables are the fastest-growing energy source in the world today and we estimate they could provide at least 15% of the global energy mix by 2040.

Biofuels

We believe that biofuels offer one of the best large-scale solutions to reduce emissions in the transportation system.

We produce ethanol from sugar cane in Brazil, which has life-cycle greenhouse gas (GHG) emissions around 70% lower than conventional transport fuels. Our three sites produced 765 million litres of ethanol equivalent in 2018.

Brazil is one of the world's largest markets for ethanol fuel. In order to better connect our ethanol production with the country's main fuels markets, we established a joint venture in 2018 with Copersucar – one of the world's leading ethanol and sugar traders. This includes operating a major ethanol storage terminal in Brazil's main fuels distribution hub.

Our Tropical and Ituiutaba biofuels sites are certified to Bonsucro, an independent standard for sustainable sugar cane production. We are working towards certification for our Itumbiara site in 2019.



See page 33 for how we are using technology in our biofuels business.

Renewable products

Butamax, our 50/50 joint venture with DuPont, has developed technology that converts sugars from corn into bio-isobutanol – an energy-rich bio product. Bio-isobutanol has a wide variety of applications. For example, it can be used in the production of paints, coatings and lubricant components. It can also be blended with gasoline at higher concentrations than ethanol. Butamax has upgraded its ethanol facility in Kansas to produce bio-isobutanol.

Biopower

We create biopower from bagasse, the fibre that remains after crushing sugar cane stalks, and export around 70% to Brazil's local electricity grid. In 2018 we generated 892GWh – enough to supply power to 1.25 million people in Brazil.

This is a low carbon power source, with part of the CO₂ emitted from burning bagasse offset by the CO₂ absorbed by sugar cane during its growth.

Wind energy

BP has significant interests in onshore wind energy in the US. We operate 10 sites in seven states and hold an interest in another facility in Hawaii. Together they have a net generating capacity of just over 1,000MW.

We've partnered with Tesla to test how effectively wind energy can be stored at our Titan 1 wind energy site in South Dakota. The electricity captured is then available for the site to use whenever we need it – even when the wind isn't blowing. The project will help us learn more about energy storage applications that could be useful across our entire portfolio.

In 2018 we divested three wind energy operations in Texas, as part of a broader restructuring programme designed to optimize our US wind portfolio for long-term growth.

Solar energy

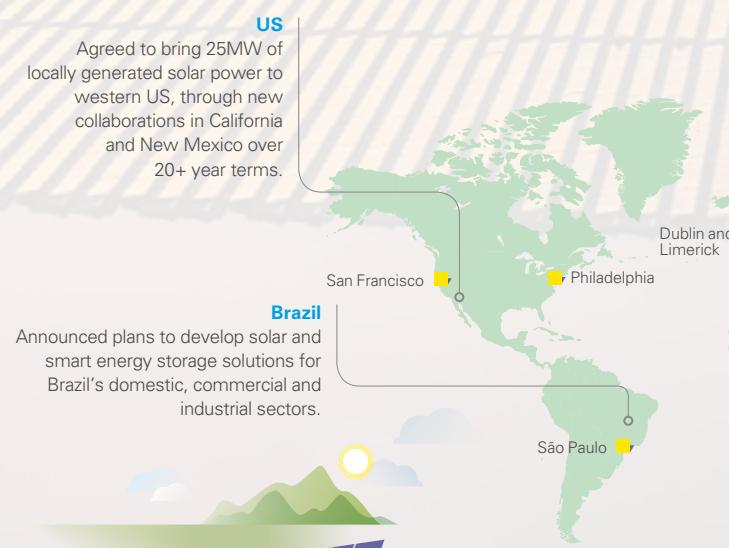
Solar could generate 12% of total global power by 2040, in a scenario based on recent trends. That could grow to 21% in a scenario consistent with the Paris climate goals.

We have a 43% share in Lightsource BP and plan to invest \$200 million over a three-year period. Lightsource BP aims to play a vital role in shaping the future of global energy delivery by developing substantial solar capacity around the world, and we are working with Lightsource BP to expand its global presence.

Advancing solar

Lightsource BP has doubled the number of countries where it has a presence since December 2017.

■ Lightsource BP sites



5 new countries in 2018



Partnering with BP has afforded us the ability to deliver real growth momentum for solar. Working together we are able to create real value and advance low carbon across energy markets that we are both active in.



Nick Boyle, group chief executive officer, Lightsource BP

As at 31 December 2018

UK

Completed the UK's biggest-ever unsubsidized solar power deal to supply AB InBev, the Budweiser brewer, with 100MW of solar power at its UK operations in South Wales and Lancashire.

Australia

Awarded the project to provide 105MW of solar power to Snowy Hydro, the country's fourth-largest national energy retailer, through a 15-year power purchase agreement.



India

Established EverSource Capital with Everstone to manage the Green Growth Equity Fund aiming to raise up to \$700 million of investment in low carbon energy infrastructure projects across India.

Accrediting our lower carbon activities

To reinforce our low carbon ambitions, we have implemented our Advancing Low Carbon accreditation programme, which aims to inspire every part of BP to identify lower carbon opportunities.

Since its launch in 2018, the programme has motivated people across BP to do more to advance low carbon, with 52 activities being accredited or reaccredited in 2019, up from 33 in 2018. Each activity supports one of our low carbon ambitions – by reducing emissions in our operations, improving our products or creating low carbon businesses. These activities take place through our own businesses, as well as in partnership with others.

Deloitte conducts independent assurance on the Advancing Low Carbon activities, including assessing the application of BP's process and criteria for accrediting activities, and GHG emissions offset and saved within the programme.

We estimate that 53 million tonnes of CO₂ equivalent have been saved or offset through activities delivered by BP, and 4.7 million tonnes through activities delivered by BP partners since the programme began in 2017.^a

 See page 75 for the full list of accredited activities and bp.com/advancinglowcarbon for more details on the programme and Deloitte's assurance statement.



It's great to see a 50% increase in the number of activities we've accredited this year and the enthusiasm the programme is generating among our people and businesses.



Katrina Mannion, director, Advancing Low Carbon programme, BP

Delivering a better carbon outcome

To gain accreditation by BP, each activity must meet certain criteria, including delivering what we call a 'better carbon outcome' by doing one of the following:

- Reducing greenhouse gas (GHG) emissions.
- Producing less carbon than competitor or industry benchmarks.
- Providing renewable energy.
- Offsetting carbon produced.
- Furthering research and technology to advance low carbon.
- Enabling BP or others to meet their low carbon objectives.

^aThe total emissions saved or offset from the accredited activities are estimated using a variety of methodologies and baselines. The figures aim only to illustrate the impact of the activities within the programme, and delivered by BP or a BP partner only refers to the organization leading on delivering the activity. Savings or offsets may be claimed by or attributed to other parties. The scope of accredited activities is wider than, and does not seek to align with, our GHG reporting boundaries. Therefore, the figures are not directly comparable to BP's reported emissions.

advancing low carbon

Reducing operational emissions
Our sustainable GHG emissions reductions programme includes actions taken by our businesses to improve energy efficiency and reduce GHG emissions and flaring in our operations around the world.

Creating biopower
BP creates biopower by burning bagasse, the fibre that remains after crushing sugarcane stalks to make biofuels. Some of this renewable power runs our three biofuels mills in Brazil, with the rest exported to the local electricity grid.

Operating efficient tankers
BP operates 26 oil tankers that go beyond the International Maritime Organization's energy efficiency regulation requirements.

Investing in electric transport
We invest in Lightning Systems, a company that makes electric powertrains for truck, van and bus fleet companies.

Producing renewable diesel
Our Cherry Point refinery in the US now manufactures diesel made from biomass-based feedstocks, alongside traditional fossil fuel feedstocks. This fuel has a lower carbon footprint compared with the petroleum-based alternative.

Sponsoring CCUS research
BP sponsors the Gulf Coast Carbon Center (GCC) at the University of Texas's Bureau of Economic Geology. The GCC studies the technology, engineering, stakeholder relations, policy and economics needed to make carbon capture, use and storage (CCUS) a widely deployable option.

Safety

Safety is the foundation for everything we do at BP, which is why it continues to be our top priority.

Q How do you learn from incidents?

A It's easy to think that human error causes incidents. However, when we dig deeper we find that actions and decisions are influenced by the conditions in which people work – including the equipment, systems, processes and environment. We can fix those issues to reduce the likelihood of mistakes. It can be as simple as making it clear which button to press. Or it could be more complex, like asking where there are opportunities for misunderstanding in a procedure. Behind every metric or statistic is a real person. That's why, for us, safety is about taking care of each other by fixing these issues.

Diane Chadwick-Jones, human performance director, BP



Preventing incidents

Our goal is no accidents, no harm to people and no damage to the environment. To deliver this, we carefully plan our operations, with the aim of identifying potential hazards and managing risks at every stage.

We design our facilities in line with process safety – the application of good design and engineering principles. If we can't eliminate a hazard, we take steps to reduce or manage it. For example, as part of our downstream corrosion management programme, which proactively identifies integrity risks, the team at our Kwinana refinery in Australia discovered a condensation corrosion risk, which we inspected and repaired to avoid a potential incident.

Human performance in safety

People, and how they interact with equipment, processes and each other, underpin any safe working environment. We have trained more than 5,000 people on human performance and provided techniques that help teams to analyse and redesign specific tasks to reduce the chance of mistakes occurring.

We are integrating these human performance techniques into our existing practices, such as incident investigation, risk assessment and the way we design facilities and equipment, to help prevent errors. As an example, we asked operators with different levels of experience in our UK fuels business to assess the way in which fuel storage tanks are typically drained. They discovered that the risk of opening an incorrect valve – and potentially causing a fuel spill – could be greatly reduced with clearer labelling and new valve locks, so we put these in place at the site.



Our approach

- Preventing incidents
- Monitoring security
- Keeping people safe.

We focus on these so people can go home safely.

Systematic learning

To strengthen our safety performance, we investigate incidents and near misses, take corrective action, apply what we have learned and focus on continually improving how we work. Our systematic approach to learning is also informed by good practices from other industries, such as aviation and nuclear.

Collaboration

We share what we have learned with our contractors. They carry out more than half the hours worked by BP, so their skills and performance are vital to our ability to carry out our work safely.

Our standard model contracts include health, safety and security requirements. We also use documents to define how our safety management system co-exists with those of our contractors to manage risk on a site. For our contractors working on more hazardous tasks, we conduct quality, technical, health, safety and security audits before awarding contracts. Once they start work, we continue to monitor their safety performance and work together to resolve issues.

Keeping people safe

We focus on keeping employees and contractors safe and alert to potential hazards in their work.

Tragically we suffered one fatality in 2018. In our lubricants business a heavy goods driver working for one of our contractors in the US was struck by a passing vehicle while checking a tyre. We are deeply saddened by this loss and are working closely with our contractors to continue to improve safety and to seek to prevent injuries in our work together.

One of the ways we are doing this is by working with our peers on consistent standards. For example, through the International Association of Oil & Gas Producers we have encouraged other members to use new cars with an internationally recognized five-star safety rating from January 2019.

Health and wellbeing

One in four people are affected by mental health issues at some point in their life. We signed the UK Time to Change employer pledge in 2018 to change the way we think and act about mental health at work. We also ran a series of employee events on World Mental Health Day and offered resilience training to around 500 people across the group.



Our mental health fluctuates from day to day. As with physical health, at times we are ill and may need treatment. We can help by changing the way we view and talk about mental health.



Richard Heron, vice president health and chief medical officer, BP



Wearing a vest to signal heat stress

We work in some of the hottest places on the planet including the Omani desert, where temperatures can reach 55°C.

We manage heat exposure in a number of ways and the Omani government mandates breaks and shorter working hours during the hottest months. However, it is not always clear that an individual is suffering from heat stress.

So, we piloted a new wearable technology at one of our rigs. Following a health examination, the special vests are tailored to the wearer and send data on heart rate, respiratory rate and skin temperature to their smartphone. If the data exceeds the individual's parameters, a text message and email alert is sent to the rig medic and health and safety lead so that they can intervene.

We've learned a number of valuable lessons from this pilot and are now looking at additional uses in our wider operations.

Using technology to improve efficiency

Our Brazilian biofuels business is spread across a number of geographically remote locations, which means that every day across our sites our team makes around 800 trips, covering 45,000 kilometres. This often takes place in remote locations with poor network and communications coverage, making it difficult to stay in touch.

Our SmartLog programme is helping to overcome some of these challenges and improve performance across our three sites by driving efficiencies and reducing costs. Using a combination of mobile satellite technology, sensors and radio, we can connect our people and their vehicles to a central control room. Here we receive 24-hour, real-time information about what's happening in the field to help manage activities remotely, as well as monitor and analyse behaviour and give advice or intervene on safety and efficiency.

Since introducing SmartLog in 2018, we've reduced the equipment needed by 20% and our remote monitoring is helping to reinforce our safety culture in the field.

We also use in-vehicle monitoring systems and cameras to improve transportation safety and further understand driving behaviour.



Security

As a global business, BP monitors hostile actions that could harm our people or disrupt our operations. We focus on operating areas affected by political and social unrest, terrorism, armed conflict or criminal activity.

Our 24-hour response information centre in the UK monitors global events and related developments, which means we can assess the safety of our people and provide timely advice if there is an emergency. This meant that in 2018 we were aware of events such as the earthquake in Mexico almost immediately. Our team was quickly able to confirm the safety of employees in the area and provide advice.

Cyber threats

Cyber attacks are on the rise and our industry is subject to evolving risks from hacktivists, cyber criminals, terrorists and insiders. We have experienced threats to the security of our digital infrastructure, but none of these had a significant impact on our business in 2018.

To encourage vigilance among our employees, our cyber security training programme covers topics such as email phishing and the correct classification and handling of our information.

We also collaborate closely with governments, law enforcement and industry peers to understand and respond to new and emerging threats.

100+

events held around the world during cyber week to raise awareness of the risks and actions to take.

Our safety performance

We track our safety performance using industry metrics and work to continuously improve personal and process safety across BP.

In 2018 we saw a reduction in the number of tier 1 and tier 2 process safety events. We also saw an overall decrease in our recordable injury frequency and day away from work case frequency.

However, our goals stay the same – to have no accidents, no harm to people and no damage to the environment. There is always more we can do and we remain focused on achieving better results today and in the future. We do that by:

- Training our staff and giving them the tools they need to do their job.
- Promoting a working environment that encourages everyone to speak up and care.
- Focusing on the systematic and disciplined application of our processes.

Our Cherry Point refinery in the US marked a historic milestone in April 2018, when its employees and contractors – representing more than 80 local companies – passed 25 million work hours and more than five years worked without a single day away from work case.

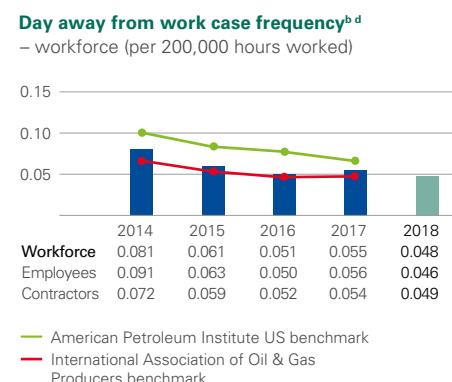
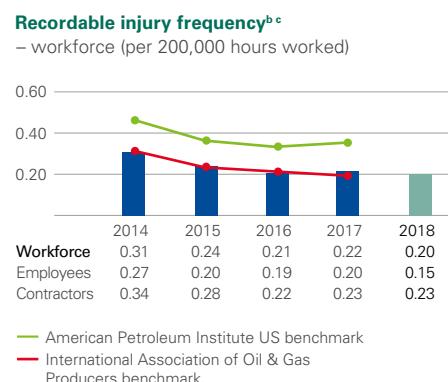
See bp.com/hsechartingtool for safety data.



Safety is our first priority – on every job, every day. Our values determine how we work, and no value is more important than safety. We want all our people to go home in the same way that they came to work, or even better.



Bob Allendorfer, Cherry Point refinery manager, BP



^aTier 1 process safety events are losses of primary containment of greater consequence, such as causing harm to a member of the workforce, costly damage to equipment, or exceeding defined quantities. Tier 2 events are those of lesser consequence.

^bAPI and IOGP 2018 data reports are not available until May 2019.

^cThe number of reported work-related incidents that result in a fatality or injury.

^dThe number of incidents that resulted in an injury where a person is unable to work for a day (or shift) or more.

Human rights

We are committed to identifying, preventing and addressing human rights risks and impacts associated with our business activities.

Q

What is BP doing to protect worker rights?

A

In petrochemicals we have been undertaking assessments at selected sites. We are using the findings from these assessments to help our contractors deepen their understanding of the risks to the workforce and improve their labour practices. We are also using what we have learnt to inform how we can build labour rights and modern slavery risk prevention into our business processes to manage the risk more systematically across BP.

Rita Griffin, chief operating officer,
petrochemicals, BP



Respecting human rights

We respect the rights of our workforce and those living in communities affected by our activities.

We set out our commitments in our human rights policy and code of conduct, and our operating management system contains guidance on respecting the rights of workers and community members. We respect internationally recognized human rights as set out in the International Bill of Human Rights and the International Labour Organization's Declaration on Fundamental Principles and Rights at Work, including the Core Conventions. We are incorporating the UN Guiding Principles on Business and Human Rights, which set out how companies should prevent, address and remedy human rights impacts, into our business processes.

Our focus areas include ethical recruitment and working conditions of contracted workforces at our sites, responsible security, community health and livelihoods and mechanisms for workers and communities to raise concerns.

We encourage employees, contractors, communities and other third parties to speak up if they see something they think could be unsafe or unethical, including potential human rights abuses. At our sites we help make sure people are aware of our confidential global helpline OpenTalk and our community and workforce grievance mechanisms.

 See page 48 for more information.

International Labour Organization's Declaration on Fundamental Principles and Rights at Work

International Bill of Human Rights

UN Guiding Principles on Business and Human Rights

Voluntary Principles on Security and Human Rights

International standards and principles

Our human rights focus areas



Labour rights

- Health and safety
- Forced labour and human trafficking

- Fair working and living conditions
- Non-discrimination
- Channels to raise concerns



Security and human rights

- Interaction between security forces, communities and workers



Rights of people in communities

- Livelihoods and local employment
- Consultation and grievance mechanisms

- Socio-economic, health and environmental impacts

Our own standards

Code of conduct

Our values

Human rights policy

Operating management system

Expectations of suppliers

Livelihoods and communities

We recognize that our activities could adversely affect the rights of people in communities near our sites.

We work hard to prevent, reduce and manage any negative effects on the livelihoods, land, environment, cultural heritage, health and wellbeing of people in communities near our activities, including indigenous peoples. For example, in Indonesia our liquefied natural gas operations are situated close to the local community fishing ground. We engage with local authorities and fishermen to get their views on actions we can take to reduce disturbance to the fishing area. While no fishermen were expected to be economically affected by our construction and operating activities, we put in place a livelihood programme for local fishermen to help manage and prevent any negative impact to the communities.

We screen our major projects to identify and manage any potential impacts, including on human rights. If we do cause, or contribute to, adverse impacts on the human rights of communities near our operations, we are committed to providing for, or co-operating in, the remediation of those impacts.

To bring a systematic approach to the way our sites identify and act on concerns raised by local communities, we issued guidance on community complaints mechanisms in 2018, in line with the UN Guiding Principles on Business and Human Rights criteria. In Brazil this led us to establish a two-way channel to discuss and listen to stakeholder feedback at our biofuels sites which are close to almost 30 communities. We introduced a register to log and address concerns and requests, as well as training for employees and contractors who work directly with external stakeholders on managing community complaints.

 See page 48 for more information on community complaints.



Labour rights

Our employees, contractors and suppliers should work in safe, healthy, secure and fair conditions.

Employees

Respect for our employees' human rights is integral to our recruitment, management and diversity and inclusion processes. Our code of conduct requires employees to report any suspected human rights abuses in our operations or those of our business partners.

We aim to ensure equal opportunity in recruitment, career development, promotion, training and reward for all employees – regardless of ethnicity, national origin, religion, gender, age, sexual orientation, marital status, disability or any other characteristic protected by applicable laws.

Working with contractors and suppliers

We operate in 78 countries and have around 54,000 suppliers, including contractors, vendors, service providers and contingent labour, plus thousands more in our wider supply chain.

We expect contractors and their employees to act in accordance with our code of conduct, human rights policy and our expectations of suppliers. Our standard procurement contracts include a requirement for suppliers to respect internationally recognized human rights, with a specific ban on the use of forced, trafficked or child labour.

Our labour rights due diligence process helps us to identify risks and impacts in our supply chain. These tools and resources can be used to screen suppliers in a consistent way anywhere in the world. We use it with suppliers on a risk-prioritized basis to understand how they manage these risks in their business and supply chain.

» Working with our peers

We are working with a number of our peers to create an oil and gas industry framework for human rights supplier assessments, with a particular focus on labour rights. When developed, it is intended that the results of these assessments can be shared with the participating companies through an independent third party. The aim is to make it easier and more efficient for suppliers to demonstrate how they respect human rights and support improvements in working conditions.

Labour rights and modern slavery assessments

We are developing a more systematic approach to managing the risk of modern slavery and other labour rights issues by building it into our management systems, processes and procedures.

Some of our business activities and parts of our supply chain may pose a higher risk of labour rights and modern slavery issues than others. Since 2016 we have been taking a risk-based approach to monitoring our contractors and suppliers by considering:

- Countries that pose a high degree of risk, as identified by risk analytics firm Verisk Maplecroft and other data sources.
- Activities that rely on manual labour, such as construction, catering, cleaning and certain types of manufacturing.
- Factors related to the vulnerability of the workforce, such as poverty levels, ethnic, religious or gender minorities and migrant workers.

Using this approach, we have been reviewing the risk of modern slavery at selected businesses, including mapping supply chains to identify high-risk contractors.

This initial screening has led to further due diligence through questionnaires or on-site labour rights assessments, including worker interviews. In 2018 18 businesses were under review.

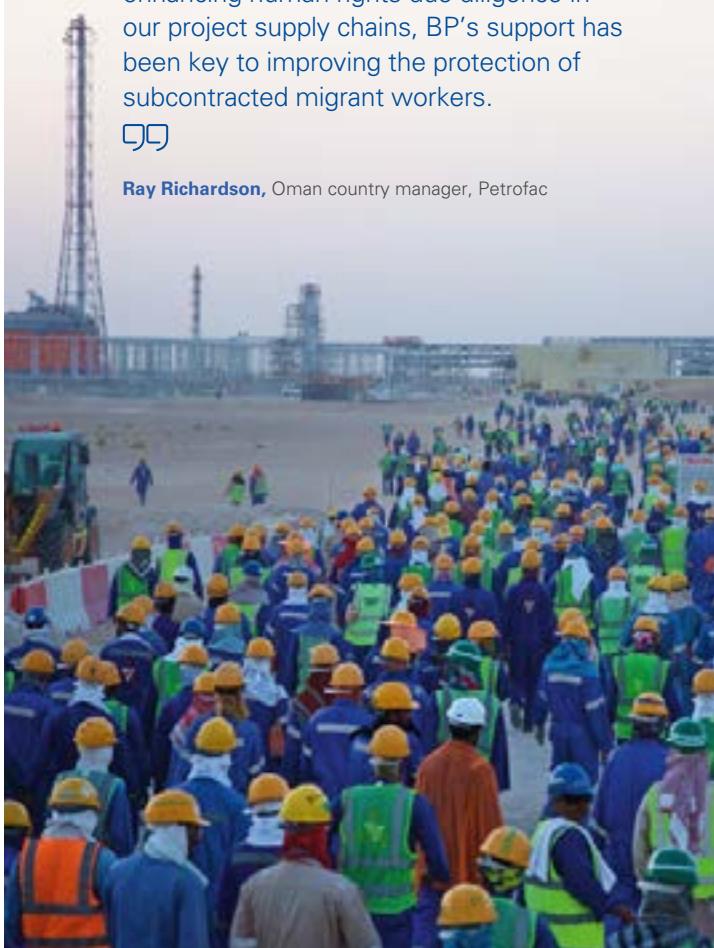
The assessments focus on key warning signs, such as passport retention, recruitment or other fees, wage deductions, employment contracts, working hours, shift patterns and living conditions.



We've been working with BP to develop the Khazzan and Ghazeer gas projects. In advancing Petrofac's commitment to enhancing human rights due diligence in our project supply chains, BP's support has been key to improving the protection of subcontracted migrant workers.



Ray Richardson, Oman country manager, Petrofac



Where we find an issue, we try to work with the contractor to resolve it and improve the situation of those affected. If a serious breach is found and no corrective action is taken, we reserve the right to terminate contracts.

Upholding labour rights in Oman

We commissioned independent assessments of labour conditions in our contractor workforce in Oman, where we work with contractors that employ migrant workers. The assessments, which included terms of recruitment and employment, identified issues related to working practices, passport retention, recruitment fees and worker grievance mechanisms.

Since the initial assessments three years ago, we've made significant progress by working with our contractors to:

- Develop action plans to reduce the risk of modern slavery on site and in their supply chains.
- Put in place policies that prohibit forced labour, including specifically requiring employers to pay recruitment fees and preventing restriction on workers' freedom of movement.
- Improve how we communicate our expectations on labour rights to our contractors, including hosting management forums to raise awareness and share good practices.

To strengthen our controls, BP employees are on site monitoring conditions and raising worker awareness of their rights at work. This includes asking labour rights questions during workforce site inductions and making sure there is an effective mechanism for workers to raise concerns. Where we find contractors are not following our expectations we require them to take corrective actions – for example we have asked some contractors to repay recruitment fees to workers.



See bp.com/modernslavery.

Security and human rights

Providing security for our assets around the world can be complex, especially in locations where there is a higher likelihood of conflict or violent crime.

BP works with security providers who protect our facilities to reinforce the importance of respecting human rights. We support the Voluntary Principles on Security and Human Rights. These principles guide the way we work with these security forces. They emphasize the need to understand and respect the human rights of our workforce and people living in communities near our operations.

As an example of our continued implementation of the Voluntary Principles, we conducted an assessment of the practices of private security contractors and the way we work with public security forces in our operations in Georgia. The review found that potential impacts – both positive and negative – of our security arrangements on individuals and communities are regularly assessed and plans for mitigation of the associated risks are integrated into existing processes.

We provide training on the principles for those employees who are accountable for managing security and conduct assessments to identify areas where we can improve.

We report on our progress in relation to security and human rights issues in an annual report to the Voluntary Principles plenary.

 See bp.com/vpshr for more information about our progress on security and human rights.



Society

We make a significant contribution to societies around the world – providing heat and light for homes, fuel to get people to their destinations and power for industry.

Q

Why is the UN Sustainable Development Goal of affordable and clean energy important to BP?

A

Having worked in many parts of the world for BP, I've seen first hand the benefits that energy projects can bring to societies. My own experience shows that there is a close relationship between improved access to energy and better living conditions. In fact, 80% of the world's population live in countries where more energy can make a real difference. The challenge for our sector is to provide this energy in an affordable and sustainable manner, working closely with governments and local communities.

William Lin, chief operating officer,
upstream regions, BP



Providing heat, light and mobility

The energy we produce helps to improve the quality of life for millions of people around the world.

Today more than one billion people don't have any access to electricity – that's 15 out of every 100 people on the planet. And our population is still growing, heading towards nine billion by 2040.

Demand for energy will underpin this growth in population and prosperity and we project that global energy consumption could increase by around a third by 2040.

More energy could help lift 2.5 billion people out of low incomes over the next two decades.

Our work helps countries around the world to grow their domestic energy supplies and boost their energy security. This in turn creates jobs, drives economic development and generates revenue for governments. The value we create can transform communities, even nations.

The value we generate





North America



BP has a larger economic footprint in the US than in any other country. We support more than

125,000 jobs. Our operations contributed \$101 billion to the US economy in 2018. And we have spent more than \$6 billion with diverse suppliers since 2008.



Europe



Our UK North Sea oil and gas operations have helped drive economic growth in the UK for more

than 50 years. In 2018 we successfully started up our Clair Ridge project, which, at peak, is expected to supply 10% of all UK oil production. During the construction phase we invested almost \$2 billion with UK suppliers, awarded more than half the contracts to UK-registered companies and created thousands of jobs.



Asia



To improve urban air quality, China is rapidly developing its electric vehicle industry and is now one of the

world's largest markets for electric vehicles. We're participating in this transformation through our \$10 million investment in the NIO Capital fund. The fund will support the development of advanced mobility opportunities, including electric vehicles, new energy infrastructure and batteries.



South America



Around 42% of Brazil's energy comes from renewable sources and more than half

of its passenger cars contain flex-fuel engines, which combine gasoline and sugar cane ethanol. We were the first international energy company to invest in Brazilian sugar cane ethanol. In 2018, our three biofuels sites produced enough renewable power to meet the needs of all the homes in a city of 1.25 million people.

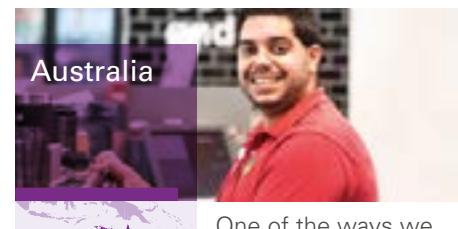


Africa



Africa is one of the fastest-growing energy markets with demand expected to rise by as much as

127% by 2040. We want to support that growth, which is why we're working with Kosmos Energy and two national oil companies to develop natural gas resources off the coast of Mauritania and Senegal. Our offshore liquefied natural gas facility will supply gas to both domestic and global markets, generating revenue and new energy supplies for the two countries.



Australia



One of the ways we are investing in the long-term future of Australia is by building strong relationships

with Aboriginal and Torres Strait Islander communities. We've set out our aims in our Reconciliation Action Plan, which includes a commitment to spend 3% of our addressable spend with indigenous businesses by 2023. We have more than 5,700 employees and long-term contractors across the country, of which approximately 2% identify as Aboriginal or Torres Strait Islander.

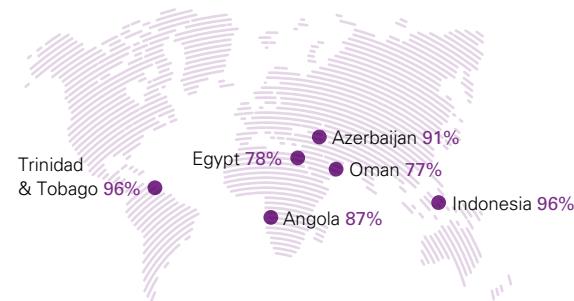
Supporting local workers and suppliers

We are committed to creating jobs and growing local businesses in the communities in which we operate.

We aim to recruit our workforce from the community or country in which we are based. While some governments require us to do so, we try to do this wherever we work because we believe it's not just good for the local community, it's good for BP.

When vital skills, such as engineering and technical abilities, are in short supply, we offer training and on-the-job learning.

Nationals employed



Developing skills in the West Nile Delta

Our West Nile Delta project is located around 85 kilometres offshore from Alexandria, Egypt's second largest city. To bring lasting benefits to the communities where the gas comes onshore, we provide local people with training on vocational skills and health and safety standards. Almost 700 people took part in 2018, studying topics such as defensive driving, scaffolding, welding and working at heights. Approximately 10% of the people trained now work on the West Nile Delta project. The aim is to reach around 1,500 people by the end of 2019.

Creating apprenticeships in the North Sea

BP supports a number of apprenticeship programmes in countries where we work, providing access to development opportunities to a wide range of young people.

In the North Sea we provided 12 oil and gas technical apprenticeships in 2018 in partnership with OPITO, the skills organization for oil and gas. Participants spend two years at college and a further two years on site, earning two qualifications on completion of the programme.



Working offshore on BP's Glen Lyon vessel means that every day is different and brings a new challenge. It's also a great opportunity for me to put my learning to the test and find out what I'm capable of in a safe and friendly environment.



Rhiannan Flaws, OPITO apprentice, BP

Building a Papuan workforce

Our Tangguh liquefied natural gas plant is located in the remote Papua Barat province in Indonesia. We are committed to reaching an 85% Papuan workforce by 2029, up from 56% in 2018, through internship and apprentice programmes that focus on training graduates from Papua and Papua Barat.

To create a sustainable source of income for local people, we've also helped establish several businesses. These include a clothing manufacturer and a company that provides air conditioning maintenance services.

Using local suppliers in Senegal

To help local suppliers develop their business skills, we jointly launched the Invest in Africa initiative in Senegal in 2018. The programme aims to improve understanding of international standards and contracting processes so that local companies can bid for work with businesses like BP.

Together with other founding partners Cairn Energy, Kosmos Energy and Woodside, we plan to develop a database of local suppliers who have passed the initial due diligence process. This will allow international operators to identify appropriate suppliers more easily.

We have already contracted more than 80 local companies for services such as catering, transport and site surveying across our businesses in Mauritania and Senegal.

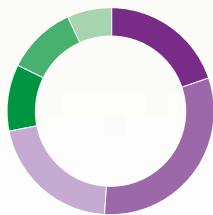


Contributing to communities

We engage with governments, local communities and non-governmental organizations to create social investment programmes that can provide sustainable benefits.

We invest in community projects that align with local needs and our business activities. We consider how these projects support the UN Sustainable Development Goals, which aim to overcome worldwide challenges such as poverty, hunger, inequality and climate change. Based on our global business activities, we have prioritized the goals that relate to economic development, education and environment.

BP's community spend by region (\$ million)



Economic development

Our activities contribute to local economic development and we help communities build entrepreneurial skills. We also work with local partners to promote commercial partnerships.

India

We developed a training programme to help motorcycle mechanics working in small enterprises develop additional skills in business management and customer service. Since it began in 2009, the programme has trained more than 200,000 mechanics.

Mauritania

Together with our partners, we launched the Mauritania-British Business Council (MBBC) and support its work to strengthen economic development, co-operation and trade relations with the country. We have hosted several MBBC meetings on doing business in Mauritania, along with a series of educational and technical workshops on the oil and gas sector for private and public stakeholders.

Education

Many of the education programmes that we support encourage young people to consider careers in science, technology, engineering and mathematics (STEM).

Egypt

We support an annual scholarship programme that gives Egyptian students the opportunity to pursue post-graduate studies in the UK. After completing their studies, the students commit to return to Egypt to apply their skills and knowledge in their home country. Graduates from previous years currently work at various institutions, including the Ministry of Foreign Affairs, local universities and multinational companies.

See page 60 for information on how we support STEM education in the UK and the US.



Environment

We support biodiversity and conservation programmes, as well as initiatives to promote sustainable development.

Georgia

We created the Eco Award programme jointly with our co-venturers and the Georgian government to promote the responsible use of natural resources, conservation and community wellbeing. In the first round, three projects received funds, including one that is introducing sustainable land and water practices to reduce the risk of land degradation in the south of the country.

Australia

We have agreed a five-year partnership with the food rescue organization OzHarvest. During that time our funds will help fuel food waste collection and delivery trucks and support an education programme to raise awareness of the role that food waste plays in climate change, sustainability and hunger relief. OzHarvest also collects food waste from 120 of our convenience stores.



Engagement

We want to make art more accessible for audiences. We have supported arts and cultural activities for more than 50 years in the UK and have long-term partnerships with the British Museum, the National Portrait Gallery, the Royal Shakespeare Company and the Royal Opera House. We marked the 30th anniversary of our partnership with the Royal Opera House in 2018. In that time we have helped more than 900,000 people experience free opera and ballet performances.

► The BP Foundation

The BP Foundation provides money for humanitarian relief activities around the world. The foundation also matches personal contributions from BP employees that are made to eligible charities of their choice.

- \$6.4 million in employee contributions that the BP Foundation matched with grants of \$6.1 million.
- \$424,250 contributed to local communities hit by extreme events including:
 - \$100,000 to the Indonesian Red Cross Society to support earthquake relief efforts in Lombok and Sulawesi.
 - \$50,000 for emergency relief and aid to victims of the fires in California, via the California chapter of the American Red Cross.



Engaging with communities

We work with local communities in an open and constructive way to help avoid and minimize any adverse impact that our work might have.

We consult with communities so that we can understand their expectations and address any concerns. For example, our offshore exploration drilling programme in Nova Scotia, Canada, had the potential to affect local fishing activities. So we worked with fisheries associations and indigenous communities to develop plans that outlined the way in which we would communicate with them during drilling operations. We also shared bi-weekly updates throughout the drilling programme.

In Mauritania and Senegal, where we are developing a cross-border floating liquefied natural gas project, we met with community members to discuss areas of interest. One of the areas discussed was how we can support fishing activities. As a result, we are providing access to funding for small-scale fishermen and training on fish processing techniques for women's co-operatives.

Community complaints

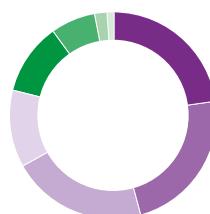
We require each of our operating sites to have a robust process to receive, document and respond to complaints.

As an example, at our South Caucasus Pipeline Expansion project in Georgia and Azerbaijan, all complaints are logged within a seven-day period of receipt and we aim to investigate and provide a formal response within 30 days. An internal panel reviews the investigation outcomes and agrees resolution of the grievance and any corrective measures, where necessary.

Most of the concerns raised by communities living near our operations in 2018 related to job opportunities and nuisance. We saw an increase in the number of complaints we received in 2018, largely due to improvements in the systems we have put in place to capture community complaints. Some of the increase is also due to the types of activities undertaken by BP in 2018. For example, there was a rise in the number of concerns from local community members at our Tangguh liquefied natural gas plant in Indonesia, where we are expanding the facility. The majority of these related to concerns about employment and recruitment procedures.

 See page 37 for more information on human rights grievance mechanisms.

Community complaints



Damage to property or crops	23%
Job opportunities	23%
Nuisance (odour, noise and dust)	21%
Community investment	12%
Other	11%
Security arrangements	7%
Flaring	2%
Discharges to water	1%

Promoting revenue transparency

We support transparency in the flow of revenue from oil and gas activities to governments. This helps citizens hold public authorities to account for the way they use funds received through taxes and other agreements.

We are a founding member of the Extractive Industries Transparency Initiative (EITI), which supports the disclosure of payments made to and received by governments in relation to oil, gas and mining activity. As part of the EITI, we work with governments, non-governmental organizations and international agencies to improve the transparency of payments to governments. We supported EITI implementation in a number of countries where we operate, including Iraq and Trinidad & Tobago, in 2018.

In addition, we disclose information on payments to governments for our upstream activities on a country-by-country and project basis under national reporting regulations, such as those in effect in the UK.



Environment

Our goal is to understand and sustain the health of the environments in which we operate and to respect the resource needs of the communities which depend on them.

Q How do you manage environmental impacts at a local level?

A We conduct detailed environmental and social assessments when planning our projects to identify impacts that could arise from our activities. We then take measures to address them. For example, at our Tangguh expansion project in Indonesia, the planned location of a new offloading facility and the route of a nearshore pipeline for our liquefied natural gas plant were identified as being close to mangrove habitat. We therefore took measures such as moving the location to the western side of the site and using horizontal drilling for the pipeline to avoid the habitat.

Kelly Goddard, vice president of environment, social responsibility and HSSE compliance, safety and operational risk, BP



Our environmental and social impacts

We work hard to understand environmental and social sensitivities in the areas where we operate with the aim of avoiding, minimizing and mitigating any potential impacts.

The way in which our operating sites around the world manage their environmental and social impacts is set out in our operating management system (OMS). This includes requirements on consulting with stakeholders who may be affected by our activities. To continue to improve the way we manage potential impacts and our environmental performance, we are further integrating the requirements of the ISO 14001 environmental management standard into our OMS.

Project planning

During the initial planning stages of our major projects, we complete a screening process to identify potential environmental and social impacts. These may include impacts on sensitive areas and freshwater resources, as well as the prevalence of bribery and corruption in a host country, local employment and community health and safety.

We use the results to identify actions and mitigation measures and then implement these in project design, construction and operations. For example, as part of our exploration activities in São Tomé and Príncipe, we are using underwater sound recorders and an autonomous vehicle to understand the distribution and movement of marine mammals. The outcomes of this can inform planning for potential future activities.

Operations

At our major operating sites, we review performance each year and set local improvement targets. These can include measures on flaring, air emissions and the use of water.

Many of our sites operate for several decades and we aim to manage environmental and social impacts throughout their lifespan. In Indonesia, when we began planning our liquefied natural gas plant in 2002, we set up an independent panel to monitor our progress. The Tangguh Independent Advisory Panel continues to review our performance in areas such as human rights, security and governance.



See bp.com/id for the panel's reports and BP's responses.

Decommissioning

We consider environmental factors, such as the reuse of materials and appropriate disposal, when closing down a site. For example, we undertook the demolition of four tanks weighing 300 tonnes each at a site of a former refinery in the Isle of Grain in the UK. The site was close to a special protected area for bird habitat and we took measures so that the area was not impacted. In addition, nearly 99% of the steel was recovered for recycling.

We are also working with our partners to incorporate environmental factors into decommissioning projects in the North Sea. For example, removal of the Miller platform was completed in 2018, with around 40,000 tonnes of material, mainly steel, moved onshore – enough steel to build the Eiffel Tower four times over. Up to 97% of the materials will be reused or recycled.

Sensitive areas and biodiversity

We support the conservation of sensitive areas that house our planet's rich natural and cultural heritage.

In circumstances where our activities occur in places that have cultural significance, are home to threatened or protected species, or have outstanding biological, geographical or social value, we take action to avoid and mitigate the potential impacts of our work.

Every year we review the location of our operations in and close to the most sensitive areas. This can change from year to year as governments update protected area designations.

We evaluate new projects to determine whether planned activities could affect protected areas. If our screening process shows that a proposed project could enter or affect an international protected area, we conduct a detailed risk assessment to better understand any potential impacts. Executive approval is required before any physical activities can take place.

No new project sought permission to enter an international protected area in 2018.

Biodiversity

When planning new projects we identify and take action to reduce potential impacts on biodiversity. For example, with the expansion of our liquefied natural gas facility in Indonesia, we are aiming for no net loss in biodiversity and we worked with the local university to identify 22 priority tree species for conservation. To support the growth of these species, we are planting saplings and are working to restore degraded forest. We're also using remote sensing technology to detect changes in the habitat so we can monitor our progress.

In Senegal, as part of our commitment to environmental conservation in the region, we have helped train 50 members of the local community in biodiversity monitoring and management. We also provided equipment for wildlife parks in both Mauritania and Senegal.

We work with conservation organizations, such as Conservation International, Fauna & Flora International, the Nature Conservancy, universities and other partners to understand biodiversity trends, issues and threats.

Major operating sites in and around international protected areas



See bp.com/protectedareas for more information on our sites in and close to international protected areas.

Local impacts of unconventional gas

Almost half of our gas portfolio comes from unconventional resources, including shale gas. We acquired BHP's US unconventional assets in 2018 in a move that significantly upgrades our US onshore portfolio.

Water use

The volume of freshwater withdrawn by our unconventional gas operations was 3.7 million m³ in 2018, which represents 1.4% of the group total. We look at ways to reduce freshwater demand and support industry efforts to identify new water treatment technologies.

Water contamination

We design, operate and decommission our wells in a way that reduces the risk of water contamination. We install multiple layers of steel into each well and cement above and below any freshwater aquifers. We then test the integrity of each well before we begin the fracturing process and again at completion.

Earth tremors

Hydraulic fracturing creates very small earth tremors that are rarely felt at the surface. Before we start work, we assess the likelihood of our operations causing such activity. For example, we work to identify natural faults in the rock. This analysis informs our development plans for drilling and hydraulic fracturing and we seek to mitigate this risk through the design of our operations.

Chemicals

The water and sand that make up 99.5% of the injection material used in hydraulic fracturing are mixed with chemicals that help reduce friction and bacterial growth in the well. We list the chemicals that we use at each site and, to the extent allowed by our suppliers who own the chemical formulas, submit data on the chemicals used in our hydraulically fractured wells at fracfocus.org or other state-designated websites.

Sensitive habitats

We monitor the impact of new gas development and our operations on species. For example, in the San Juan Basin we monitor potential impacts on the population levels and movement patterns of species such as bald eagles and mule deer. This allows us to schedule our activities and to reduce any impacts.

Noise and community impacts

Drilling and truck traffic can raise concerns over noise and disturbance to the local community. We seek to design facilities and plan road, pipeline and well pad locations to limit disturbances and mitigate noise and other impacts from drilling and truck traffic.

To reduce the impacts from traffic, we aim to apply dust suppression techniques, install pipelines to transfer water where practical, and minimize the number of kilometres driven. We work with communities to manage traffic movements whenever possible.

 See page 16 for information on how we manage methane emissions in our US onshore gas business.

Water

Water is one of the planet's most precious resources, which is why we actively manage its use.

We have operations in many different countries and the availability of water in areas where we work can vary greatly. That's why it's important to look at local conditions, such as water stress and scarcity, in order to manage our impact.

How we evaluate water risk

Each year we review water risks in our portfolio, considering the local availability, quantity, quality and regulatory requirements.

We estimate that around half of our major operations withdraw fresh water in areas where its availability is considered stressed or scarce. These operations account for 23% of our total freshwater withdrawals.

In our gas operations at our Khazzan development in Oman – an area where the availability of fresh water is extremely scarce – we withdraw brackish water under permit from a local underground aquifer that is only used for industrial purposes. We desalinate the water and use it for drilling and hydraulic fracturing. We completed a modelling study in 2018 to assess the sustainability of this water supply. The results of the study have been incorporated into a long-term water management plan to reduce water demand.

We saw a small decrease in our freshwater withdrawal, consumption and wastewater volumes in 2018 primarily due to operational changes such as maintenance at selected refineries and petrochemicals plants. Overall there was a slight increase in consumption efficiency.

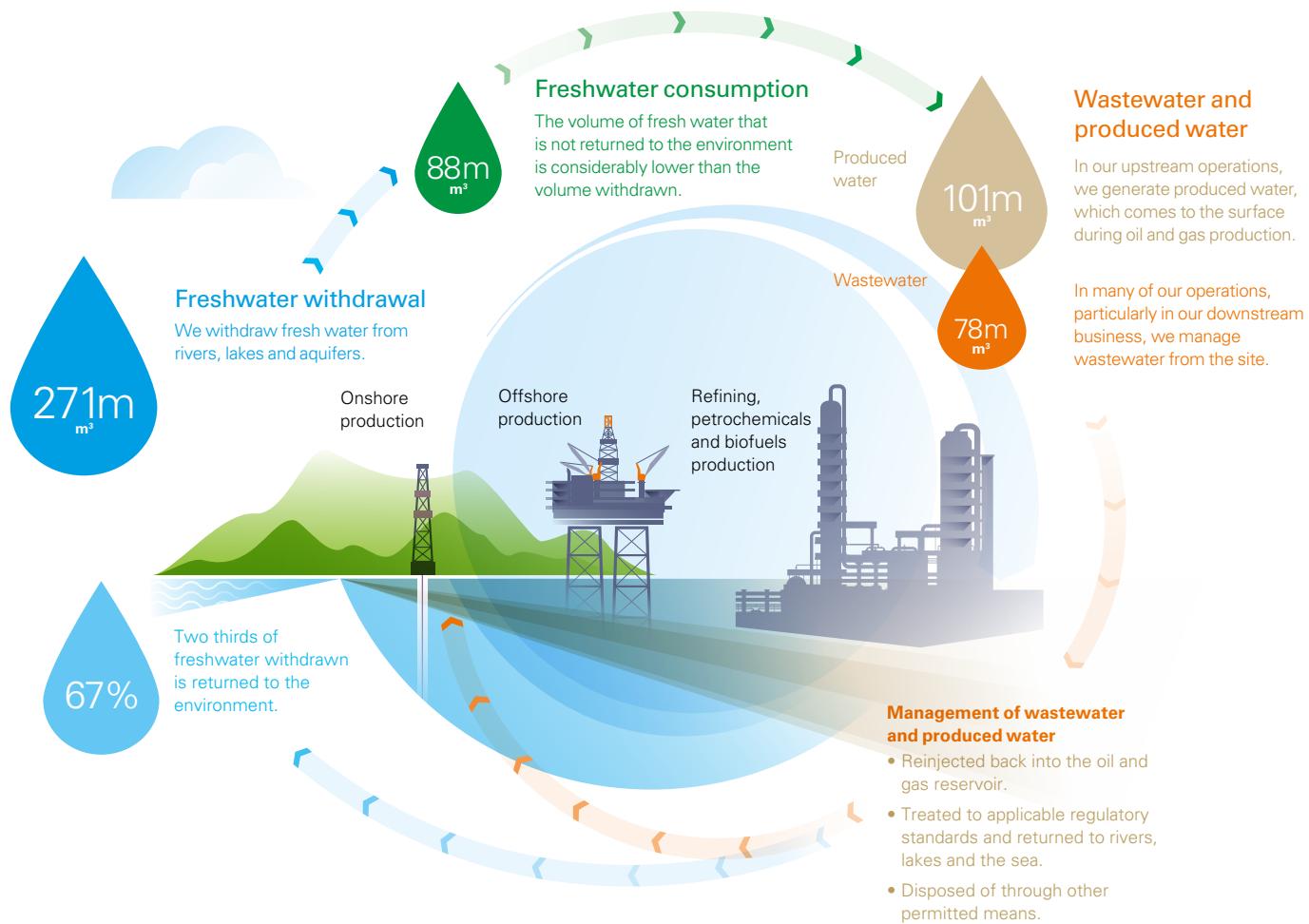
 See bp.com/hsechartingtool for water performance data.



Water use

Water is required for drilling, hydraulic fracturing and other upstream production processes and it is an essential component in refining, petrochemicals and biofuels production.

We use non-fresh water, such as seawater, in our oil and gas production and treated wastewater at some of our refineries.



Air emissions

Tackling local air quality is increasingly important to communities, governments and other stakeholders, driven mainly by public health concerns.

We monitor our air emissions and put measures in place to reduce the potential impact of our activities on the surrounding community.

In our unconventional gas operations in the US, we use lower sulphur fuels in our drilling rig engines and hydraulic stimulation equipment, which reduces sulphur dioxide emissions.

In shipping, we are introducing six liquefied natural gas (LNG) carriers with energy-efficiency enhancements. They are designed to use approximately 25% less fuel and emit less nitrogen oxides than our older LNG ships.

Our people and ethics

Our people are our biggest asset, so we are creating an environment where everyone feels valued and able to contribute their unique skills and perspectives.

Q

Why is creating an inclusive workplace important for BP?

A

Put simply, it generates value and is about respect. My family came from a small town in Mexico. When we moved to the US I could not speak the language, but my teachers saw something in me and helped steer me towards maths. My love of engineering came from people valuing what I could do and seeing my potential. Today I lead engineering for our upstream assets and I make it a priority to create a culture where everyone's contributions are heard and valued. People who feel included have a sense of belonging and contribute – this generates immense value for the team and the business.

Aleida Rios, head of engineering, Upstream, BP



Creating a diverse and inclusive workplace

We want to build teams that reflect the communities we serve.

Research shows that diverse, inclusive groups make better, faster decisions and that diversity of thought inspires greater innovation and productivity. Creating this environment starts with our recruitment process and is driven by our people.

Leaders are vital in instilling an inclusive culture and reinforcing our values of safety, respect, excellence, courage and one team. In 2018, our employment engagement survey showed that 79% of respondents felt that leaders in their part of the business were demonstrating our values.

Our employee-run business resource groups in areas such as ethnicity, gender, sexual orientation, parenting and disability are a way of bringing employees together. Each group is sponsored by a senior executive. These groups support our recruitment programmes and provide valuable input to our policies.

We made progress in a number of important areas in 2018:

- We launched our gender transition guidelines to support employees who are transitioning, or helping someone who is.
- We use a tool called Textio, which assesses the way in which job descriptions appeal to different audiences. It highlights words or phrases in advertisements and job descriptions that are perceived as gender biased and helps create more balanced role descriptions.

→ We worked with MyPlus, a disability consultancy, to increase our understanding of the needs of disabled candidates in our application and hiring processes.

→ We received recognition as a best place to work for lesbian, gay, bisexual, transgender and queer equality in the Human Rights Campaign's Corporate Equality Index in 2018.

Ethnicity

As a global business we are committed to increasing the national diversity of our workforce to reflect the countries in which we operate.

In the US we have set goals to improve minority representation. Our aim is to have ethnic minorities represent 20% of our group leaders and 30% of our employees by 2025, up from 17% and 26% in 2018. Our recruitment, development, advancement and inclusion programmes underpin these goals. For example, we sponsor the Executive Leadership Council's Institute for Leadership Development and Research, which supports mid-career high potential African American employees.

In the UK, we were named one of the Top 10 Outstanding Employers in the 2018 Investing in Ethnicity Awards and we were also included in Business in the Community's Best Employers for Race listing.

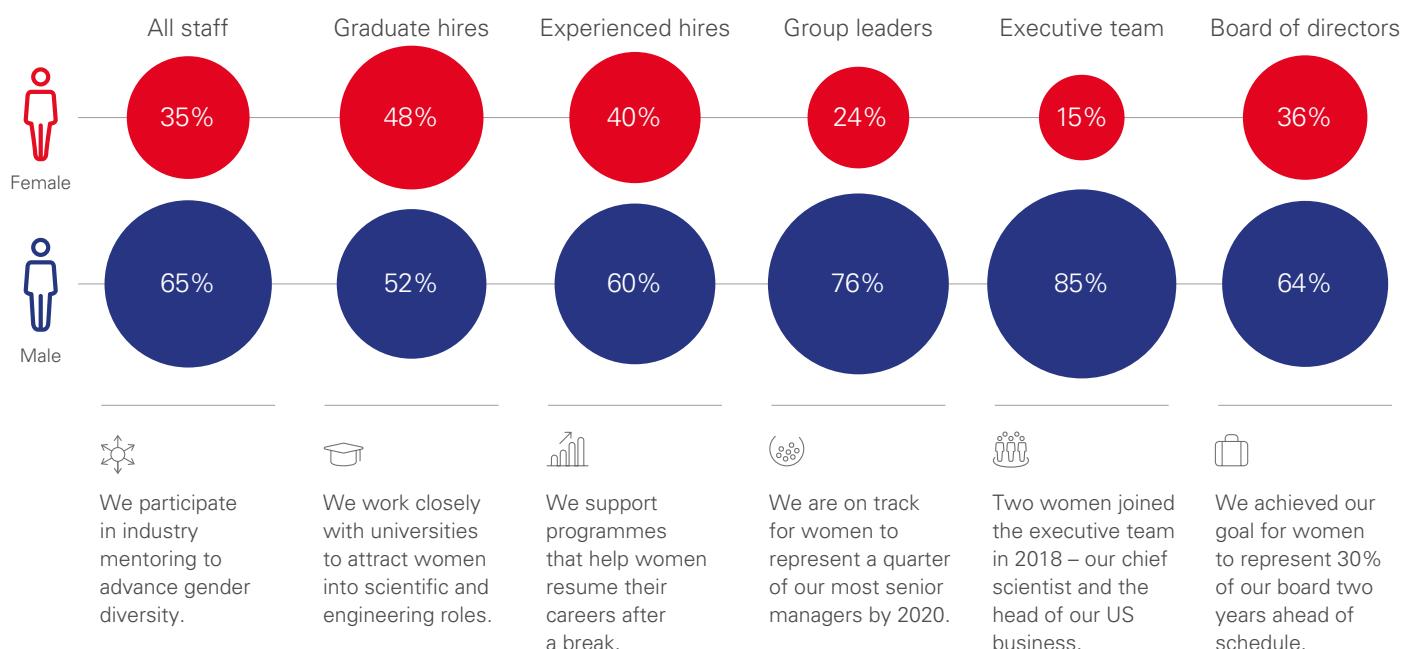
Gender balance

The proportion of women employed across BP is higher than ever before, with female representation at 35% in 2018. Women lead some of our core businesses such as petrochemicals, shipping and treasury, and countries such as Canada, China, Mexico and the US. However, while we are making progress, women make up half the world's population and we still have a lot more to do.

Shifting the gender imbalance will require a significant change in both our industry and society at large. One of the ways in which we can support this change is by having the right policies in place. For example, our diversity and inclusion policy promotes diversity in our job shortlists and interview panels.

We are also using mentoring, sponsorship and coaching to help more women progress through their careers and are working to improve and implement policies that support flexible career development for all. We refreshed our flexible working principles in 2018. These encourage flexibility beyond the formal areas of part time, job sharing or working from home.

BP employees by gender (%)



We are working with our peers to close the gender gap in our industry. For example, we partner with POWERful Women, an initiative to advance gender diversity and female leadership development in the energy sector.

UK gender pay gap reporting

We make sure employees in similar roles are paid equitably. However, our 2018 data shows we do have a gender pay gap that varies across our UK businesses. This is largely due to a higher proportion of men in senior roles and specific roles, such as offshore work, that attract higher pay, bonuses or allowances. We are working to address the differences, recognizing that this is a long-term challenge. We have seen a slight improvement in female representation in leadership roles and our 2018 gender pay gap data shows some improvements compared with 2017.

See bp.com/ukgenderpaygap.

Engaging our employees

BP is committed to creating a positive and empowering work environment in which all employees feel valued for the work they do and the impact they make.

To better understand how employees feel about BP, we conduct an annual survey. The overall employee engagement score in 2018 was 66%. Pride in working for BP was at the highest level in a decade at 76% in 2018.

The area where our employees scored us as needing attention was in the efficiency of our processes and ways of working. We know we still have work to do to streamline our processes and drive the benefits of digitization throughout BP.

We launched a new initiative called Energize! in 2018 to encourage employees to recognize their colleagues' work and how they demonstrate our values. The online platform and social newsfeed allows individuals to publicly thank and recognize a peer. So far the uptake has been positive with 77% of employees receiving recognition.

We invest in our employees' development – with an average spend of around \$3,200 per person. This includes online and classroom-based courses and resources, supported by a wide range of on-the-job learning and mentoring programmes.

We reward our employees based on what they deliver and the way in which they demonstrate behaviour that reflects our values. All employees must set priorities on their contribution to safety and creating value.

Our spotlight on respect and inclusion

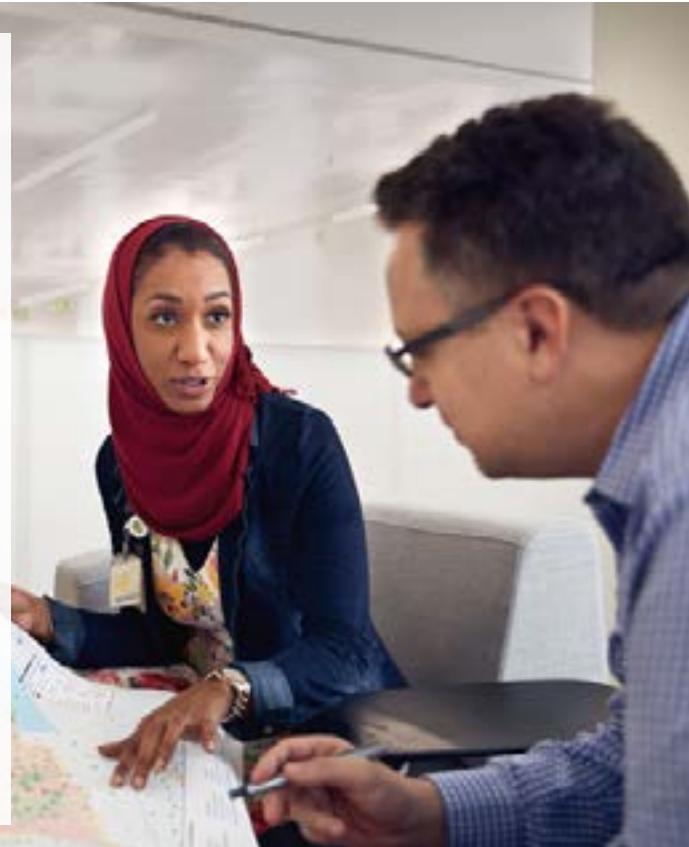
The actions we take as individuals often affect those around us. To help employees think about their own impact we ran a month-long respect and inclusion campaign in 2018. This included our *#itstartswithme* initiative to encourage employees to share a commitment to be more respectful and inclusive.



Respect and inclusion doesn't start or end with the campaign, it is something that we need to think about every day. Research shows that people perform better when working in a more respectful and inclusive environment, which is good for business.



Rahul Saxena, group ethics and compliance officer, BP



Addressing the skills gap

One of the challenges facing our industry is that fewer young people are choosing careers in science, technology, engineering and maths (STEM). We support initiatives around the world to encourage students to pursue these subjects.

UK

For the past decade, we have partnered with the National STEM Learning Centre to help science teachers continue their professional development. We also developed the five-year Enterprising Science programme with University College London, King's College London and the Science Museum to better understand factors that affect the way in which young people engage with STEM subjects. The programme came to an end in 2018 but continues to inform our ongoing work with schools and universities as well as our STEM-related teaching resources. It is also the basis for the Science Museum Group Academy, which launched in October 2018 with BP as the founding partner.

We supported the Royal Academy of Engineering's This Is Engineering initiative in 2018, aimed at encouraging more young people, from all backgrounds, to pursue engineering careers.

» Graduate recruitment

The number of graduates joining BP in 2018 was 296, a slight decrease from 314 graduates in 2017. We were pleased to be named the UK's highest-ranking recruiter in the oil and gas sector in *The Times* newspaper's Top 100 Graduate Employer rankings in 2018.

US

BP's STEM ambassador volunteer programme encourages employees to become mentors and promote STEM careers in local schools and communities. We also support Million Women Mentors, an initiative set up to encourage girls and young women to pursue STEM-based careers.

BP Global STEM Academies

We are partnering with non-governmental organization AFS Intercultural Programs on a new three-year international exchange programme that combines hands-on STEM learning with intercultural activities and problem-solving. In 2018, 100 students participated in the programme, which included the opportunity to study abroad for four weeks in Brazil, Egypt or the US. On completion, 92% of participants said they were interested in pursuing further STEM education and 93% said their interest in world affairs had increased.



»

Intercultural learning is key to creating a more just and fairer world. By combining this with STEM, we hope to equip our students with the skills that will be needed to address the sustainable development issues of our time.

»

Daniel Obst, chief executive officer, AFS Intercultural Programs

Conducting our business ethically

We are committed to conducting our business in an ethical, transparent way, using our values and code of conduct to guide us.

We expect our employees to treat others with respect, fairness and dignity. Our code of conduct sets clear expectations for how we work at BP. It applies to all employees and members of the board. We also expect our contractors and their employees to act in a way that is consistent with our code. If those expectations are not met, we take appropriate action.

We train our employees on how to apply the code in their daily work. In 2018 this training focused on raising awareness of workplace harassment, conflicts of interest and protecting confidential information.

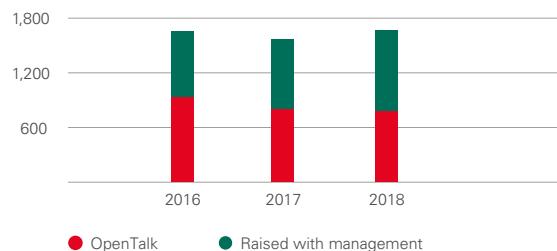
 See bp.com/codeofconduct.

Speaking up

We want our employees, contractors and other third parties to feel comfortable speaking up whenever they have a question or concern about our code or if they see something that they feel is unethical or unsafe.

That's why we encourage employees to discuss their questions or concerns with their managers, supporting teams, works councils or via OpenTalk, BP's confidential helpline. A total of 1,712 concerns or enquiries were recorded in 2018 through these channels. The most commonly raised concerns were about fair treatment of people, workplace harassment and protecting BP's assets.

Total number of concerns raised



Concerns recorded
(by code of conduct chapter)



BP has zero tolerance for retaliation against anyone who seeks advice, raises a concern, reports misconduct or participates in an investigation. The consequences for misconduct or retaliation range from coaching and performance management through to dismissal.

Our businesses dismissed 50 employees for non-conformance with our code of conduct or unethical behaviour in 2018. This excludes dismissals of staff employed at our retail service stations.

Engaging with suppliers

We hold sessions with suppliers to help them understand our code of conduct and how we do business. We held an event in Trinidad & Tobago in 2018 with around 50 suppliers to share BP's expectations of working. Topics discussed included anti-bribery and corruption, conflict of interest scenarios and grievance processes. We also issued our supplier expectations to our key suppliers in Indonesia.

Anti-bribery and corruption

BP operates in parts of the world where bribery and corruption present a high risk. Our code of conduct explicitly prohibits engaging in bribery or corruption in any form. Our group-wide anti-bribery and corruption policy and procedures include measures and guidance to assess risks, understand relevant laws and report concerns. We provide training to employees appropriate to the nature or location of their role. A total of 10,957 employees completed anti-bribery and corruption training in 2018.

We assess any exposure to bribery and corruption risk when working with suppliers and business partners. Where appropriate, we put in place a risk mitigation plan or we reject them if we conclude that risks are too high.

We also conduct anti-bribery compliance audits on selected suppliers when contracts are in place. For example, our upstream business conducts a number of supplier audits in higher-risk regions to assess their conformance with our anti-bribery and corruption contractual requirements. We issued a total of 27 audit reports in 2018. We take corrective action with suppliers and business partners who fail to meet our expectations, which may include terminating contracts.

Lobbying and political donations

We prohibit the use of BP funds or company resources to support any political candidate or party. We recognize the rights of our employees to participate in the political process and these rights are governed by the applicable laws in the countries where we operate. For example, in the US we provide administrative support for the BP employee political action committee (PAC), which is a non-partisan committee that encourages voluntary employee participation in the political process. All BP employee PAC contributions are reviewed for compliance with federal and state law and are publicly reported in accordance with US election laws.

We are members of multiple industry associations that offer opportunities to share good practices and collaborate on issues of importance to our sector. We aim for alignment between our policies and those of trade associations, but understand that associations' positions reflect a compromise of the assorted views of the membership.

Governance and risk management

Our governance structure includes the processes and policies which provide our framework for decision making.

Q What role does the board play in helping BP achieve its strategic priorities?

A The board sets the long-term strategy of the company. We challenge and monitor the performance of the group chief executive, Bob Dudley, and his team as they make the decisions that shape the future of the company. We make sure that we have the right leadership in place and that we continue to build a dynamic, inclusive and diverse culture. In my role as chairman, I meet with employees across our businesses in order to understand how we are rising to the dual challenge of providing more energy with fewer emissions – one of the defining issues of our times.

Helge Lund, chairman, BP



Board oversight

Our board is responsible for the overall conduct of the group's business.

BP's board of directors reviews and monitors performance against our long-term strategy and confirms that the processes for identifying and managing key risks – both financial and non-financial – are in place.

We identify risks for particular oversight by the board and its committees each year. In 2018 these were financial liquidity; geopolitical risk; cyber security; process safety, personal safety

and environmental risks; security; ethical misconduct; legal and regulatory non-compliance; and trading non-compliance.

The oversight and management of other risks, for example technological change, is undertaken in the normal course of business and in the executive team, the board and relevant committees.

The safety, ethics and environment assurance committee, one of our six board committees, looks at the processes that BP's executive team use to identify and mitigate operational and non-financial risk.

Climate governance

BP's governance framework applies equally to the management of the various aspects of climate change and the transition to a lower carbon economy. In addition to the oversight provided by the executive team, the board and relevant

committees, various groups and committees in BP bring together cross-segment and cross-functional expertise of relevance to this area, including those set out below.

BP governance framework

See bp.com/annualreport.



Renewal committee

Reviews strategic, commercial and investment decisions outside of core activity and related to new lines of business.
Chaired by our deputy chief executive.

New energy frontiers steering committee

Oversees strategy and development of growth opportunities in low carbon business models that can be scaled up to create new businesses for BP. Chaired by our deputy chief executive.

Carbon steering group

Focuses on strategy, policy, performance oversight and collaboration relating to carbon management activities across the group. Chaired by our vice president of carbon management.

Upstream carbon steering committee

Focuses on the delivery of lower carbon plans in the Upstream. Chaired by our chief operating officer of production, transformation and carbon, Upstream.

Downstream advancing the energy transition committee

Develops and drives the implementation of advancing the energy transition in the Downstream. Chaired by our head of technology, Downstream and BP chief scientist.

■ Executive-level committee

■ Cross-functional committee

■ Business and segment committee

(1)



Field visits

In 2018 members of the board visited our operations in Oman and the US to give them first-hand experience of our assets and the chance to observe and ask questions.

(1) Khazzan gas field, Oman

Members met with site leaders and discussed the safety, risk and operating culture. They also heard from a local tribal leader who spoke about community interest in the development. During the trip, Melody Meyer, one of BP's non-executive directors, visited our Muscat office and held a session with female employees to share her experience and insights on leadership attributes.

(2) Cooper River, the US

Cooper River is one of the world's largest producers of purified terephthalic acid, used to make items such as clothes and plastic food packaging. Board members met with site leaders and discussed business emergency planning, safety, risk and operating culture at the petrochemicals plant. They also heard about new sustainability-related technologies.

(3) Thunder Horse, the US

Board members saw how BP operates in the Gulf of Mexico when they visited our Thunder Horse platform. They met with employees and discussed operational risk management and safety culture. They also visited our Westlake campus in Houston and talked to employees about the response to Hurricane Harvey and saw the cyber security centre, trading floor and the wells monitoring centre.



(2)



(3)

Executive accountability

The executive team reviews BP's strategy with the board on a periodic basis.

The executive team worked with the board in 2018 to understand the implications of the transition to a low carbon economy. They reviewed the *BP Energy Outlook*, which looks at projected energy trends over the next two decades, and discussed the strategic direction of the group.

Supported by dedicated committees, our executive team oversees BP's performance in a wide range of areas:

- The operations risk committee reviews progress on issues such as carbon management, safety performance and potential modern slavery risks.
- The people committee looks at employee issues, including capability, reward and diversity.

- The ethics and compliance committee reviews breaches against our code of conduct.

Executive pay is linked to performance with safety, reliable operations and financial performance accounting for one third of executive bonuses. Tier 1 process safety events and recordable injury frequency are the two safety performance measures for executive reward.

Progress against our strategic priorities accounts for 20% of the longer-term share awards for our group chief executive and chief financial officer. Many performance measures, including those related to gas, renewables, venturing and renewables trading, contribute to this.

 See bp.com/annualreport for more information on remuneration.

Managing risks in our operations

Our operating businesses are responsible for identifying and managing risks and our operating management system helps them do this in a consistent and rigorous way.

Our operating management system (OMS) brings together BP requirements on health, safety, security, the environment, social responsibility and operational reliability – as well as related issues, such as maintenance, contractor relations and organizational learning – into a common management system.

Any variations in the application of our OMS, in order to meet local regulations or circumstances, are subject to a governance process.

Setting expectations of our partners

BP often partners with other companies in our business activities – sometimes we are the operator and sometimes our partner manages the operations.

We monitor performance and how risk is managed in our joint ventures, whether we are the operator or not. In joint ventures where we are the operator, our OMS, code of conduct and other policies apply. We aim to report on aspects of our business where we are the operator, as we directly manage the performance of these operations.

Where we are not the operator, our OMS is available as a reference point for BP businesses when engaging with operators and co-venturers. We have a group framework to assess and manage BP's exposure related to safety, operational, and bribery and corruption risk from our participation in non-operated joint ventures. Where appropriate, we may seek to influence how risk is managed in these types of ventures.

40%

of our upstream production in 2018 was from joint ventures where BP is not the operator (excluding our US onshore gas business).

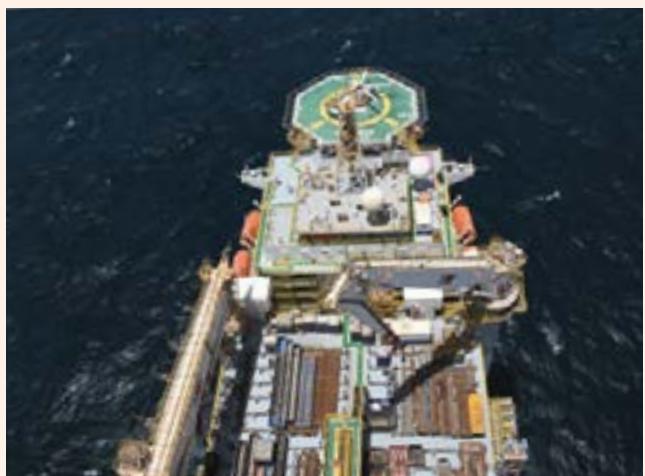
Assessing physical risks to our facilities

We seek to assess the potential impacts of severe weather events and a changing climate – such as heatwaves, extreme precipitation, drought, storms and rising sea levels – on our new projects from the design stage.

In Mauritania and Senegal, where we are developing an offshore liquefied natural gas facility, we are using climate models to assess potential vulnerability to possible increasing air temperature, seawater temperature and precipitation.

Our operations and projects can draw on guidance, including in-house expertise, to help them manage potential risks from a changing climate. We are working with industry and academia to build enhanced tools and methods to help assess potential changes.

We're also working with industry peers through the International Association of Oil & Gas Producers (IOGP). We hosted an IOGP climate resilience conference in 2018 which brought together oil and gas operators and academics to discuss physical risks for the industry.



Our reporting

Engaging with our stakeholders

Our stakeholders are the many individuals and organizations who are affected in some way by BP's activities – whether it is in our role as an energy provider, an employer or as a business that helps boost local economies through jobs and revenue.

We engage with our stakeholders and listen to their differing needs and priorities in our daily work. The input and feedback we receive helps inform the decisions we make.

Employees

We work to attract, develop and retain the best talent the world offers. We make time to listen to our people and create a variety of opportunities for open and honest conversations with them. These include regular one-to-one meetings with line managers, our annual employee engagement survey, our intranet and local employee forums and works councils. Senior leaders regularly engage with employees through briefings.

 See page 59 for information on our employee engagement survey.

73,000

employees across
the world

Investors

We rely on the support of our investors and aim to balance shareholder returns with investment in longer-term growth projects. We have ongoing conversations with shareholders and analysts through our programme of roadshows, one-to-one meetings, webcasts and our annual general meeting. We keep them informed of our strategy and plans from both financial and non-financial perspectives.

 See bp.com/annualreport.

Communities

Talking with local people helps us better understand the potential impacts of our activities and look for ways to work that align with their needs. The engagement process typically begins long before any physical work has started and continues throughout the lifespan of a project. We engage with local communities through public consultations, as well as regular and ad hoc meetings with community representatives.

 See page 48 for more information.

Non-governmental organizations

We often consult with local and international NGOs who bring valuable perspectives on the ways in which our activities could affect the local community or environment. NGOs are active members of several initiatives that we take part in, including the Voluntary Principles on Security and Human Rights, the Methane Guiding Principles and the UN Global Compact. We met with NGOs in 2018 to discuss a range of sustainability issues, including our low carbon ambitions, modern slavery risk, contract transparency and operating in sensitive areas.

Governments

We engage with governments on many fronts and aim to maintain dialogue at every stage of our presence in a country. In many countries where we operate, lobbying activity is strictly regulated. We engage in policy debates that are of concern to us and the communities in which we operate, such as financial transparency, security and human rights, and safety.

In some countries, we work in partnership with governments through production-sharing contracts.

 See page 49 for information on revenue transparency.

Contractors and suppliers

As more than half the hours worked for BP are carried out by contractors, their skills and performance are essential in helping us carry out our work safely and responsibly. Our standard model contracts include health, safety, human rights and security requirements.

We held sessions with our contractors on topics including safety, our code of conduct and modern slavery risk in 2018.

54,000

suppliers, plus thousands more supporting them

» Scope of this report

This *Sustainability Report* concentrates on performance and activities from 1 January to 31 December 2018. We aim to report on all aspects of our business, including joint ventures where we are the operator. Where appropriate, we seek to provide information on some of our joint venture activities where we are not the operator, but where we have significant influence on the operator.

» Reporting standards

We draw on sustainability reporting guidance from IPIECA, the industry association for environmental and social issues. We report in accordance with the core option of the Global Reporting Initiative standards. We also support the UN Global Compact's 10 principles on human rights, labour, environment and anti-corruption.

 See bp.com/reportingstandards for more information.

Taskforce on Climate-related Financial Disclosures

The TCFD was established by the Financial Stability Board with the aim of improving the reporting of climate-related risks and opportunities.

We support this aim. Our reporting provides information supporting the principles of the TCFD recommended disclosures.

TCFD recommended disclosures	Where to find more information
Governance Disclose the organization's governance around climate-related issues and opportunities.	
a) Describe the board's oversight of climate-related risks and opportunities.	Sustainability Report – page 64.
b) Describe the management's role in assessing and managing climate-related risks and opportunities.	Sustainability Report – page 64.
Strategy Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's business, strategy and financial planning where such information is material.	
a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	Sustainability Report – pages 1, 7, 18, 27 and 66. Annual Report – page 55-56.
b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy and financial planning.	Sustainability Report – page 7.
c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	Sustainability Report – page 7. Energy Outlook 2019 – pages 4-5. Annual Report – pages 10-12.
Risk management Disclose how the organization identifies, assesses and manages climate-related risks.	
a) Describe the organization's processes for identifying and assessing climate-related risks.	Annual Report – page 45.
b) Describe the organization's processes for managing climate-related risks.	Annual Report – page 45.
c) Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organization's overall risk management.	Annual Report – pages 45, 53-54.
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 organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	Sustainability Report – pages 10-11. Annual Report – pages 17, 48.
b) Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 GHG emissions, and the related risks.	Sustainability Report – pages 14, 72. Annual Report – pages 17, 48.
c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	Sustainability Report – pages 10-11.

UN Sustainable Development Goals

The UN Sustainable Development Goals (SDGs) aim to overcome global challenges such as poverty, hunger, inequality and climate change.

Our core business of delivering energy to the world contributes directly to goals 7, 8 and 13. The way we operate supports the implementation of goals 3, 6, 9, 12, 14, 15 and 17 in the countries where we are present. Some examples of how we are contributing to the goals are outlined below.



► Lead2030 partner

We are proud to be part of the first coalition of global businesses working together to support youth-led innovation for the SDGs. As the challenge partner for SDG 7, we will fund

and mentor an initiative with a tangible impact on improving access to sufficient and reliable energy that is affordable and clean. See *lead2030.com* for more information.



The Project Selection Forum strongly supports BP Target Neutral's efforts to integrate the UN SDGs into the project selection process. It acknowledges the broader role of carbon reduction projects in creating opportunities to not only reduce carbon emissions, but also deliver improved socio-economic outcomes for communities around the world.



Damian Ryan, acting chief executive officer, The Climate Group

Using the SDGs to select carbon offsetting projects

We are helping our customers offset their emissions through BP Target Neutral, which has offset more than 4 million tonnes of CO₂ equivalent (CO₂e) on behalf of customers since 2006.

An independent panel made up of representatives from three international NGOs – Fauna & Flora International, The Climate Group and Forum for the Future – selects the projects that carry out the activities generating the offsets. BP Target Neutral has applied the UN SDGs as part of the project selection process, so that projects are not only chosen based on emissions reductions potential, but also on their broader impact to society and the environment.

Projects must disclose their impact on a range of SDGs, such as good health and wellbeing, affordable and clean energy, decent work and economic growth. BP Target Neutral uses this information to rank the projects based on their contribution to the SDGs relative to the CO₂e reduced. This provides the detail required for a shortlist, which the panel can then approve for site visits and final selection.

800,000+ tonnes

of CO₂e offset by Target Neutral across all projects

Performance data

Safety^a

	2014	2015	2016	2017	2018
Fatalities – employees ^b	0	0	0	1	0
Fatalities – contractors ^b	3	1	3	0	1
Day away from work cases – workforce	145	108	94	97	79
Day away from work case frequency ^c (DAFWCF) – workforce	0.081	0.061	0.051	0.055	0.048
Recordable injuries – workforce	547	428	385	384	328
Recordable injury frequency ^c (RIF) – workforce	0.31	0.24	0.21	0.22	0.20
Tier 1 process safety events ^d (number)	28	20	16	18	16
Tier 2 process safety events ^d (number)	95	83	84	61	56
Loss of primary containment ^e (number)	214	202	200	205	186
Oil spills ^f – number (> one barrel)	156	146	149	139	124
Oil spills contained	93	91	91	81	63
Oil spills reaching land and water	63	55	58	58	57
Oil spills – volume (million litres)	0.4	0.4	0.7	0.9	0.5
Oil unrecovered (million litres)	0.2	0.1	0.3	0.3	0.1
Severe vehicle accident rate (per million kilometres driven)	0.13	0.11	0.05	0.03	0.04
Total vehicle accident rate (per million kilometres driven)	1.18	1.08	1.04	1.08	0.87

Greenhouse gas emissions

	2014	2015	2016	2017	2018
Operational control^g					
Direct greenhouse gas (GHG) (Mte CO ₂ equivalent (CO ₂ e))	54.1	51.2	51.4	50.5	48.8
Direct carbon dioxide (CO ₂) (million tonnes (Mte))	51.6	48.5	48.4	47.8	46.4
Direct methane (Mte)	0.12	0.11	0.12	0.11	0.09
Methane intensity ^h (%)	–	–	0.2	0.2	0.2
Sustainable GHG emissions reductions ⁱ (Mte CO ₂ e)	0.1	0.2	0.7	0.5	1.3
Indirect emissions ^j (MteCO ₂ e)	7.5	7.0	6.2	6.1	5.4
Flaring ^k (upstream) (thousand tonnes of hydrocarbons)	2,188	1,863	1,896	1,987	1,634
Equity^l					
Direct greenhouse gas (GHG) (Mte CO ₂ equivalent (CO ₂ e))	48.7	49.0	50.1	49.4	46.5
Direct carbon dioxide (CO ₂) (million tonnes (Mte))	45.5	45.1	46.1	45.8	43.3
Direct methane (Mte)	0.15	0.16	0.16	0.15	0.13
Sustainable GHG emissions reductions ⁱ (Mte CO ₂ e)	0.1	0.1	0.3	0.4	0.6
Greenhouse gas intensity (TeCO ₂ equivalent/unit)					
Upstream (per thousand barrels of oil equivalent)	32.0	32.7	34.7	30.4	27.8
Refining (per utilized equivalent distillation capacity)	978	944	951	923	915
Petrochemicals (per thousand tonnes)	291	290	287	304	325
Indirect emissions ^j (MteCO ₂ e)	6.8	6.9	6.2	6.8	5.7
Customer emissions ^m (MteCO ₂)	406	402	395	412	437
Carbon dioxide avoided through our renewables business ⁿ (MteCO ₂ e)	3.2	3.3	2.8	2.7	2.8

Society

	2014	2015	2016	2017	2018
Benefits to employees – including wages, salaries, share-based payments, benefits and pensions (\$ million)	13,936	12,928	11,233	10,204	10,490
Taxes to governments – comprising income taxes and production taxes paid (\$ million)	7,980	3,516	2,174	5,797	7,527
Total dividends distributed to BP shareholders ^o (\$ million)	7,168	7,301	7,469	7,867	8,080
Contribution to communities ^p (\$ million)	85.0	67.2	61.1	89.5	114.2

Environment

	2014	2015	2016	2017	2018
Freshwater withdrawal (million m ³)					
Group	280	285	257	276	271
Upstream	7.6	6.8	5.7	6.4	5.7
Downstream	263	264	239	259	254
Other businesses and corporate	9.9	13.5	12.2	10	11
Freshwater consumption (million m ³)	93	92	87	91	88
Percentage of withdrawal	33	32	34	33	33
Water consumption – group intensity (tonnes water/tonnes production)	0.37	0.38	0.36	0.38	0.36
Discharges to water – Upstream					
Mass of produced water managed per unit mass of production	0.7	0.6	0.7	0.7	0.7
Discharges to water – Refining and chemicals					
Wastewater treatment measured as chemical oxygen demand (mg/l)	52	40	49	41	44
Air emissions – nitrogen oxides (thousand tonnes)	129	123	125	122	115
Air emissions – sulphur oxides (thousand tonnes)	39	36	36	35	32
Air emissions – non-methane hydrocarbons (thousand tonnes)	99	94	91	87	64
Environmental expenditure (\$ million)	4,024	8,017	536	971	1,223
Environmental and safety fines (\$ million)	1.0	0.6	15.0	3.6	1.9

^a This represents reported incidents occurring within BP's operational HSSE reporting boundary. That boundary includes BP's own operated facilities and certain other locations or situations.

^b A fatality is any death of an employee or contractor as a result of a work-related incident.

^c DAFWCF and RIF are the annual frequency per 200,000 hours worked.

^d We report tier 1 process safety events, which are losses of primary containment of greatest consequence – causing harm to a member of the workforce, costly damage to equipment or exceeding defined quantities. Tier 2 events are those of lesser consequence.

^e Loss of primary containment is an unplanned or uncontrolled release of oil, gas or other hazardous materials from a tank, vessel, pipe, truck, rail car or other equipment used for storage, separation, processing or transfer.

^f Oil spills are defined as any liquid hydrocarbon release of more than, or equal to, one barrel (159 litres, equivalent to 42 US gallons).

^g Comprises 100% of emissions from activities that are operated by BP.

^h This includes the methane emissions from BP's upstream oil and gas operations as a percentage of the gas that goes to market from those operations. Data was not reported prior to 2016. In 2018 we aligned the way we calculate methane intensity with that of the Oil and Gas Climate Initiative. On a like-for-like basis this shows a reduction from 0.3% in both 2016 and 2017 to 0.2% in 2018.

ⁱ This measure reflects actions taken by our businesses that reduce their GHG emissions. See page 12.

^j Indirect emissions include those resulting from the electricity and steam we import in our operations.

^k We report the total hydrocarbons flared from our upstream operations.

^l BP's equity share data comprises 100% of emissions from subsidiaries and the percentage of emissions equivalent to our share of joint arrangements and associates, other than BP's share of Rosneft.

^m Based on BP's total reported production of natural gas, natural gas liquids and refinery throughputs.

ⁿ Based on BP's total ethanol production and wind generating capacity. The 2016 and 2017 figures are restated in line with the grid emissions factor which was published by the US EPA in 2018 but is applicable from 2016 onwards.

^o This includes dividends paid in cash and scrip dividends.

^p The increase from 2017 to 2018 is mainly driven by the \$20m spend in São Tomé and Príncipe and higher spend in Egypt due to new legislation.

Our people and ethics

	2014	2015	2016	2017	2018
Number of employees – group	84,500	79,800	74,500	74,000	73,000
Number of employees – group leadership	501	431	394	394	376
Women in group leadership (%) ^a	18	19	22	21	24
Women at management level ^a (%)	27	28	29	30	31
People from racial minorities in UK and US group leadership (%)	9	10	11	11	11
People from beyond the UK and US in group leadership (%)	21	21	23	24	24
Employee engagement ^c (%)	73	71	73	66	66
Employee turnover ^d (%)	12	16	16	12	12
Concerns raised (OpenTalk cases and concerns raised to management) ^e	1,114	1,158	1,701	1,612	1,712
Dismissals for non-compliance and unethical behaviour ^u	157	132	109	70	50

^a Includes employees who are group leaders, senior level leaders or in other management positions.

^c We conduct an annual employee survey to understand and monitor levels of employee engagement and identify areas for improvement. We changed our survey questions in 2017 to reflect the new priorities set out in our refreshed strategy. The scores prior to 2017 are based on questions on priorities set out in 2012, so the numbers are not directly comparable.

^b These figures relate to non-retail employees only. In 2018 voluntary turnover (resignations and retirements) was 4%.

^d The figures from 2016 are restated to include concerns raised to line management, as well as OpenTalk cases. Any employee, contractor or other third party can contact our confidential helpline, OpenTalk.

^e Excludes dismissals of staff employed at our retail sites.

Data tool



See bp.com/hsechartingtool to filter and analyse our health, safety and environmental data.

Advancing Low Carbon accredited activities in 2019

A total of 52 activities met the criteria needed for our Advancing Low Carbon accreditation programme in 2019.

Each activity supports one of our low carbon ambitions – by reducing emissions in our operations, improving our products or creating low carbon businesses.



See page 28 and bp.com/advancinglowcarbon for more information on each of the activities.

The activities must deliver a better carbon outcome by doing one of the following:

- Reducing greenhouse gas (GHG) emissions.
- Producing less carbon than competitor or industry benchmarks.
- Providing renewable energy.
- Offsetting carbon produced.
- Furthering research and technology to advance low carbon.
- Enabling BP or others to meet their low carbon objectives.

advancing low carbon

Reduce

LNG carriers

We introduced liquefied natural gas (LNG) carriers that are the most fuel-efficient and technologically advanced vessels ever built by BP.

Oil tankers

BP operates 26 oil tankers that go beyond the International Maritime Organization's energy efficiency regulation requirements.

OzHarvest partnership

We've partnered with OzHarvest, an Australian perishable food-rescue organization, to reduce food waste and help deliver more meals to people in need across Australia. This results in a reduction of food to landfill and associated potential methane emissions.

Sustainable GHG emissions reductions

BP is taking steps to tackle emissions across its operations through delivering sustainable emissions reductions.

BP's participation in:

Climate and Clean Air Coalition's Oil and Gas Methane Partnership

BP is a member of this initiative, which aims to deepen industry's understanding of the core sources of methane emissions in upstream operations so that it can take action to address them.

CO₂ Capture Project

BP is a founding member of this project, formed with other energy companies in 2000. Participants have carried out more than 150 projects to improve understanding of carbon capture, use and storage.

Methane Guiding Principles

BP is a signatory to the Methane Guiding Principles which were drawn up by a coalition of industry peers, international institutions, non-governmental organizations and academics to develop best practices on methane emissions reductions.

World Bank flaring reduction initiatives

BP participates in the Global Gas Flaring Reduction Partnership and World Bank Zero Routine Flaring by 2030 initiative, which aim to eliminate routine flaring and to remove technical and regulatory barriers to progress.

BP's academic support for:

Harvard Kennedy School

BP sponsors the Harvard Kennedy School's Energy and Climate Policy Programme, which is looking at policy options under the Paris Agreement for climate change mitigation, adaptation, finance and energy technology.

Princeton's Carbon Mitigation Initiative

Princeton's Carbon Mitigation Initiative brings together scientists, engineers and policy experts to design carbon mitigation strategies that are safe, effective and affordable.

Tufts University's Climate Policy Lab

The Climate Policy Lab explores which climate policies work and why – providing independent advice to governments as they implement policies in response to the Paris Agreement.

University of Texas Gulf Coast Carbon Center

BP supports this institute, which works to further understanding of the practical and cost-effective ways to plan, operate, monitor and close carbon capture, use and storage projects.

Improve

Acetic anhydride

BP has developed a unique method of making the chemical acetic anhydride that requires less energy than traditional methods.

Air BP into-plane fuelling services

BP's programme to maintain carbon neutrality for the operation of our global into-plane fuelling service across Air BP operated locations.

Air BP's low carbon offer to private customers

An initiative between Air BP and BP Target Neutral to help aircraft operators offset the carbon dioxide emissions from the fuel they buy from BP.

BP and Aral fuel cards (fleet)

BP and Aral offer business customers the opportunity to offset the carbon emissions from the fuel they buy from us, as well as access training and data to improve their own fuel efficiency. The initiative is available in Germany, the Netherlands, Austria and the UK.

BP Biojet

BP's sustainable aviation fuel made with recycled cooking oil.

BP fuels with ACTIVE technology

BP is developing and deploying advanced fuels that contain its ACTIVE technology formula designed to improve engine efficiency. This helps reduce fuel consumption, which, in turn helps to lower CO₂ emissions.

BP Target Neutral

BP's carbon offsetting programme that develops carbon neutral products and services.

Butamax advanced biofuels

Working in partnership with DuPont, BP has developed Butamax technology, which converts sugars from corn into an energy-rich bio-product known as bio-isobutanol.

Castrol carbon neutral car dealership offer

BP's carbon offsetting programme gives car dealerships the opportunity to offset their own emissions and offer customers the same service – for a set mileage – within the sale or service of their vehicle.

Castrol EDGE and MAGNATEC BIO-SYNTETIC

Two Castrol lubricants made with 25% sugar cane-derived oil compounds. Both have been certified carbon neutral to the BSI PAS 2060 standard.

Castrol GTx ECO

Castrol engine oil range that uses a base oil blend of at least 50% re-refined base oil to reduce carbon dioxide emissions by a minimum of 10% during its production.

Castrol low viscosity lubricants

Castrol has developed a number of engine lubricants for passenger cars with low viscosities that help reduce friction. This improves fuel economy, leading to lower carbon dioxide emissions.

Castrol Optigear Synthetic

Castrol is the world's first supplier to offer the wind-industry certified carbon-neutral lubricants in accordance with the BSI PAS 2060 standard.

Castrol passenger car oil carbon neutral initiative

The passenger car oils that Castrol sells in Japan have been certified carbon neutral in accordance with the BSI PAS 2060 standard.

Castrol Professional

Castrol's high-performance engine oil is the world's first certified carbon neutral oil in accordance with the BSI PAS 2060 standard.

Castrol Transmax

In Japan, two Castrol transmission fluids used to lubricate automatic gearboxes in passenger vehicles have been certified as carbon neutral in accordance with the BSI PAS 2060 standard.

Castrol VECTON

Castrol VECTON was the world's first certified carbon neutral commercial vehicle engine oil in accordance with the BSI PAS 2060 standard and is specifically formulated to meet the needs of the commercial vehicle industry.

Cherry Point renewable diesel

BP's Cherry Point refinery now manufactures diesel made from biomass-based feedstocks, alongside traditional fossil fuel feedstocks. This fuel has a lower carbon footprint compared with the petroleum-based alternative.

NEXCEL

NEXCEL reduces tailpipe CO₂ emissions through a combination of thermal management – faster engine warm-up – and new bespoke oil formulations.

PTAir

PTAir offers customers in the polyester value chain the opportunity to buy lower carbon feedstock.

PTAir Neutral

The world's first certified carbon neutral PTA, giving BP customers the opportunity to purchase a carbon neutral product with net zero carbon emissions.

Create

Biofuels ☀

BP's biofuels business in Brazil converts sugar cane into ethanol for use as a fuel for transport. Ethanol reduces GHG emissions by up to 70%, compared with conventional transport fuels.

Biopower ☀

BP creates biopower by burning bagasse, the fibre that remains after crushing sugar cane stalks to make biofuels. Some of the power runs our three biofuels mills in Brazil, with the rest exported to the local electricity grid.

BP Chargemaster ⚡

BP now has more than 6,500 chargepoints for electric vehicles across the UK, following its acquisition of Chargemaster in 2018.

BP's participation in OGCI ☀

BP was one of the founding members of the voluntary, CEO-led Oil and Gas Climate Initiative, which aims to increase the ambition, speed and scale of the initiatives undertaken by its individual companies to help reduce manmade GHG emissions.

Carbonfree Chemicals ⚡

BP has invested in this company, which has developed new technology to convert GHG emissions from waste gases into chemicals that can be used to make products such as baking soda.

Encourage Capital EKO Green Carbon Fund ☀

BP has invested in this fund which, in turn, invests in the development of carbon offsetting opportunities.

FreeWire ☀

BP has invested in FreeWire, which makes ultra-fast electric vehicle charging technology.

Fulcrum BioEnergy ☀

BP has invested in Fulcrum BioEnergy, which has developed a process to turn certain types of household waste into fuel for transport.

Global Environmental Products ☺

BP's Global Environmental Products business supports carbon pricing by helping to enable projects that reduce GHG emissions and generate environmental credits for use in carbon emissions trading markets.

Lightning Systems ☀

BP has invested in this US-based company, which makes electric powertrains for trucks, vans and buses.

Lightsource BP ☀

Lightsource BP is focusing on funding, developing and managing major solar projects and smart energy solutions around the world.

ONYX InSight ☀

This joint venture between *Castrol* and Romax Technology provides engineering and software services to wind farm operators so that they can monitor the condition of their turbines and avoid breakdowns.

Peloton ☀

BP has invested in this automated vehicle technology company, which has developed a wireless system that allows freight trucks to travel closely together to reduce aerodynamic drag and fuel consumption.

Solidia Technologies ☀

BP has invested in this US-based company, which has developed technologies that have the potential to reduce the carbon footprint of concrete, as well as reduce water consumption from the manufacturing process.

StoreDot ☀

BP has invested in this ultra-fast-charging battery start-up company, which is developing technology that could reduce recharging times for electric vehicles to five minutes.

Titan 1 Battery Storage Project ☀

Working with Tesla, BP is piloting high-storage battery technology at its Titan 1 wind farm in the US. The technology stores excess energy that can then be used across the site when the wind isn't blowing.

Tricoya Technologies ☀

BP has invested in this wood modification technology company, which uses proprietary acetylation technology and the chemical acetic anhydride to alter wood's chemistry to improve its durability.

Voltaware ☀

BP has invested in this electricity data intelligence company, which has developed an internet-enabled energy monitoring device that allows business and residential users to track energy demand.

Wind ☀

BP has significant interests in onshore wind energy in the US, operating 10 sites in seven states and holding an interest in another facility in Hawaii.

Independent assurance statement

Scope of work

We have provided independent limited assurance, in accordance with the International Standard for Assurance Engagements ("ISAE") 3000 (Revised),¹ on selected sustainability information ("subject matter"), for the financial year ended 31 December 2018. The subject matter is reported in the 2018 Sustainability Report ("SR") of BP p.l.c. ("BP").

Select subject matter for assurance

- Safety indicators:² recordable injury frequency, day away from work case frequency, number of fatalities, number of oil spills, process safety events (Tier 1 and Tier 2),³ and
- Environmental indicators: operational control-based Scope 1 greenhouse gas (GHG) emissions, equity-based Scope 1 GHG emissions,⁴ total sustainable GHG emissions reductions towards 3.5m tCO₂e target,⁵ and methane emissions intensity.

The above subject matter has been assessed against BP's Reporting Requirements and Definitions.⁶

Key assurance procedures

To form our conclusions, we undertook the following procedures over the subject matter:

- Reviewed the documents relating to BP's sustainability performance, including safety and operational risk documentation, internal audit outputs, and board committee minutes, to understand the level of management awareness and oversight of sustainability performance;
- Interviewed staff responsible for managing data processes and data management systems at group level;
- Reviewed a sample of control documentation for non-financial management information;
- Reviewed disaggregated data reported by a sample of businesses to assess whether the data has been collected, consolidated and reported accurately; and
- Tested the completeness of the data and whether it has been collected, consolidated and reported accurately at group level.

We believe that the evidence obtained is sufficient and appropriate to provide a basis for our limited assurance conclusion.

Our conclusion

Based on our procedures described in this report, nothing has come to our attention that causes us to believe that the selected subject matter stated above, for the financial year ended 31 December 2018, as presented in BP's 2018 SR, has not been prepared, in all material respects, in accordance with BP's Reporting Requirements and Definitions.

The basis of our work and level of assurance

We used the ISAE 3000 to carry out a limited assurance engagement. To achieve this, the ISAE 3000 requires that we review the processes, systems and competencies used to compile the areas on which we provide assurance. This is designed to give a similar level of assurance to that obtained in the review of interim financial information. It does not include detailed testing of source data or the operating effectiveness of processes and internal controls.

Inherent limitations

Inherent limitations exist in all assurance engagements due to the selective enquiry of the information being examined. Therefore fraud, error or non-compliance may occur and not be detected. Additionally, non-financial information, such as that included in BP's 2018 SR is subject to more inherent limitations than financial information, given the nature and methods used for determining, calculating, and sampling or estimating such information.

Our work has been undertaken so that we might state to BP those matters we are required to in this report and for no other purpose. Our work did not include physical inspections of any of BP's operating assets.

While we acknowledge that this report will be published on the BP website, the maintenance and integrity of that website is the responsibility of BP. The work that we carried out does not involve consideration of the maintenance and integrity of that website and, accordingly, we accept no responsibility for any changes that may have occurred to this report and BP's 2018 SR since they were initially presented on the website.

Our independence and competence

We complied with Deloitte's independence policies, which address and, in certain cases, exceed the requirements of the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants in their role as independent auditors, and in particular preclude us from taking financial, commercial, governance and ownership positions which might affect, or be perceived to affect, our independence and impartiality, and from any involvement in the preparation of the report.

We have confirmed to BP that we have maintained our independence and objectivity throughout the year and that there were no events or prohibited services provided which could impair our independence and objectivity.

We have applied the International Standard on Quality Control 1 and accordingly maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Roles and responsibilities

BP is responsible for the preparation of the sustainability information and statements contained within the 2018 SR. It is responsible for selecting appropriate KPIs with which to describe the entity's performance, and establishing and maintaining appropriate performance management and internal control systems from which the reported information is derived.

Our responsibility is to independently express conclusions on the selected sustainability information subject matter as defined within the scope of work above to BP in accordance with our letter of engagement. Our work has been undertaken so that we may notify BP of those matters we are required to inform them of in this statement and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than BP for our work, for this report, or for the conclusions we have formed.

Deloitte LLP, London

10 April 2019

¹ ISAE 3000 (Revised) standard for Assurance Engagements other than Audits or Reviews of Historical Financial Information issued by the International Auditing and Assurance Standards Board.

² For personnel safety metrics, the metric assured is for the entire workforce (employees plus contractors).

³ For process safety events reporting, BP's methodology follows the American Petroleum Institute guide RP-754 Process Safety Performance Indicators for the Refining and Petrochemical Industries, Second Edition, 2016.

⁴ As disclosed by BP in the GHG emissions performance reporting in the 2018 SR, the percentage of greenhouse gas emissions equivalent to BP's share of Rosneft is not included.

⁵ The total sustainable GHG emissions reductions are the sum of sustainable GHG emissions reductions from the years 2016, 2017, and 2018, on an operational control basis.

⁶ BP's Environmental Performance Group Reporting Requirements and Health, Safety and Environmental Reporting Definitions.

Cautionary statement

BP Sustainability Report 2018 and bp.com/sustainability contain certain forecasts, projections and forward looking statements – that is, statements related to future, not past events and circumstances – which may relate to the ambitions, aims, targets, plans and objectives of BP – as well as statements that include but are not limited to statements about how we run our business; expectations regarding world energy demand including the growth in relative demand for renewables; plans, expectations and targets in relation to BP's approach to lower carbon and reducing emissions; plans and expectations in relation to future mobility and electric vehicles; advancing the circular economy and in particular the chemicals and plastics sector; investments in new technologies and low carbon businesses such as solar energy and biofuels and including advanced mobility, bio and low carbon products, carbon management, digital transformation and power and storage; carbon capture, use and storage and the Clean Gas Project; safe and reliable operations; creating a diverse and inclusive workplace; and actions of contractors and partners or our work with them.

Forward looking statements involve risk and uncertainty because they relate to events and depend on circumstances that will or may occur in the future and are outside the control of BP. Actual results or outcomes may differ from those expressed in such statements, depending on a variety of factors including those set out in the 'Risk factors' in our *Annual Report and Form 20-F 2018* and any other matters referred to at bp.com/energytransition.

Material is used within this document to describe issues for voluntary sustainability reporting that we consider to be of high or medium importance in terms of stakeholder interest and potential business impact. Material for the purposes of this document should not, therefore, be read as equating to any use of the word in other BP p.l.c. reporting or filings. *Annual Report and Form 20-F 2018* may be downloaded from bp.com/annualreport. No material in the *Sustainability Report* forms any part of that document. No part of this *Sustainability Report* or bp.com/sustainability constitutes, or shall be taken to constitute, an invitation or inducement to invest in BP p.l.c. or any other entity and must not be relied upon in any way in connection with any investment decisions. BP p.l.c. is the parent company of the BP group of companies. Unless otherwise stated, the text does not distinguish between the activities and operations of the parent company and those of its subsidiaries.

Our reporting suite



Sustainability Report 2018

Covers our sustainability performance with additional information online.

bp.com/sustainability



Annual Report 2018

Details of our financial and operating performance in print and online.

bp.com/annualreport



BP Energy Outlook

Provides our projections of future energy trends and factors that could affect them out to 2040.

bp.com/energyoutlook



BP Technology Outlook

How technology could influence the way we meet the energy challenge into the future.

bp.com/technologyoutlook

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