Energy with purpose

BP Sustainability Report 2019
Our purpose is reimagining energy for people and our planet.

We want to help the world reach net zero and improve people’s lives.

We will aim to dramatically reduce carbon in our operations and production and grow new low carbon businesses, products and services.

We will advocate for fundamental and rapid progress towards Paris and strive to be a leader in transparency.

We know we don’t have all the answers and will listen to and work with others.

We want to be an energy company with purpose; one that is trusted by society, valued by shareholders and motivating for everyone who works at BP.

We believe we have the experience and expertise, the relationships and the reach, the skill and the will, to do this.
Navigating our reports

Our quick read
provides a summary of the Sustainability Report, including key highlights and performance in 2019.

bp.com/quickread

Our reporting centre
brings together all of our key reports, policies and performance data, including our ESG datasheet.

bp.com/reportingcentre

Introduction

Message from Bernard Looney 2
Our ambition 4
2019 at a glance 6
Energy in context 8

Sustainability at BP

UN Sustainable Development Goals 11
Stakeholder engagement in 2019 12
Key sustainability issues 14

Our focus areas

Climate change and the energy transition 16
Our role in the energy transition 18
Our ‘reduce, improve, create’ framework 20
Accrediting our lower carbon activities 22
Reducing emissions in our operations 23
Improving our products 26
Creating low carbon businesses 30
Safety 36
Process safety 38
Personal safety 39
Safety performance 41
Our value to society 42
Creating social value 44
Social investment 45
Local workers and suppliers 46
Human rights 47
Community engagement 48
Our impact on communities 49
Labour rights 50

Doing business responsibly

Environment 54
People 60
Business ethics 68

Governance

Human rights governance 74
Executive oversight of sustainability 74
Managing risks 75

Our reporting

Independent assurance statement 77
Cautionary statement 78
Our purpose is reimagining energy for people and our planet. This will frame our thinking, our activities and our interactions.

Introducing a new structure, new leadership team and new ways of working.

Our commitment to safe and reliable operations remains unchanged.

And our investor proposition remains unchanged.
This is the first time I have written the foreword to BP’s annual sustainability report, and I do so during an unprecedented global health crisis. The coronavirus (COVID-19) pandemic is having a huge impact on people’s lives, and in many places it is having tragic consequences too.

Where we can, BP has been making its own contribution to efforts to deal with the virus and our teams throughout the world have been playing their part where possible. This includes providing free fuel in the UK for emergency services and donating $2 million to the World Health Organization’s COVID-19 Solidarity Response Fund. For BP, the challenge is also compounded by oil prices lower than they have been for many years.

The year 2019 already seems like a long time ago. But the changes which were in planning then, and which we announced on 12 February this year, seem even more important today. BP now has a new ambition to get to net zero by 2050 or sooner, and to help the world get to net zero. And I have immense confidence in our business – both to get through the current global crisis, and to meet our longer-term ambition.

One reason for that confidence is the foundation laid by my predecessor, Bob Dudley. In the past decade he has built the strong foundations that are essential if BP is to play its full part in supporting a sustainable future for our world.

Reimagining energy, reinventing BP
Our company is now entering a new phase, yet it is a phase for which planning has long been underway. For several months last year I went on the road with a small team. We met investors, partners, policymakers, climate scientists, development experts from non-governmental organizations, academics – and many colleagues at BP.

From these conversations, all around the world, we came away with one inescapable conclusion. BP has to change, and faster than ever, because the world is changing fast, and so are society’s expectations of us.

At the same time, I think it is important to say that BP wants to change. Not only is it the right thing to do, it is a tremendous business opportunity for us.

And that is because people everywhere want the same thing: energy that is not just reliable and affordable, but clean. The world’s carbon budget is finite, and it is running out fast, driven by the needs and aspirations of society. But we have the skill and the will to help the world meet this growing desire for cleaner energy.

That is what led us to adopt a new purpose for BP, to reimagine energy for people and our planet. As our purpose and ambition have changed, BP itself must evolve. So to enable us to deliver our net zero ambition we are embarking on a wide-ranging reorganization. We are reinventing BP to become more focused, more integrated, and better equipped to meet the world’s fast-changing energy demands.

Rebuilding trust
This is going to be a multi-year journey and we know we cannot make it alone. We will need the support of many partners and open, constructive dialogue with those willing to engage, challenge and advise us.

I know many will doubt our intentions and commitment. So we aim to show firmly and clearly the alignment between what we say and what we do. For example, we will stop corporate reputation advertising campaigns and redirect resources to promote well-designed climate policies and set new expectations for our relationships with trade associations. And we aim to be more transparent in our reporting, including implementing the recommendations of the Task Force on Climate-related Financial Disclosures.

Building on strong foundations
If you are familiar with this report, you will know BP is not starting from scratch with our low carbon ambition. For instance, we have major interests in solar development, electric vehicle charging and sustainable biofuels. We have expertise in low carbon developed over decades, and this year we met our target for sustainable emissions reductions six years ahead of schedule.

We know we have much more to do. We want to help countries, cities and corporations around the world decarbonize. We want to support governments and industry sectors around the world as COP26 and the UN Biodiversity Conference approach. And we will also be looking at how we can support the ‘decade of delivery’ for the UN’s Sustainable Development Goals. To do so, we need to ensure that as BP changes we continue to perform as we transform. We are committed to safe and reliable operations, respecting our people and the communities in which we work, and delivering value to those who trust us with their investment.

Helping the world get to net zero and improving lives
Our destination is now set and there is no turning back. We are aiming to be trusted by society, valued by our shareholders, and a motivating and inspiring place to work for our employees. We will need your support and challenge to get there. We may not get everything right along the way and we will need to listen and learn from others.

We are heading to a net zero future as a thriving, sustainable energy business that is a force for good in a low carbon world.

Bernard Looney
Chief executive officer
27 March 2020
Our ambition is to become a net zero company by 2050 or sooner, and help the world get to net zero.

Our ambition is supported by 10 aims:

Five aims to get BP to net zero

**Aim 1** is to be net zero across our entire operations on an absolute basis by 2050 or sooner. This aim relates to Scope 1 and 2 GHG emissions. Read more about our operational emissions on page 23.

**Aim 2** is to be net zero on an absolute basis across the carbon in our upstream oil and gas production by 2050 or sooner. This aim relates to Scope 3 emissions, and is on a BP equity share basis excluding Rosneft. Read more about net zero on page 24.

**Aim 3** is to cut the carbon intensity of the products we sell by 50% by 2050 or sooner. This is a lifecycle carbon intensity approach, per unit of energy. It covers marketing sales of energy products and potentially, in future, certain other products, such as those associated with land carbon projects. Read more about net zero on page 24.

**Aim 4** is to install methane measurement at all our existing major oil and gas processing sites by 2023, publish the data, and then drive a 50% reduction in methane intensity of our operations. And we will work to influence our joint ventures to set their own methane intensity targets of 0.2%. Read more about methane on page 25.

**Aim 5** is to increase the proportion of investment we make into our non-oil and gas businesses. Over time, as investment goes up in low and no carbon, we see it going down in oil and gas.
Five aims to help the world get to net zero

**Aim 6** is to more actively advocate for policies that support net zero, including carbon pricing. We will stop corporate reputation advertising campaigns and re-direct resources to promote well-designed climate policies. In future, any corporate advertising will be to push for progressive climate policy; communicate our net zero ambition; invite ideas; or build collaboration. We will continue to run recruitment campaigns and advertise our products, services and partnerships – although we aim for these to increasingly be low carbon.

Read more about advocacy and lobbying on page 71.

**Aim 7** is to incentivize our global workforce to deliver on our aims and mobilize them to become advocates for net zero. This will include increasing the percentage of remuneration linked to emissions reductions for leadership and around 37,000 employees.

Read more about remuneration on page 100 in the BP Annual Report 2019.

**Aim 8** is to set new expectations for our relationships with trade associations around the globe. We will make the case for our views on climate change within the associations we belong to and we will be transparent where we differ. And where we can’t reach alignment, we will be prepared to leave.

Read more about trade associations on page 71 and online bp.com/tradeassociations.

**Aim 9** is to be recognized as an industry leader for the transparency of our reporting. On 12 February 2020, we declared our support for the recommendations of the Task Force on Climate-related Financial Disclosures. We intend to work constructively with the TCFD and others – such as the Sustainability Accounting Standards Board (SASB) – to develop good practices and standards for transparency.

Read more about TCFD online bp.com/TCFD.

**Aim 10** is to launch a new team to create integrated clean energy and mobility solutions. The team will help countries, cities and corporations around the world decarbonize.
2019 at a glance

Our scale, our reach and range of activities, from exploration to venturing and investing in biofuels and solar, make us a truly global energy provider. Thanks to our people and relationships we are well placed to contribute in the transition to a lower carbon economy.

Upstream

Responsible for oil and natural gas exploration, field development and production, gas and power marketing and trading activities.

Replacement cost (RC) profit before interest and tax

$4.9bn
(2018 $14.3bn)

Downstream

Comprises the manufacturing and marketing of fuels, lubricants and petrochemicals, as well as our oil integrated supply and trading function.

RC profit before interest and tax

$6.5bn
(2018 $6.9bn)

Rosneft

We have a 19.75% shareholding in Rosneft, one of Russia’s largest oil and gas companies, which has both upstream and downstream operations.

RC profit before interest and tax

$2.3bn
(2018 $2.2bn)

Other businesses and corporate

Comprises our Alternative Energy business as well as a number of corporate activities.

RC loss before interest and tax

$(2.8)bn
(2018 $(3.5)bn)

For terms with refer to glossary in the BP Annual Report 2019.
Scale
We are an integrated energy business. We have operations in Europe, North and South America, Australasia, Asia and Africa.

Performance
Our performance has helped us deliver for our shareholders and other stakeholders, including energy consumers worldwide.

Advancing low carbon
We are committed to advancing a lower carbon future. We will aim to dramatically reduce carbon in our operations and in our production, and grow new lower carbon businesses, products and services.

70,100 employees
(2018 73,000)

98 tier 1 and 2 process safety events
(2018 72)

$4.0bn profit attributable to shareholders
(2018 $9.4bn)

>20 years in renewable businesses

>500m invested in low carbon activities in 2019

>7,500 BP Chargemaster charging points in the UK

13 countries where Lightsource BP is active

Our strategy
Our strategy, which we set out in 2017, allows us to be competitive, flexible and resilient while also responding to a rapidly changing energy landscape, with growing expectations for us to adapt to changing demands from stakeholders.

We remain committed to managing our portfolio for value, and investing with discipline in flexible and resilient options, which together support our pursuit of a strategy which we believe is consistent with the goals of the Paris Agreement.

We plan to provide more information on our future strategy and near-term plans at our capital markets day in September 2020.

Growing advantaged oil and gas in the upstream
Invest in oil and gas, producing both with increasing efficiency (lower cost, higher margin and close to markets), with a focus on carbon.

Market-led growth in the downstream
Innovate with advanced products and strategic partnerships, building competitively advantaged businesses that deliver profitable marketing growth.

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.

a On a combined basis of subsidiaries and equity-accounted entities.
Energy in context

Many forces and trends are fundamentally changing the business environment, creating uncertainties and influencing the way we operate.

Megatrends

The key trends affecting our businesses include: growing global concern over climate change, the impact of rapidly advancing digital technology, increasing prosperity in the emerging world, driving economic growth, changing societal expectations of corporations, and the shifting geopolitical structure.

One of the key drivers of these trends is climate change and the widening concern about the energy transition. The global energy system needs to deliver more energy with less carbon. Demand for energy is set to grow significantly, driven by increases in prosperity in the developing world. Most of the growth in demand comes from developing economies, to support their industry and infrastructure and sustain improvements in living standards.

Carbon emissions need to fall sharply as the world seeks to move to a lower carbon energy system consistent with meeting the climate goals outlined in the Paris Agreement.

BP Energy Outlook 2019

Our Outlook explores the forces shaping the global energy transition out to 2040 and the key uncertainties surrounding it. The 2019 Outlook considers a range of scenarios. They have some common features, such as ongoing economic growth and a shift towards a lower carbon fuel mix, but differ in terms of policy, technology and behavioural assumptions.

Scenarios

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

Rapid transition: envisages a more rapid transition to a lower carbon energy system, through a reduction in emissions stemming from greater energy efficiency, fuel switching and use of carbon capture, use and storage (CCUS).

For more information see bp.com/energyoutlook. The BP Energy Outlook 2020 will be published later in the year.

The changing energy mix

Increased demand for energy will be met over the coming decades through a diverse range of supplies, including oil, gas, coal and renewables.

The energy mix is shifting as the transition to a lower carbon energy system continues, with renewable energy and natural gas gaining in importance relative to oil and coal.

Scenarios

Evolving transition: renewables and natural gas account for almost 85% of the growth in primary energy by 2040, with their importance increasing relative to all other sources of energy.

Rapid transition: renewable energy grows rapidly, accounting for more than the entire increase in primary energy by 2040 – and a sharp contraction in the use of coal. The level of oil consumption falls, but gas continues to grow aided by increasing use of CCUS.

Primary energy consumption by fuel

Exajoules (EJ)

For more information see bp.com/energyoutlook. The BP Energy Outlook 2020 will be published later in the year.

* Renewables includes wind, solar, geothermal, biomass and biofuels

Source: BP Energy Outlook 2019

* Paris Agreement

(1) Article 2.1(a) of the Paris Agreement states the goal of “Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change.”

(2) Article 4.1 of the Paris Agreement: In order to achieve the long-term temperature goal set out in Article 2, parties aim to reach global peaking of greenhouse gas emissions as soon as possible, recognizing that peaking will take longer for developing country parties, and to undertake rapid reductions thereafter in accordance with best available science, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century, on the basis of equity, and in the context of sustainable development and efforts to eradicate poverty.
The transition envisaged in the 2019 Outlook

The world economy continues to grow, driven by increasing prosperity
- The global population grows by 1.7 billion, reaching close to 9.2 billion people in 2040.
- The global economy more than doubles over the next 25 years, with twice as much economic activity in 2040 than we see today.
- The emergence of a large and growing middle class, particularly in emerging Asia, is an increasingly important force shaping growth and energy trends.

Demand for energy is set to grow significantly
- Global energy demand increases by about 20-35% by 2040 in the different scenarios.
- The vast majority of demand growth comes from developing economies to support their industry and infrastructure and allow living standards to keep improving.

But carbon emissions need to fall sharply
- There is a growing commitment to move to a pathway consistent with meeting the climate goals of the Paris Agreement.
- To help achieve this, the world needs to transition to a lower carbon energy system.

The key dimensions of the energy transition

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

- Improving energy efficiency, to decouple energy demand growth from growing prosperity.
- Rapid growth in renewable energy and other low or zero carbon energy sources.
- Increasing the share of electricity in final energy use and decarbonizing power generation.
- Switching to low or zero carbon liquid and gaseous fuels, particularly in areas such as heavy transport.
- Deploying carbon-removal technologies, such as CCUS, at scale.
- Promoting natural climate solutions, including the management and restoration of habitats, and the role of offsets.

The pace at which the transition can be achieved and the precise mix of elements is uncertain. There are many possible pathways to meeting the Paris goals and we use the different scenarios to explore this uncertainty.

For more information see Evaluating new material capex investments with the Paris goals, on page 22 of the BP Annual Report 2019.

Achieving the Paris goals – a multitude of pathways

There are many different pathways to achieve the Paris goals’ with substantial variation in the implied energy mix.

The Intergovernmental Panel on Climate Change (IPCC) is the United Nations’ body for assessing the science related to climate change. It is the leading source of data that summarises the potential pathways to achieve the Paris goals. The IPCC compiles a database of the published results on mitigation pathways from modelling teams around the world.

The chart shows the range of modelled pathways for carbon emissions from energy and industrial use, collected by the IPCC, that meet the long-term temperature goals in the Paris Agreement, together with the paths associated with two of BP’s own scenarios. The ‘rapid transition’ scenario clearly sits well within the range. Also highlighted is the ‘Sustainable Development Scenario’ from the International Energy Agency (IEA SDS), which is often cited as a reference case for a scenario that is consistent with meeting the Paris goals.

Source: Integrated Assessment Modeling Consortium (IAMC) 1.5°C Scenario Explorer and Data hosted by International Institute for Applied Systems Analysis (IIASA), release 2.0. Scenario data has been rebased to common starting point that matches the BP Energy Outlook history for 2015.
Sustainability at BP

By providing the energy to heat and light homes and for transport and industry, BP supports economic growth and the improvements in quality of life this brings.

We aim to do this in ways that support sustainable development and the energy transition. We want people to benefit from our products, our services, and our presence in their communities. We know we can’t do this by ourselves and we don’t have all the answers, so we are listening, learning from experience and working with others to help make a positive difference.

A sustainable approach to responsible business is inherent in our purpose – reimagining energy for people and our planet. We want to help the world reach net zero and improve people’s lives and can only do this by being a safe, focused, responsible, well-governed and transparent organization.
UN Sustainable Development Goals

Stakeholders are increasingly looking to businesses to help address global development challenges. The UN Sustainable Development Goals (SDGs) provide a global framework to help countries, businesses and other stakeholders understand and address society’s most important challenges.

We want to contribute to sustainable development and are working to do more to support the delivery of the SDGs. Our business activity touches directly or indirectly on many of the goals, but we’ve focused our effort on specific goals that most closely align with our current business strategy and purpose. These include affordable and clean energy, decent work and economic growth, and climate action.

We continue to look for opportunities to do more to support the SDGs. In 2020 we plan to evaluate them alongside our new strategic priorities, which we will provide information about later in the year.

Working with others

Through our membership of IPIECA, BP is working with the World Business Council for Sustainable Development on the development of an SDG Sector Roadmap, due for publication in 2020. The Roadmap aims to accelerate and optimize the sector’s contribution to the delivery of the SDGs.

How we contribute to goals 7, 8 and 13

Through our business activities – delivering energy products and services to the world – we contribute directly to goals 7, 8 and 13.

| 7 | Affordable and clean energy: we’re currently investing at least $500 million a year to support low carbon activities, including our renewables businesses and acquisitions. | Page 30. |
| 8 | Decent work and economic growth: to promote an inclusive culture we support employee-run business resource groups, including those for ethnicity, gender, sexual orientation, parenting and disability. | Page 65. |
| 13 | Climate action: we’ve set a new ambition to become a net zero company by 2050 or sooner, and to help the world get to net zero. | Page 4. |

How we support the goals

The SDGs also include areas where we can have a positive impact or where we need to mitigate and manage any potential negative impacts. The way we work supports the implementation of the goals in countries where we have a presence. This includes goals 3, 6, 9, 12, 14, 15 and 17.

We contribute to these through our safety, environment, human rights, community, diversity and inclusion and wider business activity including tax and anti-bribery and corruption.

| 3 | Good health and wellbeing: we support a range of public health programmes including efforts to combat malaria and improve safety for women giving birth. | Page 48. |
| 6 | Clean water and sanitation: we invest in sustainable development projects that align with local needs, including water supply infrastructure in Mauritania. | Page 45. |
| 9 | Industry, innovation and infrastructure: BP Ventures is focused on exploring new opportunities with the potential to help us deliver the energy transition. | Page 34. |
| 12 | Responsible production and consumption: to identify potential impacts we carry out detailed environmental and social assessments before starting major projects. | Page 55. |
| 14 | Life below water: our marine mammal and sea turtle programmes improve our knowledge and inform our planned activities, to avoid the most sensitive areas. | Page 56. |
| 15 | Life on land: we’re working with IPIECA on developing industry good-practice guidance on the new post-2020 global biodiversity framework for our sector. | Page 56. |
| 17 | Partnerships for the goals: we are working with our peers to create an oil and gas industry platform for supplier human rights assessments, with a particular focus on labour rights. | Page 70. |
Stakeholder engagement in 2019

As a large global business, we want to create value for individuals, communities and organizations affected by or involved in our activities. To do this, we engage with stakeholders to listen to, understand and respond to their needs.

This stakeholder engagement activity happens in many different ways and at different levels across BP, from the board through to local community liaison officers. These are just some of the ways we’ve engaged in 2019.

---

**Employees**

We work to attract, develop and retain exceptional talent, equipped with the right skills for the future. Our people have a crucial role in delivering our purpose to reimagine energy for people and our planet.

70,100

BP employees

---

**Customers**

Our broad customer base spans industries, businesses and end consumers of our products and services. We work closely with our customers to understand their evolving needs so we can improve and adapt to meet them.

>10m

retail customers served every day

---

**Investors/shareholders**

Our investor proposition is to grow sustainable free cash flow and distributions to shareholders over the long term.

$8.3bn

total dividends distributed to BP shareholders in 2019

How we engage

- **Town halls, webcasts and employee network events**: regular opportunities to engage with leaders and subject experts on key topics and events.
- **Pulse survey**: employee feedback gathered through our annual survey. The survey had the highest completion rate in its 13-year history, at 72% in 2019. We use the survey’s employee engagement score as a key performance indicator for the group.
- **Employee awards**: we recognize employees’ contribution to the BP values through our Helios awards programme. In 2019 more than 800 entries were submitted. In 2019, we introduced a new ‘advancing low carbon’ category to recognize outstanding contributions to the energy transition. 124 entries were submitted in this category.
- **BP Yammer**: employees at all levels and locations share ideas, opinions and support using our internal social media channel. Posts by our chief executive officer, Bernard Looney, generate around 10,000 staff engagements each month.
- **Original equipment manufacturer collaborations**: we work closely with car manufacturers to co-engineer advanced lubricants and fuels of the future, while improving the performance and efficiency of cars, trucks and transmissions already in the market.
- **Customer events**: we hold regular face-to-face events with business-to-business customers. In Perth, Australia, our customer breakfast event brought government, civil, transport and fleet sector customers together to share insights and discuss the energy transition and BP’s role in it.
- **Annual engagement plan**: we facilitate meetings between the board, senior management, investor relations and institutional shareholders and the broader investment community. Our engagement includes company presentations and field trips, senior executive investor roadshows and meetings, and banking and industry conferences.
- **Annual general meeting**: shareholders are invited to meet the BP board at our AGM. The 2019 AGM in Aberdeen was Helge Lund’s first as chairman of the board.
- **Environmental, social and governance (ESG) engagement**: we engage frequently with our investors on ESG issues. This includes one-to-one conversations, participation at external events and group meetings, including with Climate Action 100+ representatives, who requisitioned a special resolution on climate change disclosures at the 2019 BP AGM.
We are committed to driving a responsible and inclusive energy transition.

**Society (including communities and NGOs)**
We consult with stakeholders and NGOs to gain valuable perspectives on the ways in which our activities could impact the local community or environment.

- **Energy awareness workshops:** We launched a series of workshops in Senegal with the National Institute for Oil and Gas, as part of our work to build local capacity. The programme aims to train more than 2,000 participants in Dakar and 1,000 in St. Louis over a one-year period.
- **Social investment:** In Oman we’ve invested $13.3 million across 70 initiatives to support the socio-economic development of young people and entrepreneurs in the local communities where we operate. This included working with NGOs and other businesses to deliver workshops with students and teachers on a variety of digital technologies, such as 3D printing.
- **Biodiversity:** We engaged NGOs and other businesses on the role of the private sector in the development of the UN Post-2020 Global Biodiversity Framework.

**Government and regulators**
We aim to help countries around the world grow their domestic energy supplies and boost energy security. This in turn creates jobs and generates revenues for governments. We aim to maintain dialogue with governments at every stage of our presence in a country and engage in policy debates that are of concern to us and the locations in which we operate.

- **Economic impact reports:** We aim to quantify the impact of our business activity to the UK and US economies through the publication of our economic impact reports.
- **Government events:** We hosted a group of UK members of parliament at our Pangbourne technology centre to showcase innovations in clean transport fuels and lubricants.
- **Lobbying government:** We have lobbied in Washington DC concerning the rollback of methane regulations.
- **Extractive Industries Transparency Initiative:** We participate at the initiative’s international board level in order to support good governance in the extractive industries and, through multi-stakeholder groups in a number of countries, effectively help to manage EITI at national level.

**Partners**
We depend on the capability and performance of our suppliers, contractors and other partners, such as small businesses, industry peers and academia, to help deliver the products and services we need for our operations and our customers.

- **Industry events:** We shared research and knowledge from an independent report on the future of transport, commissioned by BP, called ‘On the Move’. We held a launch event for the report in London with industry stakeholders.
- **Industry memberships:** We joined the Hydrogen Council, a global initiative of leading energy, transport and industry companies with the long-term ambition for hydrogen to support the energy transition.
- **Industry groups:** We joined the Collaboratory to Advance Methane Science, an industry-led group helping the oil and gas sector find the most effective strategies for cutting methane emissions.
- **Supplier workshops:** We held an executive-level workshop for employees from BP and a new major maintenance services contractor at our Kwinana refinery. Focused on safety, reliability and efficiency, the event set the ground rules and ongoing objectives for the partnership.
- **University collaborations:** We participated in a multi-disciplinary, multi-national workshop with academics and energy experts, to explore opportunities for accelerating low carbon energy pathways at the Clean Energy Research and Education Center at Tsinghua University in China.
- **Oil and Gas Climate Initiative (OGCI):** We participate in this CEO-led initiative, which aims to drive the industry response to climate change. In 2019 OGCI launched KickStarter to help unlock large-scale investment in carbon capture, use and storage, a crucial tool to achieve net zero emissions. It also announced a number of low carbon investments in start-up companies.

**Governance**

**We rely on the support of our investors, analysts and banking and industry conferences.**

- **Annual engagement plan:** We engage frequently with our BP shareholders in 2019 total dividends distributed to $8.3bn.
- **Environmental, social and governance (ESG) **
  - **Environmental relations and institutional shareholders and the broader investment community.**
  - **Engagement relations:** We hosted a group of UK Oil and Gas Climate Initiative (OGCI):
  - **Economic impact reports:** We aim to quantify the impact of our business activity to the UK and US economies through the publication of our economic impact reports.
  - **Government events:** We hosted a group of UK members of parliament at our Pangbourne technology centre to showcase innovations in clean transport fuels and lubricants.
  - **Lobbying government:** We have lobbied in Washington DC concerning the rollback of methane regulations.
  - **Extractive Industries Transparency Initiative:** We participate at the initiative’s international board level in order to support good governance in the extractive industries and, through multi-stakeholder groups in a number of countries, effectively help to manage EITI at national level.

**BP Sustainability Report 2019**

---

**Sustainability at BP**

**Our focus areas**

**Doing business responsibly**

**Governance**

**Our reporting**
Key sustainability issues

To make sure we report about the sustainability issues that matter most to our stakeholders, we carry out an annual materiality assessment. We use what we learn to focus our sustainability reporting on these key issues.

Our materiality methodology

In 2019 we worked with an external agency to refresh and expand our materiality assessment. We engaged with internal and external stakeholders, asking them to list and prioritize their most significant sustainability or ESG issues. We also asked them to assess the relative impact of these issues on our business and to tell us how influential they think BP can be in creating positive change.

As a result, we identified 33 key topics and issues that are important to our business and stakeholders, and their significance relative to each other. We used the results to prioritize our sustainability reporting for 2019 and we plan to build on this in 2020.

Our materiality assessment process

Step 1
Setting the parameters
We determined the materiality of BP’s key issues using three parameters: importance, impact and influence. Each parameter included clearly defined criteria to enhance the rigour and robustness of the process and to eliminate subjectivity as much as possible.

- **Importance**: the importance of each issue to key internal and external stakeholders.
- **Impact**: the impact of each issue on BP’s future business.
- **Influence**: BP’s ability to influence and drive change regarding each issue.

We collaborated closely with our risk team at this stage of the assessment to define the impact criteria and thresholds, as well as throughout the entire process, to ensure alignment.

Step 2
Identifying issues
We carried out a horizon-scanning exercise to identify a list of issues for stakeholders to consider and rank. We reviewed and considered:

- relevant ESG frameworks and standards (including Global Reporting Initiative (GRI), SASB and TCFD);
- current relevant legislation; global, market and industry-specific trends;
- existing BP processes, policies and documentation, including BP’s risk processes; topics discussed in the media and across our industry.

Step 3
Determining the importance of key issues
Using our prioritization criteria, we conducted interviews and facilitated an online survey with key external stakeholders and BP employees to gather their perspectives on the importance of BP’s key issues. Participants came from: investor companies, academia, NGOs, industry associations, government, BP partners and service providers. In addition, we used several internal consumer research documents to gauge the sustainability priorities of our customers and consumers.

Step 4
Determining the impact and influence of key issues
We ran a survey to gather feedback from senior employees across BP on the impact and influence of each issue, using our prioritization criteria. To ensure a balanced and representative viewpoint, we engaged with individuals working across many different geographies and in various functions. Again, our risk team was closely involved.

Step 5
Analyzing and validating
We used qualitative analysis to extract the key themes before consolidating them to create a list of our top ten material issues. We tested and validated the final results with a working group from across BP, including experts in human rights, social performance and environment, risk and measurement.

Step 6
Ongoing engagement
The process of engaging doesn’t stop with our materiality research. We continue to gather feedback from our stakeholders and will use this to inform our next materiality assessment.
Key material issues in 2019

Climate change and the energy transition
Focusing attention across BP to tackle greenhouse gas (GHG) emissions and advance the energy transition.

GHG emissions from the use of our products
Helping customers and consumers to reduce their GHG emissions from the use of BP’s products.

GHG emissions from our operations
Reducing GHG emissions from BP’s own operations.

Health and safety
Protecting the health and safety of BP’s employees and contractors and preventing incidents through carefully planning operations, identifying potential hazards and managing risks.

Renewable energy
Promoting renewable and alternative energy including solar, wind, biofuel, biopower and hydrogen in order to increase the share of renewables in the energy mix.

Spill prevention
Seeking to avoid the negative environmental impacts of spills by minimizing the risk of spills, maintaining asset integrity, and maintaining effective spill prevention plans.

Business ethics and accountability
Conducting business in an ethical, transparent way, and respecting human rights in accordance with BP’s values and code of conduct. Being accountable to stakeholders for BP’s performance in managing these issues.

Cyber security
Protecting against cyber-related incidents such as threats to the security of digital infrastructure or disruption of our systems.

Diversity and inclusion
Building a diverse and inclusive workplace that values differences, provides equal opportunities and treats all employees fairly.

Livelihoods and community engagement
Preventing, reducing and managing negative impacts on the livelihoods, land, environment, cultural heritage, health and wellbeing of people, including indigenous peoples, in communities near BP’s activities.

Our 2019 report

Our focus areas
We’ve structured our BP Sustainability Report 2019 around our three focus areas, and the issues prioritized in our materiality process.

Climate change and the energy transition
Including our low carbon ‘reduce, improve, create’ framework.

Safety
Including personal and process safety, spill prevention and cyber security.

Our value to society
Including community engagement, community investment and human rights.
[1] See page 42.

Doing business responsibly
Other important ways that we run our business responsibly.

Environment
Operating with respect for the environment, including biodiversity.

People
Building an exceptional and diverse team to lead in the energy transition.
[1] See page 60.

Business ethics
Being an ethical, transparent and trusted business.
Climate change and the energy transition

Why it matters
The world is not on a sustainable path and needs a rapid transition to lower carbon energy in order to meet the goals of the Paris Agreement.

What we want to do
This will involve meeting growing demand with energy that is cleaner, as well as reliable and affordable.

Our approach
To advance a low carbon future by working across the whole of BP. This includes our reduce, improve, create, framework.

Performance
- Zero net growth in operational emissions
- Established more than 30 carbon neutral BP retail sites
- >$500 million invested in low carbon activities

What’s next
- Working to deliver our new ambition to become a net zero company by 2050 or sooner, and to help the world get to net zero

In this section
- Our role in the energy transition
  - 18
- Our ‘reduce, improve, create’ framework
  - 20
- Accrediting our lower carbon activities
  - 22
- Reducing emissions in our operations
  - 23
- Improving our products
  - 26
- Creating low carbon businesses
  - 30

We’re growing our low carbon and renewables businesses, investing in low carbon activities with potential to support the energy transition.
Energy with purpose means helping the world get to net zero
Our role in the energy transition

The world needs a rapid transition to net zero. To meet the goals of the 2015 Paris Agreement* we believe society must take decisive and collective action. Our role in this transition is to provide reliable, affordable and cleaner energy for people and our planet.

Our net zero ambition

Our new ambition is to become a net zero company by 2050 or sooner and to help the world get to net zero. We have set out 10 aims, which together set out a path that is consistent with the Paris goals.

Net zero aims

We have set out five aims to get BP to net zero:

1. Net zero operations – net zero across our entire operations on an absolute basis by 2050 or sooner.
2. Net zero oil and gas – net zero on an absolute basis across the carbon in our upstream oil and gas production by 2050 or sooner.
3. Halving intensity – cut the carbon intensity of the products we sell by 50% by 2050 or sooner.
4. Reducing methane – install methane measurement at all existing major oil and gas processing sites by 2023, publish the data, and then drive a 50% reduction in the methane intensity of our operations.
5. More investment for new energies – increase the proportion of investment we make into our non-oil and gas businesses.

Read about our five aims to help the world get to net zero on page 5.

Net zero

When we talk about helping the world get to net zero we mean achieving a balance between sources of anthropogenic emissions and removal by sinks of greenhouse gases, as set out in Article 4.1 of the Paris Agreement*. When talking about BP becoming a net zero company by 2050, or sooner, in the context of our new ambition and aims 1 and 2, this means achieving a balance between (a) the relevant Scope 1 and 2 emissions associated with our operations (aim 1), or Scope 3 emissions associated with carbon in BP’s net production of oil and gas excluding Rosneft (aim 2), and (b) the total of applicable deductions from activities such as sinks, for example land carbon projects, which we allow for in our methodology.

* Paris Agreement
(1) Article 2.1(a) of the Paris Agreement states the goal of “Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change.”
(2) Article 4.1 of the Paris Agreement: In order to achieve the long-term temperature goal set out in Article 2, Parties aim to reach global peaking of greenhouse gas emissions as soon as possible, recognizing that peaking will take longer for developing country parties, and to undertake rapid reductions thereafter in accordance with best available science, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century, on the basis of equity, and in the context of sustainable development and efforts to eradicate poverty.
Leading in transparency
In February 2020, we announced our aim to be recognized as an industry leader for the transparency of our reporting. This means providing our stakeholders with the information they require, particularly in relation to our low carbon strategy and aims.

At the 2019 BP AGM, the board recommended that shareholders support a special resolution requisitioned by Climate Action 100+ on climate change disclosures. More than 99% of shareholders voted for this resolution, which requires BP to respond to a number of different elements.

Calling for more progressive climate policies
We plan to allocate more resources to advocate for well-designed policies, including carbon pricing. We believe this is the most efficient way to reduce GHG emissions and incentivize everyone, including energy producers and consumers, to play their part. In our view, pricing can be effective either as a tax or as a cap-and-trade system.

A fifth of the world’s GHG emissions are now covered by carbon pricing systems. Stable and well-designed carbon pricing adds a cost to energy production and energy products, but it also provides a basis for future investment and a level playing field for all energy sources.

We believe that a well-designed 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 to avoid carbon taxation.

We recognize that carbon pricing may not always be the best solution and that in some cases a range of policy instruments may be required to address gaps in pricing coverage or market failures.

Mobilizing and motivating our employees
We’re unlocking human energy across BP in response to the energy transition.

Our Advancing Low Carbon accreditation programme made 76 accreditations in 2019. In the UK, employees also responded positively to the ‘My Advancing Low Carbon’ programme launched in 2019, through which they can offset their carbon emissions from personal travel and home energy use.

Carbon pricing in Washington State, US
We support well-designed carbon pricing but we’re prepared to oppose poorly designed proposals.

For example, we opposed the ballot initiative to introduce a carbon fee in Washington State, US, in November 2018. We believed that the policy was badly designed and would have harmed Washington’s economy without significantly reducing carbon emissions. The initiative was not passed.

We worked with legislative leaders in the state in 2019 and 2020 and supported a cap-and-invest bill, which we believed would be more effective. We intend to work with the Washington legislature during its 2021 session to see if a new carbon bill can be advanced.

Working with others
We’re working with other businesses, governments and civil society, to support the expansion of carbon pricing through our participation in the Carbon Pricing Leadership Coalition and the US-based Climate Leadership Council. In 2019 we engaged with policymakers in Europe, Australia, Canada and China.

Natural climate solutions
Natural climate solutions (NCS) are changes in land use and management that can reduce net GHG emissions and increase the absorption of CO₂ already in the atmosphere through the creation and expansion of ‘natural sinks’. NCS can be delivered by restoring and changing the management or use of a wide range of habitats, including wetlands, forests, grasslands and agricultural or coastal areas.

We strongly support NCS as a key part of the energy transition and a necessary component of meeting the Paris goals and achieving net zero emissions. It’s estimated that NCS could deliver around one third of the total GHG emissions reductions needed to meet the Paris goals by 2030, at a reasonable cost. They can also support biodiversity, contribute to improvements in water quality and quantity, and help provide sustainable livelihoods for local communities.

We’re undertaking various policy and commercial activities to accelerate the scale-up of NCS, including advocating for its wider use on a voluntary or regulatory basis and enabling investment for NCS trading. We’re supporting or participating in several multi-stakeholder initiatives and partnerships, involving academia, businesses, NGOs, multilateral agencies and some governments, to foster a shared vision for NCS and principles to help ensure that NCS deliver measurable emissions reductions, with appropriate environmental and social safeguards. These initiatives include the NCS Alliance, led by the World Business Council for Sustainable Development (WBCSD) and World Economic Forum (WEF).
Our ‘reduce, improve, create’ framework

Our commitment to advance a low carbon future is underpinned and informed by our ‘reduce, improve, create’ (RIC) framework. This focuses on reducing greenhouse gas emissions in our own operations, improving our products to help our customers lower their emissions, and creating low carbon businesses that support the energy transition.

Our low carbon journey has gathered pace since we set targets in 2018 to help frame our commitment to advancing the energy transition. In 2019 we made 1.4 MteCO2e of sustainable GHG reductions3 (SERs) – reflecting continued engagement and activity across the group since the targets were launched. We delivered over 100 separate sustainable emission reduction activities in 2019.

In 2020 we plan to provide an update on the next phase of our framework. See bp.com/targets.

Reducing emissions in our operations

<table>
<thead>
<tr>
<th>Zero</th>
<th>3.5Mte</th>
<th>0.2%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.4Mte of sustainable GHG reductions delivered in 2019 and 3.9Mte since 2016</td>
<td></td>
<td></td>
</tr>
<tr>
<td>We’ve met our 2018 target six years ahead of schedule.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Established a $100-million carbon fund for projects that deliver new greenhouse gas emissions reductions in our Upstream operations.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our progress 2019</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a SERs result from BP actions or interventions that have led to ongoing reductions in Scope 1 (direct) and/or Scope 2 (indirect) GHG emissions (carbon dioxide and methane) such that GHG emissions would have been higher in the reporting year if the intervention had not taken place. SERs must meet three criteria: BP made a specific intervention that has reduced GHG emissions, BP must be able to quantify the reduction and the reduction is expected to be ongoing. Reductions are reportable for a 12-month period from the start of the intervention/action.

b In accordance with our zero net growth methodology, the starting GHG baseline (end of 2015) is adjusted at the end of each reporting year for any qualifying changes (this covers changes due to acquisitions, divestments, outsourcing or insourcing where the total for the year is greater than 5% of overall emissions from the previous year or is due to methodology or protocol changes).
### Improving our products

| Provide lower emissions gas | Develop more efficient and lower carbon fuels, lubricants and petrochemicals | Grow lower carbon offers for customers |

**Our progress 2019**

- Successfully brought the Khazzan major project into production in 2017, and will be working to deliver first gas from Phase 2 by the end of 2020.
- Started to use solar pumps instead of pneumatic gas pumps in our US onshore business.
- Continued to scale up co-processing at our refineries, growing the volume of lower carbon bio-feedstock.
- Developed CASTROL High Mileage OW-20 and CASTROL EDGE OW-16, our new engine oils with improved fuel economy and emissions system protection in North America.
- Continued to offer customers globally the opportunity to purchase PT Air Neutral, the world’s first certified carbon neutral PTA.

### 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 |

**Our progress 2019**

- Expanded our biofuels business in Brazil by more than 50% through a joint venture with Bunge to create BP Bunge Bioenergia.
- Established more than 30 carbon neutral BP retail sites, offering a range of carbon neutral products and services.
- Offset more than 1 million tonnes of carbon for the first time in 2019 through BP Target Neutral.
- Increased the supply of BP Biojet, our sustainable aviation fuel, to 11 locations worldwide, in countries including Sweden, France and the US.

**$500m invested in 2019**

- Increased our stake in Lightsource BP to create a 50:50 joint venture. Since our initial investment in 2017, Lightsource BP has signed major projects across Europe, the Americas and Australia.
- Invested a further $30 million in Fulcrum Bioenergy, a pioneer in making low carbon, low-cost transportation fuels from household waste.
- Expanded our digital energy portfolio by investing in energy management with Grid Edge, in the UK and R&B in China. Both can help customers predict, control and optimize a building’s energy use.

**Taken a leading role in the OGCI’s Net Zero Teesside project in the UK. Using integrated carbon capture, use and storage, the project aims to store the carbon dioxide emissions of the carbon-intensive industries situated within the Teesside industrial cluster.**

### BP Sustainability Report 2019

Our accreditation programme for lower carbon activities.

---

See page 22.
Accrediting our lower carbon activities

Our Advancing Low Carbon (ALC) accreditation programme aims to inspire every part of BP to identify lower carbon opportunities to support our net zero ambition.

Since its launch in 2017, the programme has motivated people across BP to help advance low carbon, with 76 accreditations of 2019 activities – up from 52 in 2018. Each activity supports our ambition 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 ALC activities, including: assessing the application of our process and criteria for accrediting activities, and confirming greenhouse gas (GHG) emissions that are offset and saved through the programme.

We estimate that 64MteCO₂e have been saved or offset through activities delivered by BP, and 5.4Mte through activities delivered by BP partners, since the programme began in 2017.

Delivering a better carbon outcome

To gain accreditation by BP, each activity must meet certain criteria – including delivering a ‘better carbon outcome’. This can be done by:

- reducing 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 reach their low carbon objectives

Teams from across BP’s businesses have taken part, identifying ways to reduce carbon in our operations, products and technologies, and finding ways to measure the impact. The programme aims to inspire our people and partners to advance low carbon. By recognizing the many ways in which we are advancing low carbon, we hope to find more opportunities to scale these activities and help the world to reach net zero.

For a full list of accredited activities and Deloitte’s assurance statement go to bp.com/advancinglowcarbon.

Engaging BP employees in advancing low carbon

As part of our My Advancing Low Carbon programme (My ALC), BP employees in the UK and the US can offset their carbon emissions from personal travel and home energy use.

Employees can choose the carbon emissions profile that best matches their lifestyle and BP Target Neutral provides offsets for their carbon footprint. The programme supports high-quality carbon credits from a range of carefully selected projects on a not-for-profit basis. Each project helps to reduce carbon emissions while contributing to improving the lives of millions of people.

Since the programme was launched at the end of 2019, BP employees in the UK and US have chosen to offset the equivalent of 31,800 flights between London Heathrow and Houston, or the removal of 6,900 passenger cars from the roads for a year.

The more employees who enrol, the greater the low carbon benefit and as BP pays 50% of the cost to encourage this, making a difference costs less per month than a cup of coffee.
Reducing emissions in our operations

In 2019 we made further progress against the three operational emissions targets we set in 2018. These targets were to deliver: zero net growth in operational emissions out to 2025 against an adjusted 2015 baseline; 3.5Mte of sustainable greenhouse gas emission reductions (SERs) for the period 2016 to 2025; and a methane intensity of 0.2%.

Our target of zero net growth in operational emissions out to 2025 aims to ensure that our carbon footprint does not grow as our business grows. We will offset any increase in our GHG emissions above a 2015 baseline that cannot be managed through reductions, including SERs. In 2019 we did not need to purchase offsets in line with this target.

Looking forward, 11 major upstream projects are scheduled for delivery by the end of 2021. For all BP-operated major projects, it’s now standard practice to identify lower carbon options at the earliest project stage, when there is the greatest opportunity to reduce operational emissions and optimize project design in line with our central case internal carbon price of $40 per tonne (2015 $ real).

In 2019 we exceeded our target of 3.5Mte of SERs for the period 2016 to 2025, six years ahead of schedule. We reported 1.4MteCO₂ of reductions and a total of 3.9MteCO₂ since 2016.

• In Angola we delivered further reductions in flaring emissions in 2019 by building on process optimizations that started in 2018 and implementing well management strategies.
• In Oman, we invested in performance improvements to our power generators, which allowed us to operate with a reduced number of gas turbines. We also successfully applied working practices and technologies for well tests and green completions in Khazzan.
• At our BP Whiting refinery in the US, the installation of a new control scheme on a flare system has reduced continuous natural gas purging.
• Our onshore BPX Energy sites executed various projects to reduce methane venting from equipment and fugitive emissions, with the additional implementation of compressor optimization initiatives, which reduced fuel consumption on site.

3.9Mte of SERs achieved 2016-2019, six years ahead of schedule

Our shipping operations delivered emissions reductions in 2019 through improved efficiency of the new oil and LNG vessels delivered in 2018 and 2019.

Read more about our targets at bp.com/targets.

a See footnote b on page 20.
Our greenhouse gas emissions in 2019

Despite significant sustainable emissions reductions (SERs), our overall 2019 GHG emissions increased due mainly to major acquisitions. We achieved zero net growth in our operational emissions with no offsets required against our adjusted 2015 baseline.a

Operational control

Scope 1 (direct) emissions from sites operated by BP increased by 0.4MteCO₂e to 49.2MteCO₂e in 2019, from 48.8MteCO₂e in 2018. Emissions increases due to major acquisitions were largely balanced out by SERs of 1.4MteCO₂e delivered in 2019. Scope 2 (indirect) emissions decreased by 0.2MteCO₂e (3%) compared to 2018.

In our upstream businesses, emissions increased by 0.2MteCO₂e (less than 1%), but we delivered sustainable emission reductions of 1.26MteCO₂e in 2019.

Flaring

We achieved a decrease in upstream flaring – the controlled burning of gas during gas and oil production – for the second year running, as a result of emissions reduction activity. Flaring fell by 13% from 1.6Mte in 2018 to 1.4Mte in 2019. Angola operations were the largest single contributor to flaring reductions.

Equity share emissions

Our Scope 1 (direct) equity share emissions decreased by 0.5MteCO₂e to 46.0MteCO₂e in 2019 (2018 46.5MteCO₂e). Emissions resulting from the BHP acquisitions were balanced out by sustainable emissions reductions and the impact of divestments. Our Scope 2 (indirect) emissions remained the same in 2019 at 5.7MteCO₂e compared with 2018.

Net zero aims

Aim 1: net zero operations

We aim to be net zero across our entire operations on an absolute basis by 2050 or sooner. This aim relates to Scope 1 and 2 GHG emissions.

Aim 2: net zero oil and gas

We aim to be net zero on an absolute basis across the carbon in our upstream oil and gas production by 2050 or sooner. This is our Scope 3 aim, and is on a BP equity share basis excluding Rosneft. The carbon was equivalent to around 360Mte of emissions in 2019.b

Aim 3: halving intensity

Our aim is to cut the carbon intensity of the products we sell by 50%, by 2050 or sooner. This is a lifecycle carbon intensity approach, per unit of energy. It covers marketing sales of energy products c and, potentially, in future, certain other products, such as those associated with land carbon projects.

GHG emissions

Scope 1 (direct) GHG emissions (operational boundary)\(^a\)

(MteCO₂e, equivalent)

<table>
<thead>
<tr>
<th>Year</th>
<th>CO₂e</th>
<th>CH₄</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>49.2</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>48.8</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>50.5</td>
<td></td>
</tr>
</tbody>
</table>

Scope 1 (direct) GHG emissions by source (equity boundary)\(^b\)

(MteCO₂e, equivalent)

<table>
<thead>
<tr>
<th>Year</th>
<th>CO₂e</th>
<th>CH₄</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>46.80</td>
<td>0.10</td>
</tr>
<tr>
<td>2018</td>
<td>46.40</td>
<td>0.09</td>
</tr>
<tr>
<td>2017</td>
<td>47.00</td>
<td>0.11</td>
</tr>
</tbody>
</table>

Scope 2 (indirect) GHG emissions (operational boundary)\(^c\)

(MteCO₂e, equivalent)

<table>
<thead>
<tr>
<th>Year</th>
<th>CO₂e</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td></td>
</tr>
</tbody>
</table>

Estimated emissions intensity\(^d\)

<table>
<thead>
<tr>
<th>Energy Product</th>
<th>CO₂e Intensity (gCO₂e/MJ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average emissions intensity of marketed energy products</td>
<td>79.7</td>
</tr>
<tr>
<td>Refined energy products</td>
<td>93.7</td>
</tr>
<tr>
<td>Gas products</td>
<td>71.6</td>
</tr>
<tr>
<td>Bioproducts</td>
<td>28.8</td>
</tr>
<tr>
<td>Power products</td>
<td>43.8</td>
</tr>
</tbody>
</table>

Scope 3

There are 15 categories of Scope 3 emissions. For our industry the most important of these categories is the ‘use of sold products’ (category 11). For this category of Scope 3, we are reporting for the first time the estimated CO₂ emissions from the carbon in our upstream oil and gas production. This metric replaces the ‘customer emissions’ metric, which we reported in our previous Sustainability Report because it better aligns with our new aim to be net zero across the carbon in our upstream oil and gas production. Going forward, we believe this metric will allow us to monitor and report progress against this aim.

Estimated emissions intensity\(^d\)

<table>
<thead>
<tr>
<th>Energy Product</th>
<th>CO₂e Intensity (gCO₂e/MJ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average emissions intensity of marketed energy products</td>
<td>79.7</td>
</tr>
<tr>
<td>Refined energy products</td>
<td>93.7</td>
</tr>
<tr>
<td>Gas products</td>
<td>71.6</td>
</tr>
<tr>
<td>Bioproducts</td>
<td>28.8</td>
</tr>
<tr>
<td>Power products</td>
<td>43.8</td>
</tr>
</tbody>
</table>

GHG emissions - Upstream

Upstream (per thousand barrels of oil equivalent)

<table>
<thead>
<tr>
<th>Year</th>
<th>CO₂e</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>25.9</td>
</tr>
<tr>
<td>2018</td>
<td>27.8</td>
</tr>
<tr>
<td>2017</td>
<td>30.4</td>
</tr>
</tbody>
</table>

GHG emissions - Refining

Refining (per utilized equivalent distillation capacity)

<table>
<thead>
<tr>
<th>Year</th>
<th>CO₂e</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>916</td>
</tr>
<tr>
<td>2018</td>
<td>915</td>
</tr>
<tr>
<td>2017</td>
<td>923</td>
</tr>
</tbody>
</table>

GHG emissions - Petrochemicals

Petrochemicals (per thousand tonnes)

<table>
<thead>
<tr>
<th>Year</th>
<th>CO₂e</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>291</td>
</tr>
<tr>
<td>2018</td>
<td>289</td>
</tr>
<tr>
<td>2017</td>
<td>304</td>
</tr>
</tbody>
</table>

\(a\) In accordance with our zero net growth methodology, the starting GHG baseline (end of 2015) is adjusted at the end of each reporting year for any qualifying changes (this covers changes due to acquisitions, divestments, outsourcing or insourcing where the total for the year is greater than 5% of overall emissions from the previous year or is due to methodology or protocol changes).

\(b\) Estimated CO₂ emissions from the combustion of upstream production of crude oil, natural gas and natural gas liquids (NGLs) on a BP equity-share basis based on BP’s net share of production, excluding BP’s share of Rosneft production and assuming that all produced volumes undergo full stoichiometric combustion to CO₂.

\(c\) Energy products include retail fuels we sell, and also include solar power sales.

\(d\) Estimated CO₂e on a lifecycle basis from the use, production and distribution of marketed energy products per unit of energy (MJ) delivered. Marketed sales are the sales we make to our customers where it is presumed the end user will use them. Customers include business to business, business to customer and business to government sales of energy products to assumed third party end users. For refined products, gas and bioproducts, it includes value chain greenhouse gas emissions on a lifecycle (“wells to tank”) basis for each energy product and estimated emissions associated with the combustion of elemental fossil carbon. Industry standard factors are applied for each energy product value chain. Please see the basis of reporting for the list of products covered at bp.com/basisofreporting.

\(e\) Comprises 100% of emissions from activities that are operated by BP.

\(f\) 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.

\(g\) 2018 value has been corrected to 289 from 325 tCO₂e per thousand tonnes.
Reducing methane emissions

We’re taking action to reduce the amount of methane that enters the atmosphere from our oil and gas operations. Methane is the primary component of natural gas and although it has a shorter lifespan in the atmosphere than CO₂, it has higher global warming potential. We target a methane intensity* of 0.2%.

Aim 4: reducing methane

Our aim is to install methane measurement at all our existing major oil and gas processing sites by 2023, publish the data, and then drive a 50% reduction in methane intensity of our operations. And we will work to influence our joint ventures to set their own methane intensity targets of 0.2%.

This new aim isn’t intended to defer actions to help us reduce our methane intensity by 50% until after 2023. We want to make sure that the quantification of progress towards the reduction is informed by methane measurement at our major oil and gas processing sites. So we’re keeping up the momentum to tackle methane and working on ways to use measurement to take account of – and report – verified reductions achieved before our programme of installing measurement is complete.

Throughout 2019, we continued working to reduce our operational methane emissions – from upgrades in mature production fields to the design of new technology. For example, in our US onshore business we have begun using solar instead of gas pneumatic pumps.

Working with others

We continue to work with key stakeholders on activities designed to improve detection, measurement, quantification, verification and reporting of methane emissions. We’re taking a leadership role in addressing the methane challenge through the improvements we’ve made to our own operations, but also through collaboration with our peers, NGOs, third-party experts and academic research institutions. For example, we are part of the Collaboratory to Advance Methane Science, an industry-led group helping the oil and gas sector find the most effective strategies for cutting methane emissions.

We’re also working with the Environmental Defense Fund (EDF) and together with them in 2019 we announced a three-year strategic commitment to advance technologies and practices to reduce methane emissions from the global oil and gas industry. The agreement will enable collaboration on projects that test technologies and emerging strategies to continue improving methane management.

Our methane performance in 2019

Our methane intensity in 2019 was 0.14%, an improvement from 0.16% in 2018. We previously reported this number to one decimal place but are now reporting it to two, in order to better demonstrate year-on-year changes. Since 2016 our methane intensity has decreased by 44% from 0.25%.

In 2019 methane emissions from upstream operations, used to calculate our intensity, increased by 3% (4,808mmscfd in 2019 from 4,674mmscfd in 2018) with the assets acquired over the past 18 months being countered by SERs including flaring decreases and leak detection and repair. Marketed gas increased by 14% (3,370,404mmscfd in 2019 from 2,952,071mmscfd) with marketed gas volumes increasing in BPX, Azerbaijan, Georgia and Turkey.

Using technology to improve methane data

For several years, we’ve used hand-held infrared cameras to detect small leaks of fugitive emissions. New technology now makes it possible to quantify the emissions these cameras detect so we can prioritize repairs. Following a pilot of this technology in Azerbaijan and the US in 2018, we’ve now deployed the technology more widely and also appointed a number of employees as ‘super users’ to share the skills needed to use it. These employees will provide information about how to make the technology more user friendly and embed the data collected into our existing data management systems.

We’re using advanced imaging cameras that can continuously monitor facilities and identify leaks earlier than routine inspections. These cameras connect directly to our control rooms and send automated alerts. They’re now in use at our Khazzan gas field in Oman and are set to be installed in Trinidad and Tobago in 2020. They’ve also been prioritized for Sangachal and Khazzan Phase 2 in the future. We’re planning for all new major projects to use real time methane detection (if methane is or has potential to be a material emission source).

Our US onshore gas business is deploying drone-mounted sensors to inspect equipment. These drones are more efficient than hand-held devices and safer than human interventions. They also cut the carbon cost associated with inspection vehicles. Together with the Oil and Gas Climate Initiative (OGCI), we’re exploring the potential of satellite technology to measure GHG emissions from our facilities.

Energy with purpose

Reducing methane emissions in Angola

The BP Angola team operating the offshore Greater Plutonio project achieved sustainable emissions reductions of 1.5 MteCO₂ over a 12 month period 2018-2019, while also increasing production by 14mboed during the same period.

The team set out with a simple objective – to reduce GHG emissions and not waste energy. They explored ways to reduce flaring using a tool called APEX, which enabled them to create simulated duplications of the entire operational network.

They explored possible improvement measures by simulating a range of operational scenarios, then tested these in live field trials. The team say they were genuinely astonished by the success of this process, which highlighted the ‘sweet spot’ in terms of their compression and separation systems.

The reduction in flaring was immediate and visible to the human eye, with gas being sent down to the Angola liquid natural gas plant onshore, rather than wasted. Not only did BP Angola achieve CO₂ reductions and efficiency improvements, it was also recognized as the winner in the Advancing Low Carbon category of the 2019 BP Helios awards.

Running methane emissions in Angola

We’re taking action to reduce the amount of methane that enters the atmosphere from our oil and gas operations. Methane is the primary component of natural gas and although it has a shorter lifespan in the atmosphere than CO₂, it has higher global warming potential. We target a methane intensity* of 0.2%.

Aim 4: reducing methane

Our aim is to install methane measurement at all our existing major oil and gas processing sites by 2023, publish the data, and then drive a 50% reduction in methane intensity of our operations. And we will work to influence our joint ventures to set their own methane intensity targets of 0.2%.

This new aim isn’t intended to defer actions to help us reduce our methane intensity by 50% until after 2023. We want to make sure that the quantification of progress towards the reduction is informed by methane measurement at our major oil and gas processing sites. So we’re keeping up the momentum to tackle methane and working on ways to use measurement to take account of – and report – verified reductions achieved before our programme of installing measurement is complete.

Throughout 2019, we continued working to reduce our operational methane emissions – from upgrades in mature production fields to the design of new technology. For example, in our US onshore business we have begun using solar instead of gas pneumatic pumps.

Working with others

We continue to work with key stakeholders on activities designed to improve detection, measurement, quantification, verification and reporting of methane emissions. We’re taking a leadership role in addressing the methane challenge through the improvements we’ve made to our own operations, but also through collaboration with our peers, NGOs, third-party experts and academic research institutions. For example, we are part of the Collaboratory to Advance Methane Science, an industry-led group helping the oil and gas sector find the most effective strategies for cutting methane emissions.

We’re also working with the Environmental Defense Fund (EDF) and together with them in 2019 we announced a three-year strategic commitment to advance technologies and practices to reduce methane emissions from the global oil and gas industry. The agreement will enable collaboration on projects that test technologies and emerging strategies to continue improving methane management.

Our methane performance in 2019

Our methane intensity in 2019 was 0.14%, an improvement from 0.16% in 2018. We previously reported this number to one decimal place but are now reporting it to two, in order to better demonstrate year-on-year changes. Since 2016 our methane intensity has decreased by 44% from 0.25%.

In 2019 methane emissions from upstream operations, used to calculate our intensity, increased by 3% (4,808mmscfd in 2019 from 4,674mmscfd in 2018) with the assets acquired over the past 18 months being countered by SERs including flaring decreases and leak detection and repair. Marketed gas increased by 14% (3,370,404mmscfd in 2019 from 2,952,071mmscfd) with marketed gas volumes increasing in BPX, Azerbaijan, Georgia and Turkey.

Using technology to improve methane data

For several years, we’ve used hand-held infrared cameras to detect small leaks of fugitive emissions. New technology now makes it possible to quantify the emissions these cameras detect so we can prioritize repairs. Following a pilot of this technology in Azerbaijan and the US in 2018, we’ve now deployed the technology more widely and also appointed a number of employees as ‘super users’ to share the skills needed to use it. These employees will provide information about how to make the technology more user friendly and embed the data collected into our existing data management systems.

We’re using advanced imaging cameras that can continuously monitor facilities and identify leaks earlier than routine inspections. These cameras connect directly to our control rooms and send automated alerts. They’re now in use at our Khazzan gas field in Oman and are set to be installed in Trinidad and Tobago in 2020. They’ve also been prioritized for Sangachal and Khazzan Phase 2 in the future. We’re planning for all new major projects to use real time methane detection (if methane is or has potential to be a material emission source).

Our US onshore gas business is deploying drone-mounted sensors to inspect equipment. These drones are more efficient than hand-held devices and safer than human interventions. They also cut the carbon cost associated with inspection vehicles. Together with the Oil and Gas Climate Initiative (OGCI), we’re exploring the potential of satellite technology to measure GHG emissions from our facilities.

Energy with purpose

Reducing methane emissions in Angola

The BP Angola team operating the offshore Greater Plutonio project achieved sustainable emissions reductions of 1.5 MteCO₂ over a 12 month period 2018-2019, while also increasing production by 14mboed during the same period.

The team set out with a simple objective – to reduce GHG emissions and not waste energy. They explored ways to reduce flaring using a tool called APEX, which enabled them to create simulated duplications of the entire operational network.

They explored possible improvement measures by simulating a range of operational scenarios, then tested these in live field trials. The team say they were genuinely astonished by the success of this process, which highlighted the ‘sweet spot’ in terms of their compression and separation systems.

The reduction in flaring was immediate and visible to the human eye, with gas being sent down to the Angola liquid natural gas plant onshore, rather than wasted. Not only did BP Angola achieve CO₂ reductions and efficiency improvements, it was also recognized as the winner in the Advancing Low Carbon category of the 2019 BP Helios awards.

a methane intensity refers to the amount of methane emissions from BP’s operated upstream oil and gas assets as a percentage of the total gas that goes to market from those operations.

Our methodology is aligned with the Oil and Gas Climate Initiative’s (OGCI).
Improving our products

We can improve the carbon credentials of our products for customers by: providing lower emission gas for power generation; developing more efficient and lower carbon fuels, lubricants and petrochemicals; and growing low carbon offers to help these customers reduce their carbon emissions.

Lower emission gas for power generation
As the world moves towards net zero emissions, we think natural gas can play an important role in getting us there. When burned for power, natural gas has, on average on a lifecycle basis, about half the GHG emissions of coal, with fewer air pollutants, so expanding its use globally to displace coal will help to reduce carbon emissions. In fact, switching from coal to gas has avoided more than 500MtCO₂ from the power sector globally since 2010. As the amount of renewables in the energy mix grows, gas can also be a flexible partner to wind and solar, providing a reliable back-up source that’s not weather dependent.

Natural gas is adaptable, suitable for use in both domestic and industrial applications, and now widely available via a growing global market that uses pipelines and marine tankers. Looking ahead, gas can also be decarbonized. By using carbon capture, use and storage (CCUS) technology, the CO₂ generated when gas is burned for power or heat in industry can be captured so that it doesn’t reach the air. It can then be stored, or used, for example, to create building materials.

We aim to be a leader in tackling methane emissions to help maximize the climate benefits of gas. This means reducing flaring and venting, and working to minimize methane leaks. We were one of the first energy companies to set a methane intensity target which is set at 0.2%.

Read more about how we’re reducing methane from natural gas on page 25.

Lower carbon fuels, lubricants and petrochemicals
We’re pursuing several different routes to lower the carbon footprint of our fuels, lubricants and petrochemicals. They include:

• Decarbonizing our products: we are co-processing biogenic feedstocks with conventional diesel at a number of our refineries. During 2019 we continued to scale up co-processing, growing the volume of lower carbon bio-feedstock processed.

• Efficient manufacturing: BP’s PTAir branded PTA is one of the building blocks in everyday polyester clothing and packaging items. It has a carbon footprint almost 30% below the European average.

• Promoting circularity: we increasingly think about resource intensity alongside the carbon intensity of our products, and try to promote circularity where we can.

• Helping customers reduce their emissions: we offer high performance fuels and lubricants – including BP Ultimate fuels with ACTIVE technology – that are designed to promote efficient engine performance and fuel economy, to help reduce emissions.

• Carbon neutral products and services: through BP Target Neutral, we’ve expanded our Castrol carbon offsetting consultancy service for customers to cover Mexico, China and India. This means it’s now offered in 12 countries worldwide.

In 2019 we opened carbon neutral retail sites in Mexico, Indonesia and China, while Castrol extended its carbon neutral auto dealership service into India and China. This service gives dealers the tools and support to make their dealerships carbon neutral and to service vehicles with carbon neutral lubricants.

Working with others
At our Pangbourne technology centre in the UK, BP experts collaborate with car makers and original equipment manufacturers to co-engineer advanced lubricants, e-fluids and special fuels, while also improving the performance and efficiency of cars, trucks and transmissions already in the market.
Pangbourne acts as a global hub, drawing research capabilities and expertise from our other global technology centres and world-leading universities including the University of Cambridge, Imperial College London, the University of Manchester and the University of Illinois at Urbana–Champaign.

Together with these universities, we conduct studies through our research organization, the International Centre of Advanced Materials (ICAM), to test and analyze the requirements of the future transport sector. We’re focused on how we can make transformational breakthroughs. For example, a project at the University of Cambridge is exploring future opportunities with ICAM to support our research into e-mobility.

**Growing low carbon offers for our customers**

For 14 years we’ve helped customers take action on their emissions through our carbon reduction and offsetting programme, BP Target Neutral. During this time we’ve helped bring more than 20 carbon neutral products and services to market for the aviation, commercial, transport and automotive sectors.

Some of these are world firsts, for example: carbon neutral Castrol lubricants; helping fleet customers offset emissions though fuel cards; and carbon neutral PTA.

BP Target Neutral has helped customers offset over 5 million tonnes of greenhouse gas emissions since 2006, generating around $20 million to support carbon offsetting projects worldwide. These have contributed to emissions reductions, helped to improve livelihoods, financed renewable energy generation, and protected internationally significant forest land.

**Supporting a new global transport system**

Supporting the development of a new transport system is a focus area for us – including electric vehicles and their charging infrastructure – because 25% of emissions currently come from transport. We’re modernizing our fuels and retail business to support the transition.

In 2019 we hosted an event bringing together leading companies from across the electrification ecosystem to discuss shared challenges and opportunities. We also commissioned and published an independent report, ‘On the Move’, to explore expert and consumer opinions on the future of road transport, focusing on the real and perceived barriers consumers face in adopting lower carbon alternatives. The report was based on a survey of 12,000 people across three European countries.

Other modes of transport such as air travel, heavy transport and marine transport may be unsuitable for electrification. For these, we’re exploring other ways to reduce emissions, including biofuels, liquefied natural gas and hydrogen.

**Investing in hydrogen**

Hydrogen has important potential as a close-to-zero carbon option for power and heat generation, for transport, and as a source of lower carbon feedstocks used to make products. Hydrogen could be an essential complement to electrification of the global energy systems of the future. We’re exploring its potential to reduce emissions in our operations, improve our products and provide the basis for creating low carbon businesses.

In 2019 we joined the Hydrogen Council, a global CEO-led initiative to promote and support the role of hydrogen in the energy transition. The Council aims to accelerate investment into large-scale commercialization of hydrogen solutions across industries worldwide. We’re also a member of Hydrogen Europe, which seeks to promote and develop large-scale, low carbon hydrogen-based opportunities. In our view, robust policies, including carbon pricing, will be required to incentivize the investment required to exponentially grow the use of hydrogen.

We’re exploring the potential of blue hydrogen – hydrogen from natural gas – from which the carbon is captured and stored. We also believe green hydrogen produced from the electrolysis of water using renewable energy will play an increasingly important role, particularly in parts of the world with high renewable energy potential. We use large amounts of hydrogen in our refinery operations. This is typically generated from fossil fuel sources without carbon capture (grey hydrogen). We’re actively evaluating a number of options at some of our refineries to replace current hydrogen production with green hydrogen, which will help to lower the carbon footprint of our refineries and products.

With the anticipated growth in hydrogen demand, we’re pursuing opportunities to develop new low carbon businesses in this area. We now have a dedicated hydrogen team, which is progressing opportunities in green ammonia production and export, and green hydrogen for transport. In October 2019 we appointed our first vice president of green hydrogen.

>5Mt of greenhouse gas emissions offset by customers through BP Target Neutral since 2006
Carbon capture, use and storage
We believe carbon capture, use and storage (CCUS) can play a vital role in limiting emissions – helping us to reduce our carbon footprint and supporting global efforts to meet the Paris goals.

CCUS can significantly reduce emissions from gas power generation and energy-intensive industries that rely on fossil fuels. Its advantages include:

• Greater energy diversity, including lower carbon fossil fuels.
• Enabling investment in different energy sources, including low emission hydrogen production from natural gas.
• Expanding technology choices for decarbonized, flexible and reliable power.
• Protecting the value of substantial capital investments in power, industrial and manufacturing infrastructure.
• Employment and investment opportunities in industrial centres.

Although CCUS requires significant upfront investment, over time its deployment at scale can be expected to bring costs down. A third party study in the UK found that for every £1 invested in carbon capture, the payback to the national economy is almost £5. With an average CCUS project currently capable of capturing at least one million tonnes of CO2 every year, the process offers a cost-effective way to decarbonize, transition to a lower carbon economy, and reach the Paris net zero target. It also creates opportunities to build new low carbon businesses, with the CO2 sold to support these ventures.

CCUS collaboration
Collaboration is needed to make CCUS mainstream. It’s been used for more than 20 years, but needs government support, such as carbon pricing and policy making, to accelerate its deployment. Through the Oil and Gas Climate Initiative (OGCI), we’re identifying the policy mechanisms that could be most effective in scaling CCUS up on a regional basis. In the US, we are also playing a leadership role in a National Petroleum Council (NPC) report.

We’re exploring opportunities to deploy CCUS in our own operations and projects. For example, we’re participating in a joint venture in the UAE, which uses CO2 from industrial processes to enhance oil recovery. We’re also playing a leading role in the OGCI’s Net Zero Teesside project in the UK.

Testing carbon capture, use and storage in the UK
Net Zero Teesside is an integrated CCUS project that will store the CO2 emissions from carbon intensive industries situated in the Teesside industrial cluster. The project aims to decarbonize a number of carbon-intensive businesses by as early as 2030 and deliver the UK’s first zero-carbon industrial cluster.

Teesside industries account for 5.6% of industrial emissions in the UK and the area is home to five of the UK’s top 25 CO2 emitters. The project is being developed to store up to 6Mte of carbon dioxide each year – the equivalent to the annual energy use of over two million homes.

Although details are still being finalized, the project would comprise both onshore and offshore elements, potentially:

• A high efficiency gas-fired power station, including carbon capture plant, that can deliver low carbon gas power locally and nationally.
• A pipeline for the onward transport of CO2 to the offshore storage site.
• Offshore, a geologically secure site deep under the North Sea where the CO2 will be permanently stored. This will be either a saline aquifer or a depleted oil or gas field. Sites in the southern North Sea have around 1,000Mte of available storage capacity, enough for many decades of storage.

The project is owned by OGCI Climate Investments as a non-operating shareholder and is being developed on its behalf by five OGCI member companies.

As the project progresses, government funding and supportive policy will be crucial to making the project economically viable. The project won £3.8 million in funding as part of the Department for Business, Energy and Industrial Strategy’s call for CCUS Innovation Programme in 2019 and is expected to continue to be funded by the consortium of five OGCI member companies.
Supporting a circular economy
The world needs to use scarce resources in radically new ways; moving from a ‘take, make, waste’ approach towards one in which materials are re-used, recycled, repurposed and redirected to extend their purposeful life for as long as possible. BP can contribute to this through the way we use resources in our businesses and by shifting our mindset to design and operate with circularity in mind. We could see waste first and foremost as a possible feedstock for other processes.

This is already happening in some parts of our operations. For example, Downstream is working with Virent and Johnson Matthey to advance a bioforming process for the production of bio-paraxylene, a key raw material for renewable plastics.

Circular thinking is in its early stages across all industries, but we will continue to explore new ways to support it.

Energy with purpose
Joining forces to tackle plastic waste
Leading companies – from food, drink and consumer goods giants to waste management, packaging and recycling specialists – have joined forces with BP in a new consortium to help tackle plastic waste by accelerating the commercialization of BP Infinia enhanced recycling technology.

BP, Britvic, Danone, Unilever, ALPLA and REMONDIS have combined their capability and experience to develop a new circular approach to dealing with polyethylene terephthalate (PET) plastic waste. In particular, they will work to speed up bringing the recycling technology to market in order to target the difficult-to-recycle plastic food trays and coloured bottles that are currently thrown away.

BP Infinia is an enhanced recycling technology designed to turn opaque and difficult-to-recycle PET plastic waste into recycled feedstocks that can be used to make new, high-quality PET plastic packaging again and again, with no loss in quality. The aim is to create an even stronger circular PET economy where all items and applications in future can be recycled back into their original purpose.

We plan to build a $25 million pilot plant in the US to prove the technology on a continuous basis, which we have targeted to be operational around the end of 2020.
Creating low carbon businesses

We’re growing our low carbon and renewables businesses, investing in low carbon activities with potential to support the energy transition, and working with others, for example, through the Oil and Gas Climate Initiative (OGCI) $1 billion fund for research and technology.

Growing our low carbon and renewables businesses
BP has been in renewables for more than 20 years. We’ve played a part in the sector’s transformation from its early promise to becoming the fastest-growing energy source in the world.

Our experience has taught us many vital lessons, including how to prove technologies and processes, then roll them out at commercial scale. We’ve also learnt the value of complementary partnerships, for example through a 50:50 venture in the solar business Lightsource BP. By combining Lightsource’s solar development experience and track record with BP’s global scale, reach and relationships, we aim to create real change on the energy landscape.

Investing in low carbon activities
We’re currently investing at least $500 million a year to support low carbon activities, including our renewables businesses and acquisitions. Around $200 million of this investment is used to develop options for lower carbon businesses in five areas: advanced mobility, bio and low carbon products, carbon management, digital transformation, and storage.

Efficient financing
We’re looking at the efficient financing models that are emerging in the evolving renewable energy sector and that play a role in creating value in this sector. Renewable power projects can be highly attractive investments for certain types of investors, particularly when underpinned by long-term power purchase agreements. Finance can be raised against the assets, alongside equity investment, and allows greater scale to be realized.

Lightsource BP is an example of this and has a very successful track record of raising funding to support its growth and expansion. The BP Bunge Bioenergia joint venture was also able to obtain finance secured against its assets, again enabling BP to grow its participation in biofuels and biopower with limited further BP investment.

Biofuels
Using biofuels at increasing scale can help to reduce emissions in the global transport system. In our biofuels business, we produce ethanol from sugarcane in Brazil, which has life cycle greenhouse gas (GHG) emissions around 70% lower than conventional transport fuels.

In 2019 we made a step up in scale and in ambition through a 50:50 joint venture with Bunge to create a leading bioenergy company in Brazil, one of the world’s largest and fast-growing markets for biofuels and biopower.

BP Bunge Bioenergia brings together two businesses with complementary assets and experiences. It creates a highly efficient producer of ethanol and low carbon biopower and has grown our existing biofuels business by more than 50%. The joint venture is now capable of producing around 2.3 billion litres of ethanol equivalent a year. In 2019, BP’s three former sites produced 796 million litres of ethanol equivalent.

In order to better connect our ethanol production with the country’s main fuel markets, we operate a joint venture 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.

Read more about Lightsource BP on page 32.
Building our bioenergy capability

BP Bunge Bioenergia operates in Brazil, the world’s second largest and most integrated market for ethanol as a transport fuel. Around 75% of all road vehicles in the country are able to run on ethanol. In 2019 ethanol demand increased by 10% compared with 2018 and is set to increase by up to 55% by 2030.

The joint venture operates 11 biofuel sites in Brazil, of which eight were previously operated by Bunge and three by BP. These sites provide annual crushing capacity of 32 million metric tonnes and BP Bunge Bioenergia is ranked as the second largest player in the sugarcane ethanol biofuel industry in Brazil based on its effective crushing capacity. It has the flexibility to produce a mix of ethanol and sugar.

In addition to its core operation, BP Bunge Bioenergia generates enough renewable energy, fuelled by biomass from the sugarcane it uses, to power all its sites and sell surplus electricity to the Brazilian power grid.
In our 2019 Energy Outlook ‘rapid transition’ scenario, renewables account for around 30% of primary energy by 2040.

In November 2019 Lightsource BP became the first company in the UK to provide a reactive power service from a solar plant at night. The power was delivered through UK Power Networks’ distribution network and has the potential to help National Grid’s Electricity System Operator (ESO) manage voltage on the UK transmission network. The trial follows three years of testing and development through the ‘Power Potential’ project run by UK Power Networks and ESO. This project has the potential to save UK energy customers over £400 million by 2050 and provide up to an additional 4GW of power capacity.

Lightsource BP believes the use of bi-facial solar panels will boost the amount of solar energy generated at its solar farms. Tests have shown that these panels can increase electricity output by almost 15%, but this can be much higher if the ground beneath the panel is as reflective as possible. Lightsource BP is now working with a grass seed company in Norfolk to find the ‘most reflective’ grass type to grow underneath its bi-facial panels in the UK.

Wind energy

We’ve installed aerodynamic enhancements on various turbines across our wind business. The technologies are designed to increase the amount of energy captured from the wind and have helped increase overall annual energy production per unit by between 1-2%. We’re also using drones to complete detailed and one-off integrity management inspections of blades. Drones allow us to take high-resolution images of any blade damage and then schedule the appropriate repairs and maintenance. Their use also reduces risk by eliminating the need for people to access the blade directly.

Renewable products

Butamax®, our 50:50 JV with DuPont, has developed technology that converts sugars from corn into bio-isobutanol – an energy-rich bioproduct that has a variety of applications, for example in making paints, coatings and lubricant components. It’s a lower carbon alternative to isobutanol and can be blended with gasoline at higher concentrations than ethanol. We’re exploring market opportunities for the product.

Alternative Energy developments

Our Alternative Energy low carbon power unit is looking at opportunities to create value at the interplay between gas and renewable energy. Technology has the potential to revolutionize ‘emerging value chains’ and we’re developing a number of digital platforms to connect consumers with local, low carbon electricity to power their homes and transport.

1st Lightsource BP became the first company in the UK to provide a reactive power source from a solar plant at night.
Energy with purpose

Investing in digital energy solutions

BP is expanding its digital energy portfolio by investing in an exciting energy management company called Grid Edge. The technology uses artificial intelligence to help businesses and other organizations use energy more efficiently by predicting, controlling and optimizing their buildings’ energy profiles. Sophisticated cloud-based software creates predictive data by anticipating a building’s energy profile by drawing on multiple data sources, including weather forecasts, expected occupancy levels and periods of high renewable power generation. Effectively, Grid Edge technology enables customers to use their buildings’ flexibility in energy demand and generation like a giant battery, to reduce costs and carbon emissions. Already in use in the UK in buildings such as the Bullring shopping centre, Birmingham, and Birmingham Airport, Grid Edge has helped organizations to reduce energy costs and carbon emissions.

Grid Edge supports our strategy to create an ecosystem of distinctive, digitally-enabled, low carbon businesses for commercial and industrial customers worldwide.”

Dev Sanyal
Chief executive, BP Alternative Energy
BP Ventures

BP Ventures was set up more than 10 years ago to identify and invest in private, high growth, game-changing technology companies with the potential to accelerate innovation across the entire energy spectrum. Today, it’s focused on exploring new opportunities with the potential to help us deliver the energy transition.

By creating new businesses, our ultimate ambition is to build a thriving eco-system of lower carbon energy and smart digital businesses. Venturing exposes us to the emerging technologies that will shape the future and can help develop our understanding of new business models.

Our corporate venturing activities include investments in Grid Edge in the UK and R&B in China. Both companies use artificial intelligence (AI) technology that enables customers to predict, control and optimize their buildings’ energy profiles to achieve cost and carbon savings.

Backing electric vehicles (EVs)

We’ve grown our presence in EV charging in recent years, with a focus on the key markets of China, UK and Germany, where we aim to build the fastest, most convenient networks for EV customers.

We already have more than 7,500 charging points across the UK through BP Chargemaster, the country’s largest public electric charging network, and in 2019 we began installing 150kW ultra-fast electric vehicle chargers at our BP retail sites. This new technology brings charging for the next generation of EVs closer to the speed and efficiency of refuelling a passenger car with petrol. All of the electricity supplied through our public charging network is certified as 100% renewable through the Renewable Energy Guarantees of Origin (REGO) scheme. And we’re exploring other ultra-fast battery charging technologies through our investments in StoreDot and FreeWire.

We’re working with car manufacturers to develop lubricants that can help meet the changing needs of vehicle engines. For example, we already supply e-transmission fluids to a number of the world’s largest manufacturers and we’re developing fluids that enable the use of batteries with significantly enhanced thermal management performance.

>$500m

invested in low carbon activities in 2019
Energy with purpose

Building electric vehicle charging networks in China

Where better for BP to test our EV charging aspirations at scale than in China? The country is home to the largest and fastest-developing EV market, with 50% of all battery EVs currently running on its roads.

We’re involved in a number of joint ventures and are investing in innovative businesses. These include a joint venture with DiDi to provide fast-charge and convenience services that use DiDi’s app-based platform. This platform is currently accessed by around 550 million users and serves one million EVs.

We’ve also opened the first BP-branded fuel station that offers fast-charge services in China, through a joint venture with Dongming Petrochemical.
Safety

Why it matters
Safety is a core value and creating a safe and healthy workplace is our top priority, involving everyone at BP. Improving safety also makes us a more efficient business.

What we value
Cause no accidents, no harm to people and no damage to the environment.

Our approach
We focus on process safety, personal safety, health and wellbeing, and security.

• We understand that even the best processes can have weaknesses that may lead to accidents, so we take steps to design these out
• We focus on preventing incidents – reacting swiftly and effectively if they happen
• We learn from every incident

Performance
• We suffered two fatalities this year – you can read more information on page 41
• Further improvements in our recordable injury frequency (RIF) driven by a sustained focus on personal safety over several years
• An increase in tier 1 and tier 2 safety events across the group, attributable mainly to assets acquired over the past 18 months

What’s next
• Training 2,000 more leaders in safety through our new ‘leading in operations’ programme
• Launching new mental health training for our line managers and starting to roll out our wellbeing charter at all BP sites

In this section

Process safety 38
Personal safety 39
Safety performance 41
Energy with purpose means prioritizing people’s health and safety
Process safety

We want to improve safety through the equipment and systems we use. We do this by applying good practice in their design and implementation and by planning every stage of our operations with safety risks and their mitigation in mind. Through our operating management system (OMS) we work to reduce the number and severity of process safety events.

In 2019, the total number of tier 1 and 2a incidents increased, mainly reflecting performance in assets acquired over the past 18 months. Removing these assets for a year-on-year comparison, the total reduced slightly in 2019 and represented a 32% reduction over the past five years.

Each of these incidents has been or is being investigated so that lessons are learned about how we can improve performance. We will continue to focus on improving the safety performance of our assets.

We work in partnership with industry experts and host governments to prevent and reduce the impact of spills. In 2019 we took part in large scale oil spill prevention training exercises in Alaska and the Gulf of Mexico.

Spills and spill prevention

We’ve made good progress in preventing and reducing spills over the past 10 years. This reflects the targeted actions we’ve taken to improve performance. However, in 2019 we saw an increase in the total number of oil spillsb from 124 in 2018 to 152. This is mainly due to acquisitions over the past 18 months but we are taking steps to improve the performance of these assets.

Over several years we’ve focused on building competency across BP, resulting in a safe system of work, which supports the identification of process safety risks and a reduction in spills. We’re sustaining this through training in key processes, such as isolations or re-instatements and the operation of valves, carried out by our operators. We choose the most appropriate investigation methodology, depending on an incident’s severity and complexity. The most robust methodology we use, for investigating the most serious and complex incidents, is the ‘logic tree’. This is BP investigation training and certification which has been externally accredited by The National Examination Board in Occupational Safety and Health.

Our risk process has been implemented across the group and is continuously updated to help enable us to use the most effective processes and tools. In Upstream, all of our regions develop annual loss of primary containment (LOPC) plans, which address the key measures they need to take to prevent LOPCs, which comprise the vast majority of all spills. The regions collaborate with each other to share best practice and a central team works to make sure that any systemic gaps are closed rapidly.

20 April 2020 marks 10 years since Deepwater Horizon

Making BP safer, reducing risk and rebuilding trust was the key focus of the 10-point plan that Bob Dudley, then our chief executive, announced in 2011.

A decade later, we’ve achieved improvements in our safety performance through training and technology, heightened standards and continuing work on incident prevention. Our BP values and behaviours are embedded across the group. They continue to reinforce systemic working and an open culture where people feel empowered to speak up if they believe something is not right.

Human performance

People’s actions and decisions are influenced by the conditions in which they work: the processes they follow, the equipment and systems they use and their surrounding environment – these all make a difference. We can improve or redesign these aspects to reduce the likelihood of human error. To do this, we’re making greater use of human performance techniques.

Steered by our group operations and risk committee, we focus on building capability – embedding good human performance approaches and skills so that everyone involved in a process can support safety. We have a number of subject matter experts and human performance champions, all actively involved across our Upstream, Downstream and other businesses and corporate segments. At the end of 2019, our BP businesses had human performance strategies in place and around 9,000 of our people had completed human performance e-learning modules.

Pipe mapping: corrosion management at our US Whiting refinery.
Collaboration and sharing experience
BP’s Upstream global operations organization hosts an annual industry conference to strengthen safety through collaboration and shared experience. In 2019, CEOs and safety leaders from more than 20 key suppliers, together with leaders from Total, Shell and Chevron, attended a safety leadership and human performance event in Baku, Azerbaijan. Participants visited BP-operated sites and gained hands-on experience and understanding of a key aspect of human performance – identifying the gaps between ‘work as we believe it’s done’ and ‘work as it’s actually done’. Following the conference, attendees felt better equipped to build human performance processes into their operations.

Covering both process and personal safety, ‘leading in operations’ (LiO) is our new training approach to operational safety leadership. Designed to help us develop world-class operational leaders who are well equipped and highly capable, it’s delivered through a mix of site visits, face-to-face and online learning and coaching – providing those who complete it with a network they can use to learn, share, discuss and continuously improve safety. Our aim is to put around 2,000 BP operations leaders through LiO.

We continue to learn lessons from the aviation and nuclear industries about how to design the workplace around people to improve safety. We have shared our resulting capability development programme through the Energy Institute, so that our energy sector peers can access the working knowledge we’ve gained on human performance. Our aim is to support the growth of human performance skills across the industry.

Personal safety
We focus on keeping our employees and contractors safe and alert to potential hazards in their workplaces.

We’ve taken several important actions to improve road safety for those driving on behalf of BP and vehicle passengers in 2019. Following the fatality in our US lubricants business in 2018, we ran a campaign specifically focused on vehicle breakdown safety and have mandated the carrying of safety vests in the vehicle for use during breakdown procedures. We’re making it a requirement that an appropriate emergency response plan is in place for ‘higher risk driving activities’ and we have also mandated the use of in-vehicle cameras for vehicles undertaking these activities. These vehicles include multi-passenger transport vehicles, such as coaches, buses and minibuses as well as vehicles used to transport dangerous goods, including fuel tankers. All vehicles in these categories, operated by BP, will be retrofitted to carry cameras over the next two years.

Health and wellbeing
Health and wellbeing are inextricably linked to safety in the workplace. We take a proactive approach by designing employee wellbeing into our operations and continuously identifying areas for improvement.

Fatigue is defined as a lack of mental alertness arising from lack of sleep. It can affect performance, putting individuals and their teams at risk. We’ve developed group guidance on fatigue management, working in collaboration with leaders in health in the upstream part of our business. This approach now applies to all BP businesses globally.

During 2019, we’ve revised our fatigue awareness & countermeasures training (FACT) for employees in order to make it more effective. The new training will be more focused, covering two key issues: the importance of recognizing fatigue and the importance of good quality sleep. Employees will also be able to access further training through FACT, including how to manage issues relating to shift work, commuting and jet lag. The new training is set to be launched later in 2020.

In many countries psychological health is included in workplace regulations and at BP the requirement in our OMS to identify and reduce work-related health risks includes mental health. It’s also important to recognize that work can have a positive impact on mental health by providing people with the opportunities to use and develop their skills, increase motivation, challenge their thinking and interact with others. We take the mental health of our employees and contractors very seriously. In 2019 we ran an awareness campaign across BP as part of our increased focus on mental health. We also expanded our promotion of the employee assistance programme across the business, aiming to reach more employees and explain the benefits of using it. In 2020 we will be launching new mental health training for our line managers and starting to roll out our wellbeing charter to all BP sites.

Energy with purpose

Collaborating for better safety performance
Our biofuels business has collaborated with BP safety and operational risk experts to build a more effective safety culture.

As it is across BP, safety is the number one priority for BP biofuels. However, with operations spread across many locations and a large workforce comprising both BP employees and contractors, it’s also a major challenge.

Active collaboration involved the development of more and better targeted safety communications, bespoke commitment workshops to change mindsets, and continuous improvement projects to build personal empowerment. The result is a reduction in biofuels’ rolling recordable injury frequency of 24% between November 2018 and November 2019.
Safety through technology
We believe technology, particularly the use of robotics, can transform BP – helping us deliver safer, more reliable and competitive operations while reducing our carbon footprint. Robotics has the potential to deliver this impact across the breadth and lifecycle of our operations – from surveying in deserts to decommissioning in deep water.

In a first for our industry, we’ve piloted technology to measure methane emissions from remote offshore platforms in the North Sea, using a drone that has its origins in the hunt for life on Mars. It circled our Clair platform for around 90 minutes while live-streaming data for analysis, completing what may have been the longest civilian drone flight ever undertaken in the UK – more than 185 kilometres. We have plans to roll this methane detection capability out across our North Sea assets in 2020.

We now use drones routinely to perform visual inspection tasks, which reduces the need for people to work at heights. Their use also enables us to keep hot turbine exhausts or flare stacks operating during inspections, avoiding the increases in emissions that occur during plant shutdown and restart.

We’re also testing the use of drones to operate in confined spaces – for example the cargo tanks in our floating production systems in Angola – and trialling crawling robots. At our Cherry Point refinery in Washington, US, these are being used to spot microscopic cracks in the internal walls of our hydrocracker reactor.

Security
Hostile actions, including cyber attacks, could harm our people or disrupt our operations. These actions might be connected to political or social unrest, terrorism, armed conflict or criminal activity.

We take these potential threats seriously and assess them continuously. Our 24-hour response information centre in the UK monitors global events with these threats in mind. The centre uses state-of-the-art technology to monitor evolving high-risk situations in real time. It helps us to assess the safety of our people and provide them with practical advice if there’s an emergency.

This year, we faced a number of protests. We worked with local police, including marine authorities, to minimize any disruption from these to our operations.

Energy with purpose

Using maritime robotics to improve safety
A new wave of marine and subsea robots is revolutionizing how we understand our underwater operating environment. These maritime robots, more generally known as unmanned surface vessels and unmanned underwater vehicles, are loaded with sensors and cameras to capture data from the oceans safely and efficiently.

Using these robots rather than a conventional large ship for the same task, could enhance safety by taking crew out of harm’s way.

The use of unmanned vessels now forms a part of our maritime autonomous systems strategy, which involves evaluating and piloting new robotic technologies.
Cyber threats
The severity, sophistication and scale of cyber attacks continue to evolve. The increasing digitalization and reliance on IT systems makes managing cyber risk an even greater priority for many industries, including our own. The risk comes from a variety of cyber threat actors, including nation states, criminals, terrorists, hacktivists and insiders. As with previous years, we have experienced threats to the security of our digital infrastructure, but none of these had a significant impact on our business in 2019. To encourage vigilance among our employees, our cyber security training and awareness programme covers topics such as 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.

At our security operations centre we track and take steps to combat any attempts to breach our cyber security and also help to shape and co-ordinate appropriate training and advice for employees. More than 70,000 employees and contractors completed mandatory training in 2019.

Safety performance
We track our safety performance using industry standard metrics and work continuously to improve all aspects of our performance. Our focus on safety has resulted in steady improvement against international oil and gas industry benchmarks.

Tragically, we suffered two fatalities in 2019. In July, a fire-fighting assistant in our biofuels business in Brazil was fatally injured following a fire truck accident while attending to an agricultural fire. In October, a contractor at our Whiting refinery in the US was fatally injured when he fell from a scaffold ladder. We are deeply saddened by these losses and continue to work towards eliminating injuries and fatalities in our work.

Process safety
The total number of tier 1 and 2 incidents increased in 2019, mainly reflecting performance in assets acquired over the past 18 months. Removing these assets for a year-on-year comparison, the total reduced slightly in 2019, and represented a 32% reduction over the past five years.

Personal safety
Our recordable injury frequency (RIF) continues to show a downwards trend, with fewer recordable injuries than in any year since our records began. RIF reduced by 16% in 2019 including the addition of BHP assets, representing an overall reduction of 32% over the past five years – this equates to 155 fewer recordable injuries in our facilities.
Our value to society

Why it matters
We want to help people improve their lives through the products and services we provide and our presence in local communities worldwide.

What we want to do
Support a growing global population in ways that contribute to the energy transition and so that our operations have a net positive impact in local communities.

Our approach
We work hard to manage our social and environmental impacts and opportunities:

- We engage with local communities to manage the impacts of our presence
- We work with communities to identify opportunities for them to benefit from our activities
- We invest in local initiatives, focusing on economic development, education, the environment and engagement with culture or arts

Performance

- $84 million committed to support sustainable development in local communities
- Launched the new BP labour rights and modern slavery principles

What’s next

- Further work with external partners to find ways of standardizing our human rights due diligence and assessment processes
Energy with purpose means using our experience, expertise, reach and relationships to improve lives.
Creating social value

We recognize the importance of creating social value in ways that are compatible with the energy transition and we’re determined to do so through our business activities. We make a contribution to societies around the world, as an energy provider, employer, taxpayer, supply chain participant and investor in local communities.

- **As an energy provider**
  - We provide heat and light for homes, fuel for mobility and power for industry
  - Our products and services improve the quality of life for millions of people, helping to lift them out of poverty and to meet their needs and aspirations

- **As a supply chain participant**
  - We try to procure goods and services from local suppliers whenever practical
  - We hold our suppliers to our high standards
  - We support ethical employment practices and the fight against bribery and corruption

- **As an employer**
  - We create jobs and support local businesses around the world
  - We aim to recruit nationally and locally
  - We succeed by investing in the professional development of our employees

- **As a taxpayer**
  - We make a direct contribution to economies
  - We manage our tax affairs fairly and transparently
  - We publish an annual document outlining our approach to tax at bp.com/revenuetransparency

- **As an investor in local communities**
  - We engage with local communities to provide sustainable benefits
  - We support ethical employment practices and the fight against bribery and corruption

---

**Economic value generated by BP**

- **$283.3bn**
  - As an energy provider
  - We provide heat and light for homes, fuel for mobility and power for industry
  - Our products and services improve the quality of life for millions of people, helping to lift them out of poverty and to meet their needs and aspirations

- **$233.6bn**
  - Suppliers
  - Sourcing goods and services from around 50,000 suppliers
  - We try to procure goods and services from local suppliers whenever practical
  - We hold our suppliers to our high standards
  - We support ethical employment practices and the fight against bribery and corruption

- **$9.8bn**
  - Employees
  - Providing jobs for 70,100 people worldwide
  - We create jobs and support local businesses around the world
  - We aim to recruit nationally and locally
  - We succeed by investing in the professional development of our employees

- **$6.9bn**
  - Governments
  - Contributing to economies through the taxes we pay
  - We make a direct contribution to economies
  - We manage our tax affairs fairly and transparently
  - We publish an annual document outlining our approach to tax at bp.com/revenuetransparency

- **$0.1bn**
  - Communities
  - Supporting efforts to improve standards of living
  - We engage with local communities to provide sustainable benefits
  - We invest in sustainable development projects that align with local needs

---
Social investment

We make targeted social investments that contribute to sustainable development. These support our community engagement and align with specific local needs.

Generally, we focus on economic development, education, environmental programmes and engagement with culture and the arts. In 2019 our social investments included funding from BP Angola for the Halo Trust, which trains local women as ‘deminers’ to help find and clear landmines. Thanks to this investment, the Halo Trust has employed 31 new staff as it works to help the government reach its target of making Angola landmine free by 2025. Another example of the investments made in 2019 is BP South Africa’s partnership with the National Empowerment Fund to create an enterprise development fund that provides funding, mentoring and business development coaching for those working in our dealer network, with a particular focus on helping black women.

Improving access to energy can help people build better lives for themselves. In India, we’re working with the Clean Energy Access Network (CLEAN) to give local people the skills required to work in the energy generation sector, which has the potential to bring clean energy, such as solar, to people in rural areas. As this sector grows in India, these skills will be critical in ensuring the long-term efficiency of power generation equipment. Providing this training can also play a key role in mitigating rural-to-urban migration which is a problem in many rural communities.

In the UK we also invest to develop talent in our local communities through our support of STEM subjects (science, technology, engineering and maths).

Read more about our STEM projects at bp.com/ultimatestemchallenge.

Community spend by region in 2019 ($ million)

- US and Canada: 27.8
- Sub-Saharan Africa: 13.3
- Middle East and North Africa: 16.2
- Europe: 12.3
- Asia Pacific: 9.8
- South and Central America: 4.4

BP Foundation

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

- $9.1 million in employee contributions that the BP Foundation supplemented with grants of $8.3 million
- $358,000 contributed to local communities affected by extreme events, including:
  - $150,000 to support International Red Cross relief efforts in Mozambique and Zimbabwe after cyclone Idai
  - $100,000 to the Australian Red Cross to support disaster relief efforts following the Australian bush fires

Supporting a ‘just transition’

We’re participating in the wider global conversation around climate change and the energy transition. For example, BP employees have taken part in Vatican Dialogues on this topic and we’ve engaged with external groups to improve our understanding of the issues involved in a just transition. We believe our engagement and investments in local communities where we work can help make sure that they benefit from a just transition to a lower carbon future. This is the case for a number of our initiatives, including our access to energy projects in Indonesia and in Angola.

Energy with purpose

Investing to improve water supply infrastructure in Mauritania

Following engagement with regulators and community representatives to understand their needs, in 2019 we funded the upgrade of water supply infrastructure for villages along the Senegal river in the N’diago region. Currently these villages receive a very unreliable source of water for drinking. BP is financing the upgrade of a pumping station and treatment plant, water distribution system and storage system to improve the volume and reliability of drinking water to around 7,200 people (in 2018), and to accommodate an expected increase in population to 11,500 by 2038. This scheme is currently under development.
Local workers and suppliers

Whenever possible, we try to recruit our workforce from the community or country in which we’re based. In some places, governments require this, but it’s our approach wherever we work because we believe it benefits both local communities and BP.

Local knowledge is invaluable and we try to support local workers with capability development programmes. We’ve done this around the world over the past few years. In the West Nile Delta, we provided training on vocational skills and health and safety standards for local people. We reached more than 2,000 people by the end of 2019.

In Tangguh, through internships and apprenticeships, we’re aiming for an 85% Papuan workforce by 2029. We’re also helping local people to establish businesses. In Senegal we’ve helped local businesses to meet our high standards for suppliers. We’ve applied a due diligence process to assess supplier track record, which helps them identify ways of strengthening their alignment with international standards. The outcome in 2019 was that more local companies conform to international standards and some have become BP suppliers since 2006.

In 2019, 92% of our workforce in Azerbaijan were Azerbaijani nationals.
Human rights

We respect the rights of our workforce and those living in communities near our sites who are affected by our activities. We set out our commitments in our human rights policy and code of conduct, and our operating management system contains requirements and 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 at Work, including the Core Conventions. These conventions are particularly pertinent as many accepted workforce norms and standards are based on them. They underpin our own BP human rights policy.

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.

When working to remediate any impacts on the rights of local communities we are open to co-operating in good faith to agree remedial actions through state-led mechanisms such as the Organisation for Economic Co-operation and Development national contact points. We recognize the importance of accessible and effective operational-level grievance mechanisms in addressing our impacts.

Read more about human rights at bp.com/humanrights.
Tangguh has had an education and training programme together with the local government, education foundation and communities since 2004. In 2019 it provided full scholarships for 79 senior high school and university students. Training and mentoring have also been provided for more than 300 education agency staff and teachers.

To help meet its commitment to have an 85% Papuan workforce by 2029, Tangguh runs internship and apprentice programmes. In 2019 108 Papuans were enrolled in its technician apprentice programme, 32 of them going on to work in operations. Papuans accounted for 61% of the workforce in Tangguh operations at the end of 2019 and made up 20% of those working on its expansion programme.

Tangguh has supported public health programmes in selected villages since 2004, including efforts to combat malaria. In 2019 the malaria incident rate was 0.02%. In 2019 Tangguh and the local government established an emergency service to help local women give birth safely.

Supporting local communities at BP Tangguh LNG

Tangguh LNG in Papua, Barat Province, Indonesia, supports local efforts to enhance the quality of life of local communities through participative and accountable development practices that contribute to operational sustainability.

Most of the communities surrounding Tangguh LNG rely on fishing, so we engage with fishermen and local authorities to minimize disturbances to their fishing grounds. From 2018 to 2019 Tangguh also purchased local produce and fish worth $2.1 million from the local community for catering in its operations.

We help local suppliers to develop their business skills through the Tangguh indigenous enterprise development programme, set up in 2016. By the end of 2019 more than 200 entrepreneurs and local businesses had received training and mentoring. Tangguh’s efforts since 2006 helped 54 Papuan companies to become contractors with total contracts worth more than $250 million.

Engaging throughout the project lifecycle

Our social engagement strategies respect local circumstances and the needs of communities at different stages of the project lifecycle. We engage through our community liaison officers (CLOs), who play a key role in building trust at a local level.

CLOs manage our day-to-day relations with local communities and other stakeholders affected by and living close to our projects and operations. They’re the key contact for community members who want to engage with BP. CLOs handle community requests and grievances – promptly, fairly and consistently. They work hard to build relationships based on trust and mutual respect and provide support during the implementation of community development initiatives designed to improve health and safety, education and capacity building.

We engage with local communities from the early stages of projects and as an ongoing process, always respecting local legislation and culture. As an example of early stage engagement, in 2019 we involved local communities in The Gambia in assessing potential impacts before carrying out any offshore exploration activities.

We engage with local people and their representative bodies, listening to their concerns and learning from them. Our aim is to find ways of working that deliver mutual benefit, balancing their needs with our business goals.

**Energy with purpose**

We engage with local communities to help prevent or reduce the risks and impacts of our operations, in ways that can directly benefit them if possible.

We focus at a local level, concentrating on the varied circumstances we meet wherever we operate or plan to do so. We engage with local communities throughout the life cycle of our operations, from planning through active operations to decommissioning and site remediation.

We aim to minimize the impacts that our presence could have on local communities and to ensure they benefit from our activities. We also want to reduce and mitigate the impacts our operations may present to the livelihoods, land, environment, cultural heritage, health and wellbeing of local people, including indigenous people.

We work with humility and try to earn local people’s trust through our transparency and actions. We need their local skills and knowledge, as employees and stakeholders. Their co-operation is key to ensuring the success of our businesses.

We engage with local people and their representative bodies, listening to their concerns and learning from them. Our aim is to find ways of working that deliver mutual benefit, balancing their needs with our business goals.
Our impact on communities

We recognize that our activities can have a negative impact on the rights of people in communities near our sites.

We screen our projects to minimize the risk of this happening and work with local people to prevent, reduce and manage any impacts that occur. For example, in Mauritania and Senegal, we’ve developed a framework for engagement with local fishing communities. We’ve put in place community liaison officers to provide a focal point for contact, introduced feedback and grievance mechanisms, and forged strong links with the community council, which represents local stakeholders. Using a project patrol boat has also helped us and local fishermen to avoid unauthorized vessels from entering the safety exclusion zones near to our operations.

Community feedback

We have operational-level community grievance mechanisms in place to capture feedback, including complaints. This can come through direct engagement with BP employees, especially community liaison officers, and by email or telephone. We try to respond to substantiated complaints promptly and when we’ve caused or contributed to any adverse impact, we provide or co-operate in providing remediation through legitimate processes.

In 2018 we issued guidance on community complaints mechanisms, in line with the UN Guiding Principles on Business and Human Rights criteria. As a result, in 2019 we engaged relevant businesses and provided training on how to manage grievances effectively. We also developed new requirements for community grievance mechanisms in our operating management system.

In 2019, most of the concerns raised by people living near our projects and operations related to damage to their property or crops and also to job opportunities. Overall, the number of complaints decreased. We attribute this to the fact that key projects have now become steady-state operations.

In Azerbaijan, throughout the Shah Deniz 2 and South Caucasus Pipeline Expansion (SCPX) projects and subsequently in the operations phase, we’ve worked closely with the communities affected by our activities, engaging with them to communicate and explain the processes we use to manage community concerns and social risks. This and the completion of project activities in mid-2018 has resulted in a significant decrease in the number of SCPX community complaints, from 47 in 2018 to 25 in 2019. All complaints have been addressed and closed.

In many cases our community engagement and grievance management mechanisms are open to stakeholder monitoring, such as project leaders’ consultant reports and site visits. In addition, information on our social performance is widely shared with the relevant communities, as well as local and international NGOs.

In 2019 we engaged with Crude Accountability – a US NGO promoting environmental and human rights in the extractive industries – in order to discuss our community engagement processes.

Community complaints in 2019

- Damage to property/crops: 27%
- Job opportunities: 24%
- Nuisance (odour, noise and dust): 19%
- Community investment: 10%
- Security arrangements: 10%
- Other: 6%
- Flaring: 4%
- Discharges to water: 0%
Labour rights

We respect the rights of our workforce and people working at our sites, including those working through our contractors and suppliers. These commitments are included in our code of conduct and human rights policy.

In our 2018 report, we highlighted concerns related to workforce welfare and labour rights standards that were identified through onsite assessments undertaken as part of our risk-prioritized modern slavery risk management. We used the learnings from the 2018 assessments to inform the development of a more systematic approach to managing labour rights and modern slavery risk.

In 2019 we developed and issued the BP labour rights and modern slavery principles, which have been approved by our group operating and risk committee.

New requirements and guidance on identifying and managing labour rights and modern slavery risks have been introduced into our operating management system to support conformance to the principles. This will help our businesses to assess the risk and put in place effective controls in a proportionate and systematic way, building on existing processes such as supplier pre-contract due diligence, worker induction and contractor management.

BP labour rights and modern slavery principles

We’re committed to respecting workers’ rights, in line with the International Labour Organisation Core Conventions on Rights at Work and we expect our contractors, suppliers and joint ventures we participate in to do the same.

Our expectation is that workers in our operations, joint ventures and supply chains are not subject to abusive or inhumane practices, such as child labour, forced labour, trafficking, slavery or servitude, discrimination, or harassment.

To assist in communicating these expectations to our businesses, contractors and suppliers we’ve developed the BP labour rights and modern slavery principles. The principles clarify our position on a range of issues, including workers having clear employment contracts, employer-pays principles in relation to recruitment fees, and not withholding worker passport or identity documents. They build on and add to the existing high-level requirements and expectations in our code of conduct, human rights policy and supplier expectations.

The principles are now being cascaded through our businesses and will be communicated to our contractors and suppliers through our procurement processes. [Read more on bp.com/modernslavery.]

Working with contractors and suppliers

In 2019 we continued working with our contractors and suppliers in response to the labour rights issues and modern slavery indicators identified during modern slavery risk reviews in previous years.

- The dry dock yard that provides maintenance and repair services to BP shipping in Dubai has agreed a corrective action plan to address issues among their contractors including remediation of recruitment fees and passport retention.
- In Malaysia, a supplier for which we’ve undertaken a pilot labour rights assessment, has completed corrective actions relating to the recruitment and employment of foreign workers.
- At Oman’s Khazzan and Ghazeer fields, systematic monitoring processes have been put in place, including pre-deployment checks and site walkovers and worker surveys. The number of workers charged recruitment fees in the last two years when mobilized to the site has been significantly reduced. In addition, a contractor self-verification process to assess conformance with BP Oman’s worker welfare and human rights policy has been put in place and is regularly reviewed by BP.
- In Mauritania and Senegal, we’ve put in place action plans with certain contractors and suppliers to correct issues around inadequate grievance procedures, poor communication of policies and unclear wage information.

BP successfully brought the Khazzan major project into production in 2017.
Energy with purpose

Supporting labour rights in Malaysia

Following an audit in 2017, which identified a number of issues relating to the labour rights of foreign workers employed by five third party service companies, the BP Port Klang lubricants plant in Malaysia has taken positive and effective action to rectify them.

Around 90 BP employees and 250 contractors work at the plant of which fewer than 10 are foreign workers. The audit highlighted issues faced by the foreign workers at the plant including unlawful recruitment fees, salary deductions and unclear or a lack of formal recruitment policies, processes and terms of employment. It also highlighted the need for greater oversight of these service companies.

In response a number of new measures were introduced. These included modern slavery and labour rights risks training for plant management and daily site walkovers by BP site supervisors to engage with workers, inform them of their rights and encourage them to speak out about issues.

The service companies identified in the audit were required to attend two days of modern slavery and labour rights training provided at the plant to understand the local context and discuss how some existing site processes could be used to support improved labour rights management. These service companies were also required to make certain commitments on modern slavery and labour rights. The plant made sure that BP labour rights principles are made clearer to contractors, are explained during induction sessions, and are included in the specialist training introduced for high risk contractors in 2019.

Contractors can raise grievances through formal and informal channels. These grievances are then followed up and resolved with the relevant contractor companies using the BP labour rights and modern slavery principles as the basis for the discussion.

Further actions planned for 2020 include a third party review of the corrective actions being taken by the service companies and a resourcing review including appointment by BP of a dedicated modern slavery and labour rights resource for the country.

Working with others in our industry

We’re working with others in our industry to find ways of standardizing our human rights due diligence and assessment processes. Together we’ve developed a system that enables participating energy companies to share contractors’ responses to a standard human rights due diligence questionnaire.

This approach encourages focus on shared industry expectations for labour rights performance and means contractors need to make just one rather than multiple submissions to energy companies.

It also enables BP and other participants to improve due diligence and respect for human rights in our supply chains.
Lightsource BP is helping shape the future of global energy delivery by developing solar capacity around the world.

Doing business responsibly

Environment
We respect the environments in which we operate. We also respect the communities that depend on these environments for resources to support their livelihoods.

People
Our people are the most important element of our success. We need a motivated, engaged and diverse workforce to deliver our purpose and lead in the energy transition.

Business ethics
To be a trusted business, we must work to a consistent and high set of ethical standards wherever in the world we operate.

In this section
- Environment
  - See page 54.
- People
  - See page 60.
- Business ethics
  - See page 68.
Energy with purpose means operating safely, reliably and sustainably
Environment

Why it matters
We want to help manage areas in which we work – to minimize any adverse impacts our activities have and find opportunities to make a positive contribution to environmental protection.

What we want to do
Work in ways that result in no accidents, no harm to people, and no damage to the environment, including no net loss to biodiversity when undertaking new projects in sensitive areas.

Our approach
We work hard to understand any environmental and social sensitivities in the areas where we operate. With this understanding we:

• Aim to avoid, minimize and mitigate any adverse impacts
• Respect the local environment and the communities that depend on it for resources to support their livelihoods

Performance

• Reviewed and strengthened the group-wide environmental and social requirements that support our operating management system
• Took delivery of the last three vessels in our new fleet of six LNG carriers – these use around 25% less fuel and emit less nitrogen oxides than our older vessels

What’s next

• Rolling out our revised group-wide requirements to manage our environmental impacts
• Working to develop industry good-practice guidance in line with the launch of the new post-2020 global biodiversity framework

In this section
Decommissioning 56
Sensitive areas and biodiversity 56
Water 57
Air emissions 58
Waste 58
Climate change adaptation 59
Hydraulic fracturing 59
Energy with purpose means valuing and protecting our planet’s natural resources

We respect the environments in which we operate. We also respect the communities that depend on these environments for resources to support their livelihoods.

We approach every major project aiming to understand and sustain the local environment through reciprocal engagement with local communities. To identify potential impacts, we carry out detailed environmental and social assessments before starting major projects. In 2019 we updated our requirements and associated guidance in our operating management system (OMS), for sites to effectively mitigate their environmental and social impacts through the mitigation hierarchy.

We believe that incorporating the principles of circular business models can help us use natural resources, including waste from projects, in a more sustainable way.

Our operating management system

BP operating sites around the world manage their environmental and social impacts in line with our operating management system (OMS), which includes requirements to consult with people who may be affected by our activities.

During 2019 we reviewed and strengthened the group-wide environmental and social requirements that support the OMS. These new group-level requirements now apply to operations as well as projects. They cover relevant aspects of environmental and social practices, mandate carbon management plans for all operations above a threshold, and require closer engagement with local communities. The new requirements will be rolled out from January 2020 and any new projects starting after this date will adhere to them. Existing operations will be developing conformance plans to implement the new requirements in 2020.

Our review builds on the work we’ve done to integrate the requirements of ISO 14001 into our OMS. In 2017 we introduced an innovative approach to this standard, which we call ‘attestation’. This approach, which is driving performance improvements, has established a robust system, based on self-verification, management review and accredited independent third-party reviews and audits. We’ve adapted our OMS to require that all major operating sites are required to attest or certify to ISO 14001.

100% of our major operating sites required to attest or certify to ISO 14001

Project process

Planning

We complete a screening process to identify potential positive and adverse impacts, covering:

- Biodiversity and protected areas
- Freshwater
- Air quality
- Waste and wastewater
- Local employment
- Community health, safety and human rights

Design and construction

We use the results of our screening process to help us identify:

- Adverse impact and risk mitigation measures
- Development opportunities
- Actions during project development, including detailed impact assessments

Operations

Every year, we carry out performance reviews and agree local actions for any ‘issue’ areas. These could include:

- Noise and odour
- Flaring
- Air emissions
- Water use

Decommissioning

We take environmental factors into account when we decommission our projects, focusing on:

- Ways to reuse materials
- Appropriate disposal
- Remediation of sites to their original state before BP arrived
Decommissioning

We take environmental factors into account when we decommission or close down a site, paying particular attention to how we can reuse, recycle or appropriately dispose of materials.

We announced our agreement to divest our assets in Alaska in 2019 but will continue to be involved in decommissioning the Trans-Alaska Pipeline System. In the area of the North Sea where we operated North West Hutton until 2009, our marine analysis has shown colonization by cold-water coral on the seabed since decommissioning that contains species found in natural cold-water coral reefs.

We see waste from decommissioning as an opportunity to reuse and recycle materials back into the production system rather than sending them to landfill. Of the steel taken from four tanks at a former refinery on the Isle of Grain in the UK when they were demolished in 2019, 99% was recycled. Similarly high recycling rates for other platforms were achieved, including the removal of the Miller platform in 2018. This involved moving 40,000 tonnes of material, mainly steel, onshore where 97% of all materials are set to be reused or recycled.

Sensitive areas and biodiversity

We support international efforts to rapidly halt the decline in biodiversity and recognize the need to conserve sensitive areas that house our planet’s rich natural and cultural heritage.

We assess our potential impacts on biodiversity when we plan new projects and we aim to avoid activities in sensitive areas. If activities are likely to take us into or close to an international protected area, we carry out a detailed risk assessment and require executive approval before any physical activities are undertaken. Through our new group practice we set a requirement to achieve no net loss when undertaking new projects in sensitive areas.

No major operated project has entered an international protected area since 2006 and we have no existing operations or projects inside UNESCO World Heritage sites. No new requests to enter an international protected area were submitted in 2019.

For a full list of our major operating sites in or near international protected areas see bp.com/protectedareas.

We review BP activities in or near protected areas each year and disclose where BP is operating. We also engage with others to make sure we keep up to speed with best practice, including conservation organizations such as Conservation International, Fauna & Flora International and The Nature Conservancy.

In addition, academic research helps us to understand biodiversity trends, issues and threats. For example, in Mauritania and Senegal we are working with national and international scientists on the Biodiversity Action Plan for the Greater Tortue Ahmeyim development.

We recognize the important intrinsic links between climate change and biodiversity and we’re making investments in natural climate solutions including REDD (reducing emissions from deforestation and degradation).

2020 is set to be an important year for biodiversity, with the launch of the new post-2020 global biodiversity framework. We welcome this framework and will be looking at our own approach to the topic and working with IPIECA on developing industry good-practice guidance on the implementation of the framework for the oil and gas sector.

Energy with purpose

Understanding biodiversity in the oceans

A marine mammal and sea turtle baseline monitoring and data collection programme was initiated off São Tomé and Principe in 2018 and has continued throughout 2019. The programme aims to help improve knowledge and understanding of the presence and movement of marine mammals and sea turtles around São Tomé. This includes an acoustic marine mammal and soundscape study using a combination of fixed passive acoustic recorders and an autonomous surface vehicle to collect data over a wide area.

We’re also supporting the local NGO Programa Tatô to monitor sea turtle nesting and tagging turtles to see where they are going during and after nesting.

The data from these surveys is not only helping to understand the ecology of these species, but also helps inform our planned activities and avoid the most sensitive areas and times of the year.
Water

Water is a precious natural resource but also a valuable commodity. This is why we actively manage and monitor our water use and take steps to use it more sparingly and sustainably.

We actively manage our freshwater demands in areas of stress and scarcity. Based on analysis using the World Resources Institute Aqueduct Global Water Risk Atlas, in 2019 four of our 26 major operating sites were located in regions with high or extremely high water stress, with another four located in areas of medium to high water stress.

In addition, only 4% of our total freshwater withdrawal was from regions of high or extremely high water stress.

We review water risks every year, taking into account availability, quantity, quality and regulatory requirements. We also use a range of tools, including the Global Environmental Management Initiative Local Water Tool and the World Resources Institute Aqueduct Global Water Risk Atlas.

In 2019 we saw a 4% rise in freshwater withdrawals and a 3% rise in freshwater consumption. This was largely due to increased production, with the freshwater withdrawal and consumption intensities remaining flat compared with 2018.

Water use

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total freshwater withdrawals (million m³)</td>
<td>256.5</td>
<td>275.5</td>
<td>271.0</td>
<td>281.2</td>
</tr>
<tr>
<td>Group freshwater withdrawal intensity (tonnes water per tonne production)</td>
<td>1.0</td>
<td>1.1</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Total freshwater consumption (million m³)</td>
<td>87.4</td>
<td>90.5</td>
<td>88.2</td>
<td>91.1</td>
</tr>
<tr>
<td>Group freshwater consumption intensity (tonnes water per tonne production)</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
</tr>
<tr>
<td>Proportion of freshwater withdrawals returned to the environment (%)</td>
<td>34</td>
<td>33</td>
<td>33</td>
<td>32</td>
</tr>
</tbody>
</table>

Quality of treated water discharges

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil discharge to sea water (mg/l)</td>
<td>19</td>
<td>13</td>
<td>32</td>
</tr>
<tr>
<td>Chemical oxygen demand (COD) of water discharged to freshwater environment (mg/l)</td>
<td>49</td>
<td>41</td>
<td>44</td>
</tr>
</tbody>
</table>

Energy with purpose

Cooling water management at Texas City Chemicals

One of the major demands for freshwater is for cooling in our refining and petrochemical operations. Balancing the corrosion, scaling and microbiological risks of the cooling water while minimizing the volume of freshwater required for optimum cooling performance is a routine challenge at these operations.

At Texas City Chemicals, located in an area of medium to high water stress, we undertook a detailed monitoring and modelling study to improve cooling water quality and reduce freshwater demands to optimize the cooling tower operation. This involved a collaborative approach from BP and our suppliers to test different cooling cycles (the number of times cooling water can safely be recycled before being replenished with fresh water) and different chemical treatments to optimize the water chemistry.

Through modelling and monitoring we have been able to lower the demand for fresh water by over 270,000m³ per year. We will continue to reduce the fresh water requirement by optimizing cooling tower operations and reducing chemicals usage.
Air emissions

We understand that people around the world are increasingly concerned about air quality and its impact on public health. We monitor our air emissions and put measures in place to reduce the potential impact of our activities on local communities.

In our unconventional gas operations in the US, we reduce sulphur dioxide emissions by using lower sulphur fuels in our drilling rig engines and hydraulic stimulation equipment.

In 2019, we took delivery of the last three vessels in our new fleet of six liquefied natural gas (LNG) carriers. These use around 25% less fuel and emit less nitrogen oxides than the older LNG carriers in the BP-operated fleet.

Waste

Our waste includes oil-derived substances, inorganic chemicals, steel, office paper and many other materials. Some waste streams are non-hazardous and others potentially harmful, so we use a wide range of technologies to treat and manage them effectively. In terms of decommissioning our operations, a very high proportion of materials are reused or recycled, often in other industries. On a day-to-day basis we manage waste generated from operations, maintenance service and obsolete stock with a clear focus to try reducing waste production at source.

We’re exploring ways to create a more detailed picture of our waste footprint. In 2019 we carried out various activities to explore the basis for a circular approach to waste. Building on this, we will continue to look for ways to further improve our management of waste including using learnings to further develop our waste strategy.
Climate change adaptation

Severe weather events and climate-related impacts, such as floods or rising sea levels, could pose risks to the local environment, surrounding communities and the continuity of our operations.

We’re working to improve our understanding of the severe weather risks we face. We’ve reviewed the way they’re documented across BP, with the intention to develop an appropriately standardized approach. We track relevant external risk indices and academic advances in climate and severe weather science and modelling, while also maintaining modelling capability and the relevant tools to help us meet critical business needs.

We’ve already carried out severe weather risk assessments at a number of our assets and have prioritized additional assets for assessment across our Upstream, Downstream and Alternative Energy businesses.

We actively participate in relevant industry forums and initiatives, including development of the IOGP Recommended Practice document on assessing severe weather and climate change, and the IPIECA Adaptation and Resiliency taskforce.

Hydraulic fracturing

We recognize how important it is to reassure local communities that we’re effectively managing the environmental impacts of our unconventional oil and gas operations, including water contamination, chemicals use and the hydraulic fracturing process.

With the acquisition of BHP’s American shale assets into BPX Energy, we’ve significantly upgraded our US onshore gas portfolio. We take action to minimize the environmental impacts associated with our operations. We design, operate and decommission our wells in ways that reduce water contamination.

For example, we install multiple layers of steel into each well and protect freshwater aquifers with cement barriers. These are all tested before any hydraulic fracturing.

To reduce friction and bacterial growth, chemicals are added to the water and sand mixture that makes up 99.5% of the injection materials we use. We publish details of all these chemicals, although their formulas are owned by our suppliers.

Energy with purpose

Assessing future climate risks

We’ve assessed historical and future precipitation-related flood risks during the planning for a new project at our BP Rotterdam refinery. The new project will result in additional paved areas and capacity for increased storm water volume to be managed. Based on the results of our assessment, the need to expand storm water pumping capacity was highlighted.

Storm surge risk was also looked at as part of the assessment, taking into account both existing flood protection measures and up to date storm surge scenarios. High resolution maps of flooding from storm surge and precipitation for a variety of climate scenarios were developed.

The new data on precipitation and storm surge flood risks has been incorporated into the site’s major accident hazard report for future reference.
People

Why it matters
Our people are the most important element of our success. We need a motivated, engaged, and diverse workforce to deliver our purpose and lead in the energy transition.

What we want to do
Build a global workforce that represents the communities we serve and be recognized as a great company to work for: one where people feel valued and can succeed by contributing their skills and different perspectives.

Our approach
We’re building a culture that generates the diversity of thought, approach and ideas needed to lead in the energy transition – a culture in which people’s wellbeing matters and differences are valued. We’re doing this by:

- Recruiting and supporting talented people from diverse backgrounds
- Investing in excellent training, development and competitive rewards for all our people

Performance

- Part of overall reward for around 37,000 eligible employees, including executives, now linked to sustainable emissions reductions
- Included in the Financial Times’ Leaders in Diversity and in The Times Top 50 Employers for Women lists

What’s next

- An even stronger focus on inclusion to unlock human energy and value difference across BP
- Inclusion for all, supported by focused activities relevant to the different countries around the world in which we operate – for example, ethnicity, LGBT+, disability and mental wellbeing

In this section

Diversity and inclusion 62
Engagement and development 66
Building a talent pipeline 67
Energy with purpose means having the skills and the will to reimagine what BP can achieve

BP’s success depends on having a talented and diverse workforce that represents the communities we serve. We are proud to have the brightest minds in our industry with a modern working environment and an inclusive, dynamic culture. Together we are working to deliver our purpose and power the energy transition.

BP and the energy industry as a whole are undergoing a period of fundamental change – driven by the demands of the energy transition. We need to become a different kind of energy company for a very different future. This means building a modern, flexible working environment and an inclusive culture in which people feel valued and able to contribute their best knowing that BP protects their rights, works to keep them safe and well, invests in their development and rewards them fairly and competitively.

We’re investing time and energy to make sure our practices and systems help us become an employer of choice wherever we work.

Being a responsible employer
We employ more than 70,000 people. They work in hundreds of locations worldwide. We want our employees to work in safe, healthy, secure and good conditions. Respect for their human rights is integral to our recruitment, management and diversity and inclusion processes.

Our employees are bound by our code of conduct, which requires them to report any suspected human rights abuses or incidents of wrongdoing in BP or in our business partners’ operations, including bribery and corruption. They can report these through their line management, our human resources team, or by using our independent and confidential ‘OpenTalk’ service.

Read more about our approach to labour rights and human rights on page 47.

Employee safety
Our first priority is to keep our employees safe and alert to potential hazards. Everyone working at BP has the responsibility and authority to stop unsafe work or ask for clarity about things they find unclear. Our leaders are accountable for helping to build this safety-first culture in their teams and all employees are responsible for keeping themselves and each other safe at work.

Read more about our approach to safety on page 39.
Diversity and inclusion

We need a diverse workforce to be successful as a company, especially as we advance in the energy transition, to help us solve complex challenges that matter, build long term and trusted relationships and make a real contribution to a low carbon future.

We want to attract, develop and retain the best talent and to create a diverse and inclusive working environment, where everyone is accepted, valued and treated fairly without discrimination. This starts with our attraction and recruitment processes and continues through the way we support employees and unlock their human energy during their time with BP.

Our approach

We first set out our current diversity and inclusion ambition in 2012. It’s based on our core values of safety, respect, excellence, courage and one team.

During 2019 our overarching themes have been ‘respect and inclusion’ and ‘valuing difference’. Our definition of inclusion covers both visible and invisible differences, stressing the value of both. These include differences in thoughts and ideas, cultures and approaches as well as more visible aspects. It’s important to recognize that people often don’t fit into only one diversity strand but may relate to several groups or interests. We are building a culture that understands this intersectionality and values every individual’s unique and complex sense of identity.

Our leaders are vital in instilling an inclusive culture by showing their support and providing strategic direction for employees to follow.

Diversity and inclusion performance in 2019

Our strategy for diversity and inclusion focuses on unlocking human energy. It will give us an even sharper focus on inclusion and emphasize the importance of recognizing and valuing employees’ visible and invisible differences.

In 2019 we received recognition for our progress on diversity and inclusion from many external organizations.

- Included in the Financial Times’ Leaders in Diversity at number 40 out of 700.
- Listed in The Times Top 50 Employers for Women.
- Rated the eighth most desirable employer in the UK on LinkedIn.
- Listed in The Times Top 100 Graduate Employers in the UK at number 22.
- Winner of two awards at the TARGET jobs National Graduate Recruitment Awards.
- Scored 100% in the Human Rights Campaign’s Corporate Equality Index on LGBTQ equality in the workplace.
- Voted as one of Stonewall’s top employers worldwide for LGBT+ for the second year.
- Recognized in the EMpower Ethnic Minority Role Model lists in the UK and US for a number of our leaders’ contributions to inclusion in and outside of the workplace.
- A key sponsor for the Trans in the City event in the UK.

Equality and respect go hand in hand. To attract and retain exceptional people, BP must promote diversity of thought and an inclusive approach. We will only succeed in reimagining energy and reinventing BP if we recognize and embrace these factors.”

Bernard Looney
Chief executive officer
Addressing the gender balance

Both the energy sector and our business have traditionally had a gender imbalance, with more men than women in some roles. This is something that we’ve been working to address over a number of years and while we’ve made some progress, we know there’s still further to go to achieve a gender balance.

Overall, the proportion of women employed across BP continues to be higher than ever before. 38% (2018 35%) of our workforce were women in 2019. We’re pleased to see improvements in areas of the company where women were previously under-represented and to have women leading some of our core businesses, such as petrochemicals, shipping and treasury, and countries including Canada, China, Mexico and the US. Our graduate intake is almost balanced, with 45% women and 55% men.

In 2012 we set two 2020 gender goals: for women to hold 25% of our group leader roles and 30% of our senior level leader roles. Our group leaders were 25% women at the end of 2019, compared to 17% when we first reported on this in 2012 (an increase of 47%). We’re still short of our 30% goal for senior level leaders, at 26% in 2019, so we remain focused on this.

We consider sponsorship and mentoring of women to be key ways of supporting our leadership talent pipeline. We’re also doing more to include men in our efforts to achieve a better gender balance to seek to ensure everyone feels included.

UK gender pay gap reporting

We make sure that employees in similar roles are paid equitably, and in the UK we publish a pay gap report for five BP UK legal entities that employ 250 or more people. This gender pay gap shows the difference in average pay between men and women, irrespective of their roles.

Our 2019 report, the third to be published, shows small improvements compared to 2018, including improvements in our highest pay gap entities, BP Exploration Operating Company Limited and BP p.l.c. The mean gender pay gap remained reasonably static from 2018-19, changing between 1-3% in each of the reporting entities.

Our gender pay gap exists mainly because we employ different numbers of men and women at different levels in our workforce, and in specific roles that attract higher pay, bonuses or allowances.

We are working to reduce differences over time and recognize that this is a long-term representation challenge we need to address.

[See bp.com/ukgenderpaygap for more information on our UK gender pay gap reporting.]
Our accessibility BRGs aim to break down barriers related to long-term illnesses, injuries and disabilities.

Ethnicity
In the US we aim to have ethnic minorities making up 20% of our group and senior level leaders and 30% of our workforce by 2025. We reached 22% (2018 18%) for our leaders and 28% (2018 27%) for our workforce in 2019. Our recruitment, development, promotion and inclusion programmes in the US underpin these ambitions. For example, we’ve recently launched our ‘minority rules of the road’, a set of principles that focus on ethnic diversity of candidates.

In the UK, EMEA and other regions, although we haven’t set any specific ambitions for ethnic and minority representation, we recognize that it’s an important issue. We’ve conducted research to help us understand more about our black, Asian and minority ethnic (BAME) employees in the UK and assess their grades and progress through the company. At present in the UK, ethnic minorities make up 17% of our employees, compared to an estimated 14% of the UK working population.

In the UK we’ve also received external recognition for our work on ethnicity in 2019. For the third consecutive year BP leaders have been recognized in the ‘EMpower Ethnic Minority Role Model’ lists for their contribution to ethnic minority inclusion in and outside of the workplace. We were also included in the Top 10 Outstanding Employees in the 2018 Investing in Ethnicity Awards and Business in the Community’s Best Employers for Race listing.

Employing nationals
In many of the countries where we operate, we provide significant employment opportunities. Many of these opportunities are taken by nationals, who can balance our international expertise with their experience of local conditions and cultures. We recruit them and invest in their training and development whether or not host governments require us to do so.

Across BP as a whole, 25% of our global leaders are non-US or non-UK nationals. In the upstream we’re making progress on employee nationalization with goals of up to 90% in many countries.

Accessibility
We want to create a working environment in which everyone can perform to their maximum potential, irrespective of any disabilities they may have. We recognize the importance of accessibility for all and we take action through our employee-led accessibility business resource group (BRG) to get this right. This group works to help us raise awareness, break down mental or physical barriers and improve access to work. It also helps BP to consider how to improve our support for accessibility.

The accessibility BRG has executive sponsors for each region it works in, raising the prominence of accessibility issues at a senior level. Members of the BRG are also included in discussions about how BP can support accessibility better.

In 2019 we made good progress, extending our accessibility BRG to new countries in EMEA, Asia Pacific and US regions and improving the accessibility of our UK sites to all employees. We formed a mental wellbeing network and further highlighted mental health issues through BP’s global ‘this is me’ awareness campaign, in which our new chief executive officer participated.

In addition, we extended the availability of employee assistance programmes globally and integrated some of our training programmes to improve mental health and wellbeing through the BP learning academy. We also ran an internal awareness-raising feature and events for our employees to support the 2019 International Day of Personal Disabilities.

22% of our leaders in the US are from ethnic minorities, with 25% targeted by 2050.
Business resource groups

Our business resource groups (BRGs) offer support and advice to employees about diversity and inclusion. They also provide peer support and opportunities for group members to discuss workplace issues as well as leadership exposure and experience for their BRG leaders and teams. The BRGs contribute to our business policies and practices, providing valuable insights for managers and leaders at all levels.

There are six BRGs with more than 20 chapters in the UK and another 20 across EMEA. They represent a wide range of communities, including ethnic minorities, women, LGBT+, people with disabilities, and new parents and carers.

The reach and impact of our BRGs is growing well beyond our established groups in the UK and US. BRGs are now also active in Hungary, Spain, Poland, Oman, Abu Dhabi, Egypt, Singapore, China and Japan. In 2019 we’ve built closer ties between our central diversity and inclusion team and local BRGs. We also encourage cross-BRG activities, allowing people to understand differences and support others.

In 2019 we invited employees from our BRGs to come together through a number of events and activities:

- A webcast to around 1,000 employees on the economics of diversity arranged by UK Positively Ethnic Network (PEN) and US African American Network (BPAAN).
- A ‘big conversation’ about the value of diversity at our Sunbury site in the UK featured a panel of guests from Global WIN, PEN and Pride UK.
- A diversity and inclusion week in the Netherlands, co-facilitated by our BP Pride UK chair, showcased all our BRGs and what they offer.
- A BRG roadshow and panel discussion with our integrated supply and trading team including contributors from our WIN, accessibility, PEN, Pride, working parents and carers, and veterans BRGs.
- A BRG summit in the US to share experience and best practice. We plan to run a similar event in the UK in 2020.

Energy with purpose

Supporting transgender people through BP Pride

The BP Pride BRG has supported employees across BP for around 10 years, but it wasn’t until 2016 that it launched a transgender group. The decision to do this was a result of feedback from that year’s BP ‘pulse’ survey, which showed that transgender people working for BP were feeling disengaged.

BP Pride supports all of our employees on lesbian, gay, bisexual and transgender issues in the workplace and actively aids and pushes the business to enhance policies that support our LGBT+ community. In November 2019 its members, including those on the transgender working group, were first movers in the creation of a unique event called ‘Trans in the City’ which brought together 65 organizations to participate in a transgender day of remembrance and collaborative advocacy for transgender employees. BP was proud to be involved as one of 20 funding partners of the event.

Throughout 2019, the transgender working group instigated and participated in a number of initiatives, including: transgender awareness events at BP sites across the UK, transgender training for BP employees in a number of different countries, personal support and advice for BP’s trans individuals and family members and a number of cross-BRG events, including one focused on transgender and family. The working group offers its knowledge and advice free of charge beyond BP and in 2019 participants from companies worldwide took part in transgender-focused training sessions. Many others benefited from other forms of support, including individual role models from different organizations.

In addition to internal activities, BP Pride is leading the expansion of ‘Trans in the City’ to involve more companies. In 2020 there are plans for a daytime event open to schools and universities as well as an evening celebration. We will collaborate and share information with employees from the participating companies to allow their trans staff to be properly supported.
Engagement and development

We aim to create a positive, empowering culture by listening and responding to our employees’ concerns and ideas. We want our employees to feel valued for their work and impact on the business, rewarding them fairly and competitively, supporting their health and wellbeing, and investing in their development.

Reward

It’s important to reward our employees competitively for the great work they do. We think that reward is about more than just pay – it should also include a range of benefits and the opportunity to work and learn in an inclusive and supportive environment.

Our reward package is based on employee performance, including operating in line with our core values. Every BP employee sets priorities for their contribution to safety and creating value. In 2019 we changed our annual cash bonus, linking it directly to our sustainable emissions reduction (SER) target. This means that for around 37,000 eligible employees, including executives, part of their overall reward is now linked directly to meeting our low carbon emissions targets. In February 2020 we built on this, announcing a new aim to mobilize our workforce to be advocates for net zero. This includes increasing the percentage of remuneration linked to SEERs.

Our executive pay is also linked to performance, with safety, reliable operations and financial performance accounting for one-third of executive bonuses. Tier 1 and tier 2 process safety events and recordable injury frequency are the safety performance measures we use for executive reward.

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

Read more in the BP Annual Report 2019 on page 100 and at bp.com/annualreport.

Health and wellbeing

We support employees’ health and wellbeing through our global employee assistance programme (EAP), a service that’s available 24-hours a day, 365 days a year. Employees can contact the EAP to discuss anything that may be worrying them, including financial difficulties or significant life events such as illness, bereavement or divorce.

We know that one in four people are affected by mental health issues at some point in their life, so we run a number of awareness campaigns, including “this is me”, which enables employees from all parts and levels of BP to share their experiences of mental illness. In 2019 we took part in World Mental Health Day.

Flexible working

As part of our work to modernize and transform BP, we’re doing more to embrace flexible working – allowing employees to find a better work-life balance and work more productively. We’ve refreshed and launched our global flexible working principles and reviewed our leave allowances, providing every employee with a minimum amount of paid parental or carer leave.

Read more about how we support employees’ health and wellbeing on page 39.

In 2019 more of our employees have found ways of working flexibly, for example by combining home and office time. In the UK a number of teams embraced flexible working, while in Hungary, our Budapest and Szeged offices have used a flexible working model to optimize available space. At our Houston office in the US, new ways of working remotely were required when the office had to shut temporarily due to hurricane Harvey. They proved so successful that some teams have continued these new practices.

Development

We make a substantial investment in employee development – with a focus on driving safe, reliable and compliant operations, and on building technical, functional and leadership capability. We provide a range of development opportunities for our people through a mix of: on-the-job learning; developmental relationships with mentors, managers and peers; and training delivered face-to-face, virtually and via simulation or e-learning.

Leadership training

Succession planning is important to BP. We must make sure we have the right people progressing through our company to become our future leaders. One of the ways we’re doing this is through the ‘your leadership: our future’ programme, which is designed to equip potential leaders in our Upstream business with the skills they will need to excel in leadership roles.

In August 2019 we launched ‘accelerate’, a global programme to support employees as they transition into leadership roles. The three-month accelerate curriculum covers everything from motivating teams to health and wellbeing. More than 1,000 employees have participated in the programme since it was launched. In September 2019 we launched ‘mentor match’, a one-year programme that is now providing one-to-one mentoring for almost 300 high-potential employees.
We run three other talent-development programmes for high-potential employees and future leaders. The ‘aspire’ programme focuses on building partnership and leadership skills. It had 76 participants in 24 BP locations in 2019. The ‘catalyst’ programme comprises stretching strategic projects designed to energize and engage employees, particularly those based outside key locations. It was completed by 80 employees in 2019. The ‘leadership insights’ programme helps prepare employees for future leadership roles and was completed by 43 participants in 2019.

Learning from our employees
To understand what our employees think and feel about BP, we run an annual ‘Pulse’ survey. The overall employee engagement positivity score in our 2019 survey was 65% (compared with 66% in 2018). Pride in working for BP was 75% (compared with 76% in 2018, the highest level for 10 years).

In the 2019 survey participating employees told us we should focus more attention in several areas, including: sharing our strategy, reinforcing the need for an open speak-up culture, explaining how BP is taking action to help create a low carbon future and providing updates on safety improvements and other priorities.

We also launched our continuous listening survey ‘Pulse Live’ to parts of BP in 2019, which enables us to monitor changes in employee sentiment on a weekly basis. We plan to roll out ‘Pulse Live’ across the whole organization in 2020.

Building a talent pipeline
We need to attract, recruit and retain talented people in all areas of our company. This is a key challenge for us and our peers, with fewer young people currently choosing careers in science, technology, engineering and maths (STEM) fields.

We currently support initiatives around the world to encourage students to study STEM subjects and then choose careers in linked fields. We’re working in collaboration with others, for example the Royal Academy of Engineering in the UK and are involved in many different initiatives. These include POWERful Women and Million Women Mentors, which both focus on bringing more women into STEM disciplines and professions.

As part of the Women in Engineering conference, launched by the University of Aberdeen and Skills Development Scotland, girls from schools across the UK also visited the BP North Sea headquarters. We also created new teaching resources to showcase inspirational women working in STEM careers.

These activities were run in addition to our ongoing efforts to promote STEM disciplines and careers. They include speed networking, mentoring, an active school link and our support for the Royal Academy of Engineering’s 6 November campaign to change stereotypical views of engineering.
Business ethics

Why it matters
To be a trusted business, we must work to a consistent and high set of standards wherever we operate in the world.

What we want to do
Be and be seen as an ethical and responsible business, setting high standards inside BP, in our supply chain and in the industry.

Our approach
We do business in line with our code of conduct, values and behaviours, policies and procedures relating to all aspect of ethical business, including bribery and corruption, supply chain standards and revenue transparency.

Performance
• Continued to promote revenue transparency through multi-stakeholder groups in Mauritania, Iraq and Trinidad & Tobago
• Successful conclusion of the five-year ethics ‘monitorship’ put in place following the Gulf of Mexico incident to build and embed best-in-class ethics programmes across BP

What’s next
Reinforcing our code of conduct, values and behaviours while continuing to support strong business ethics and a positive culture.

In this section

| Anti-bribery and corruption     | 69 |
| Responsible supply chain management | 70 |
| Revenue transparency and payments to governments | 71 |
| Political donations               | 71 |
| Advocacy and lobbying             | 71 |
| Trade associations                | 71 |
Energy with purpose means being a business that’s trusted and transparent

We’re committed to doing business ethically and transparently, using our values and our code of conduct to guide us. We expect our employees to work in line with both and 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 our employees and members of the board. We train BP employees about how to apply the code in their daily work and in 2019 this training focused on employees sharing stories about how the code and values have helped guide their actions in difficult situations. The training is available in 18 languages and in 2019 around 39,000 employees completed it in full. We also provide respect and harassment prevention training to help employees and line managers understand their roles in creating a harassment-free work environment.

Our expectations of suppliers are documented in order to help them develop and strengthen their relationships with us by acting in accordance with the code.

Read our expectations at bp.com/supplierexpectations.

The five-year ethics monitorship put in place following the Gulf of Mexico incident, under the US Environmental Protection Agency and Department of Justice agreements, ended in 2019. This has overseen the development of a strong ethics and compliance programme across BP, as well as making ethics and compliance liaison employees (ambassadors) the interface between ethics and compliance and our businesses.

Anti-bribery and corruption

We operate in parts of the world where bribery and corruption present a high risk, so it’s important that we make our position regarding both absolutely clear to our employees, contractors, suppliers and others in any way connected to our business.

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. They apply to all BP-operated businesses. Appropriate training is focused on the needs of employees in locations or roles assessed to be at a higher risk of bribery and corruption. In 2019 around 11,000 (2018 10,957) employees completed anti-bribery and corruption training.

We assess any exposure to bribery and corruption risk when working with suppliers and business partners. When appropriate, we put in place a risk mitigation plan and will choose not to work with a counterparty or reject tenders if we conclude that the 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 regions where we operate, to assess their conformance with our anti-bribery and corruption contractual requirements. We take corrective action with suppliers and business partners who fail to meet our expectations, which may include terminating contracts. We issued 25 audit reports in 2019 (compared with 27 in 2018).

We also support anti-corruption efforts through our active participation in the Extractive Industries Transparency Initiative (EITI). The EITI provides a global framework for transparency of payments to government. Through the disclosure of government revenues and other relevant information (such as the beneficial owners of extractive companies and the contracts that govern upstream activity), EITI can help to mitigate corruption risks in the extractive sector and support local anti-corruption efforts.
**Speaking up**

We want our employees, contractors, vendors, third parties and other stakeholders to feel comfortable about speaking up whenever they have a question or concern about our code, or if they see something that they feel is unethical or unsafe. Concerns and enquiries can be raised through multiple channels: with line managers or other senior leaders, supporting teams, including human resources, legal, ethics and compliance and through work councils. Concerns can also be raised anonymously via OpenTalk, the BP global confidential helpline. This is administered by an independent company and is available 24 hours a day, seven days a week. It can accommodate calls in more than 75 languages by phone or web.

We received more than 1,800 concern\textsuperscript{a} or enquiries through these channels in 2019. The most commonly raised concerns were related to the 'our people' section of our code. This section addresses issues such as harassment, equal opportunity, and diversity and inclusion.

We have zero tolerance for retaliation against anyone who seeks advice, raises a concern, reports misconduct or participates in an investigation. The consequences for misconduct, code breaches or violations of our values and investigation. The consequences for misconduct, code breaches or violations of our values and compliance and through work councils.

Speaking up

We want our employees, contractors, vendors, third parties and other stakeholders to feel comfortable about speaking up whenever they have a question or concern about our code, or if they see something that they feel is unethical or unsafe. Concerns and enquiries can be raised through multiple channels: with line managers or other senior leaders, supporting teams, including human resources, legal, ethics and compliance and through work councils. Concerns can also be raised anonymously via OpenTalk, the BP global confidential helpline. This is administered by an independent company and is available 24 hours a day, seven days a week. It can accommodate calls in more than 75 languages by phone or web.

We received more than 1,800 concern\textsuperscript{a} or enquiries through these channels in 2019. The most commonly raised concerns were related to the 'our people' section of our code. This section addresses issues such as harassment, equal opportunity, and diversity and inclusion.

We have zero tolerance for retaliation against anyone who seeks advice, raises a concern, reports misconduct or participates in an investigation. The consequences for misconduct, code breaches or violations of our values and behaviour range from coaching to dismissal. The consequences for misconduct, reports misconduct or participates in an investigation. The consequences for misconduct, code breaches or violations of our values and investigation. The consequences for misconduct, code breaches or violations of our values and.

We aim to work with suppliers who strive for sustainability in their supply chains and innovation and excellence in the delivery of products or services, working in accordance with our code of conduct, human rights policy and other expectations of suppliers. These are set out in our supplier expectations document. Our new labour rights and modern slavery principles are also available to assist our businesses in checking suppliers' performance on these aspects.
Revenue transparency and payments to governments

We support transparency in the flow of revenue from our 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.

BP is 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.

Through EITI we work with governments, NGOs and international agencies to improve transparency. For example, in 2019 we enacted our global commitment through membership of the international board, including supporting decision making on the new global EITI standard, which represents a further evolution in transparency. The focus is on making disclosure and open data routine parts of government and corporate reporting, providing information to stakeholders that supports their widespread use in analysis and decision making. It now requires contract transparency for new contracts from 2021, plus new requirements on environmental reporting and gender.

This year, we also participated in the multi-stakeholder groups in Mauritania, Iraq and Trinidad & Tobago and agreed to join the multi-stakeholder group in Senegal, pending final agreement with the National Committee there.

We disclose information on our payments to governments for our upstream activities on a country-by-country and project basis under national reporting regulations.

With our presence in Mauritania and Senegal we launched a programme of capacity-building workshops, helping to promote transparency and local participation in the newly created energy sector. BP launched the programme along with the Senegalese National Institute of Oil and Gas in October 2019. The workshops aim to train more than 3,000 participants over a one-year period, focusing on oil and gas fundamentals and legal, institutional and fiscal aspects of oil and gas. The course will be delivered to a range of stakeholders from media, civil society, private sector, universities, public administration and parliamentarians.

Our approach to tax

We comply with tax laws and have open and constructive relationships with tax authorities.

We participate in initiatives to simplify and improve tax regimes to encourage investment and economic growth. Our approach to tax aligns with our code of conduct, which sets out what is expected of everyone at BP. This includes acting in a manner that is safe, ethical and consistent with applicable laws and regulations. We do not tolerate the facilitation of tax evasion by people who act for or on behalf of BP.

You can read Our approach to tax and Payments to governments reports at bp.com/revenuetransparency.

[Diagram: Taxes paid to governments ($ million)]

- 8,000
- 4,000
- 0

2017 2018 2019

Energy with purpose

Our participation in trade associations

We believe our membership of trade associations can provide significant benefits – from contributing to the development of equipment or operating and safety standards, through to working with regulators, knowledge sharing and professional development. Some trade associations engage in lobbying and advocacy on matters that they consider to be important to their members.

Our priority is to work to influence within trade associations, but we may publicly dissent or resign our membership if there is material misalignment on issues that we consider high priority.

In 2019 we conducted our first group-wide review of climate policy alignment with a number of the trade associations that we’re members of, selecting 30 that are actively involved in the climate debate and most relevant to our stakeholders. These were concentrated in North America, Europe and Australia. We found that 22 aligned, five partially aligned and three did not align.

We communicated the outcome of this review and our expectations to all the associations we reviewed and we’re leaving the three associations that did not align with our position. We plan to undertake another review in around two-years’ time.

You can read more at bp.com/tradeassociations.

Political donations

We prohibit the use of BP funds or 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.

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.

Advocacy and lobbying

We co-operate and engage with governments, regulators and legislators in the development of proposed policies relevant to our business. These policies can affect us in a wide range of areas – from tax and employment issues to safety or the energy transition. This co-operation and engagement may include direct lobbying on specific policy proposals by our own employees, through broader advocacy via research work or supporting think tanks, to communications activities and advertising. For example, we are working with Washington state legislature in support of a cap-and-invest bill for GHG emissions.

Read more about our advocacy on carbon pricing on page 19.

We make disclosures under the relevant legislation within the jurisdictions in which we operate. For example, BP is registered on the Transparency Register of the European Union and we comply with the US Lobbying Disclosure Act (LDA).

Trade associations

BP is a member of many 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. In February 2020 we announced our aim to set new expectations for our relationships with trade associations around the globe. We will make the case for our views on climate change and we’ll be transparent where we differ. And where we can’t reach alignment, we will be prepared to leave.
Our IST team at Canada Square in the UK supply and trade energy products across the hydrocarbon value chain.

Governance

We aim to be increasingly transparent about the ways we manage environmental, social and governance issues across our business. Our reporting, governance structure and management processes provide us with the foundations for achieving greater transparency.

Having the right leadership and governance structure in place is crucial to our ability to deliver our strategy, purpose and new net zero ambition and aims. This structure, which includes the board and its committees, extends through the organization via the executive leadership and our senior leaders to all employees.

In this section

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human rights governance</td>
<td>74</td>
</tr>
<tr>
<td>Executive oversight of sustainability</td>
<td>74</td>
</tr>
<tr>
<td>Managing risks</td>
<td>75</td>
</tr>
</tbody>
</table>
Energy with purpose means minimizing risk and maximizing efficiency

The board is responsible for the overall conduct of the group's business, including oversight of our strategy and approach to the energy transition. It reviews and monitors performance against our strategy and low carbon ambitions and confirms that the processes for identifying and managing key risks, both financial and non-financial, are in place.

**Board oversight of sustainability matters**

The safety, environment, and security assurance committee (SESAC), one of our six board committees, reviews the processes that our executive team use to identify and mitigate operational and non-financial risk, including marine, wells, pipelines, major security incidents and cyber security. The committee works with the executive leadership team to embed safe and reliable operations.

In 2019 SESAC held six meetings. The topics it discussed included the sustainability report and BP's working practices in relation to modern slavery and related human rights.

---

Read more about SESAC in the BP Annual Report 2019 page 96.

---

**Site visits**

In 2019 members of the board and SESAC visited our operations in several countries to give them first-hand experience of our assets and to observe and ask questions.

**Aberdeen**

Following the AGM in Aberdeen, the board held a number of engagement activities. Helge Lund and Bob Dudley led a town hall which was attended by over 300 employees at BP’s Dyce office and was streamed live to the offshore teams in the North Sea. The board hosted a business reception, inviting members of the local community, local political and government officials, employees and local businesses.

Members of the board had further engagement with the workforce at the Dyce office, observing new agile ways of working and gaining technological insight into new initiatives. Members of the board also visited the Clair Ridge platform, where they learnt more about operations offshore. They discussed the safety agenda onsite, visited the drilling floor and spoke with employees directly to better understand the culture when working offshore.

**South Korea**

SESAC visited BP’s shipping function and spent a day at sea in South Korea on board a new LNG vessel. They experienced the vessel in a period of ‘shakedown’ ahead of going into service. The committee observed safety processes in action and were able to discuss physical and cyber security planning. Members of SESAC met with seafarers without management present to discuss life working on board the vessels.

**Denver**

The board visited BP’s Denver office in September 2019 where they hosted several employee events. A town hall took place, led by Helge Lund, with the rest of the board present to talk with the workforce and answer questions over a community lunch, with over 150 employees in attendance. The board were also introduced to emerging talent in the region and met with senior leadership. As part of the suite of events the board also met external stakeholders at a business reception in the city.

**Kuala Lumpur and Singapore**

Members of the audit committee visited the global business services office in Kuala Lumpur. Touring BP’s offices gave valuable insight into the workforce which has been responsible for centralizing and standardizing key business processes across the organization and transforming processes end-to-end. The directors then visited the integrated supply and trading team in Singapore where they met with senior leadership and the wider workforce at BP’s offices.
Human rights governance

SESAC has oversight of human rights, including reviewing our performance in assessing and managing risks associated with modern slavery.

The group operations risk committee reviews progress on managing the potential risks of modern slavery.

Our human rights working group, which is made up of representatives from across the business, considers current and emerging human rights risks of potential group significance. The group reviews existing and proposed management of such risks and escalates identified human rights risks to executive team level as necessary.

Business functions and local operations are responsible for implementing actions to help us meet our human rights policy commitments and relevant group requirements, such as providing channels for local communities to raise concerns.

Executive oversight of sustainability

The assessment and management of climate-related issues are embedded in BP at various levels, with delegated authority from the board. The executive team discussed climate-related matters at each of its 11 meetings in 2019, including the development of BP’s net zero ambition and aims before these were presented to the board. The executive team is supported by our senior level leaders and their respective teams, which provided dedicated business and functional expertise focused on climate and related areas. They include our carbon management team, safety and operational risk teams, economics team and group policy.

We foster close alignment between group, business and function leaders through a number of bodies and forums, including carbon steering committees for group, upstream and downstream.
Managing risks

We identify risks for particular oversight by the board and its committees each year. In 2019 these were: financial liquidity, geopolitical risk, cyber security, process safety, personal safety and environmental risks, security, ethical misconduct, legal and regulatory compliance, and trading compliance.

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

See How we manage risk in the BP Annual Report 2019 page 68.

Managing risks in our operations

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

Our 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 out our expectations

We often work with other companies in our joint ventures. Sometimes we are the operator and sometimes another party 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.

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. 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). In 2019 we contributed to several IOGP initiatives linked to climate change adaptation. We produced a draft guidance note on climate change which aims to provide current best practice for metocean (a term used in the offshore industry to describe the physical environment) practitioners. We plan to develop this further through a series of working sessions with other operators and hope to publish it in late 2020. In September 2019 we hosted a seminar in London on ‘severe weather from extra-tropical cyclones’, which was attended by around 50 participants, including oil and gas operators, consultants and academics. In November 2019, a representative from BP ran a series of talks on IOGP activities and the latest consensus on severe weather risk across our industry.

Read more about climate change adaptation on page 59.

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 reporting

This Sustainability Report concentrates on performance and activities from 1 January to 31 December 2019.

We aim to report on all aspects of our business, including joint ventures where we are the operator. In some cases, we may also provide information about some of our joint venture activities where we are not the operator.

**Reporting standards**

We use sustainability reporting guidance from IPIECA for environmental and social issues and report in accordance with the core option of the Global Reporting Initiative (GRI) standards. We are a signatory to the UN Global Compact and support the UN’s 10 principles on human rights, labour, environment and anti-corruption. This sustainability report comprises our annual update on progress.

See [bp.com/reportingstandards](http://bp.com/reportingstandards) for our mapping to selected sustainability frameworks and standards.

**Environmental, social and governance data**

Reporting on ESG data is an important element of our approach. We provide performance data online and through our HSE charting tool. You can read more online at [bp.com/reportingcentre](http://bp.com/reportingcentre).

The data we report is subjected to an internal verification process which includes reviews by subject matter experts across the business.

In addition, we ask Deloitte to assure several key sustainability metrics to the internationally recognized ISAE 3000 standard. You can read more about the scope of Deloitte’s work, including the sustainability metrics they have assured, overleaf on page 77.

For more information about the sustainability metrics we assure, read our basis of reporting at [bp.com/basisofreporting](http://bp.com/basisofreporting).
Independent assurance statement
by Deloitte LLP to BP on selected sustainability information

Scope of work
We have provided independent limited assurance, in accordance with the International Standard for Assurance Engagements ("ISAE") 3000 (Revised), on selected sustainability information ("subject matter"), for the financial year ended 31 December 2019. The subject matter is reported in the 2019 Sustainability Report ("SR"), the 2019 Annual Report and Accounts ("ARA") of BP p.l.c. ("BP"), and in the 'ESG data' document, published on the BP website (BP.com) (together, the “2019 BP Reporting”).

Selected subject matter for assurance
- Safety indicators: recordable injury frequency, day away from work case frequency, number of fatalities, number of oil spills, process safety events (Tier 1 and Tier 2).
- Environmental indicators: operational control-based Scope 1 greenhouse gas (GHG) emissions, equity-based Scope 1 GHG emissions, cumulative total sustainable GHG emissions reductions towards 3.5MtCO₂e target, and methane emissions intensity.

The above subject matter has been assessed in accordance with the International Standard for 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 the 2019 BP Reporting, is subject to more inherent limitations than financial information, given the nature and methods used for determining, calculating, and sampling or estimating such information.

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 the 2019 BP Reporting, is subject to more inherent limitations than financial information, given the nature and methods used for determining, calculating, and sampling or estimating such information.

Roles and responsibilities
BP is responsible for the preparation of the sustainability information and statements contained within the 2019 BP Reporting. 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 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
27 March 2020

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

b All of the selected metrics are published with an associated ‘Basis of Reporting’ document, published on the BP website (BP.com). As disclosed by BP in the emissions performance reporting in the 2019 BP Reporting, the emissions equivalent to BP’s share of Rosneft are not included, for indicators disclosed on an equity share basis.

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


BP Sustainability Report 2019 77
Cautionary statement

In order to utilize the ‘safe harbor’ provisions of the United States Private Securities Litigation Reform Act of 1995 (the ‘PSLRA’) and the general doctrine of cautionary statements, BP is providing the following cautionary statement.

BP Sustainability Report 2019 and bp.com/sustainability contain certain forecasts, projections and forward looking statements – that is, statements related to future, not past events and circumstances with respect to the financial condition, results of operations and businesses of BP and certain of the plans and objectives of BP with respect to these items. These statements may generally, but not always, be identified by the use of words such as ‘will’, ‘expects’, ‘is expected to’, ‘aims’, ‘should’, ‘may’, ‘objective’, ‘is likely to’, ‘intends’, ‘believes’, ‘anticipates’, ‘plans’, ‘we see’ or similar expressions. In particular, such statements may include but are not limited to, statements which may relate to the purpose, ambitions, aims, targets, plans and objectives of BP – as well as statements about how we run our business; expectations regarding world energy demand including the growth in relative demand for renewables and the assumptions made in the energy transition scenarios; expectations regarding scenarios and pathways that are consistent with the Paris goals; plans, expectations and targets in relation to BP’s approach to lower carbon and reducing emissions; BP’s new ambition to be a net zero company by 2050 or sooner and help the world get to net zero, including its aims regarding emissions across operations, the carbon content of its oil and gas production; a 50% cut in the carbon intensity of products BP sells, methane measurement at major oil and gas processing sites by 2023 and subsequent reduction of methane intensity of operations, and aims to increase the proportion of investment into non-oil and gas businesses over time; aims to help the world get to net zero; plans for incentivising BP’s global workforce; the aim to build a more agile, innovative and efficient BP; continuing commitment to safe and reliable operations; commitment to continuing to perform as BP transforms and commitment to transparency and advocacy for a low carbon world; plans and expectations in relation to future mobility and electric vehicles; anticipated growth in hydrogen demand and the development of new hydrogen businesses; plans and expectations regarding carbon capture, use and storage including BP’s role in OGCI’s Net Zero Teesside project; advancing the circular economy and in particular the chemicals and plastics sector including plans and targets for BP Infinia; investments in new technologies and low carbon businesses such as solar energy, wind energy, biofuels and biopower and including advanced mobility, bio and low carbon products, carbon management, digital energy solutions and transformation, and power generation and storage; 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 2019 and any other matters referred to at bp.com/sustainability.

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 2019 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. Where we refer to the company, we mean BP p.l.c.. The company and each of its subsidiaries are separate legal entities. Unless otherwise stated or the context otherwise requires, the term “BP” and terms such as “we”, “us” and “our” are used in the Sustainability Report for convenience to refer to one or more of the members of the BP group instead of identifying a particular entity or entities.
About this report

Order copies
BP’s printed publications are available free of charge from bp.com/papercopies.

US and Canada
Issuer direct
Toll-free: +1 888 301 2505
bpreports@issuerdirect.com

UK and rest of world
BP Distribution Services
Tel: +44 (0)870 241 3269
bpdistributionservices@bp.com

Give your feedback
Email the corporate reporting team at corporatereporting@bp.com.

Follow us on social media
twitter.com/bp_plc
facebook.com/bp
linkedin.com/company/bp
instagram.com/bp_plc

Paper: Nautilus Super White is a premium ecological paper. It is made from 100% post-consumer waste recycled paper and is FSC® (Forest Stewardship Council®) certified. The paper also holds the EU Ecolabel certification. The manufacturing mill also holds ISO 14001 environmental certification. Printed in the UK by Pureprint Group.