

Net zero
from ambition
to action

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About this report

This report focuses on bp's net zero★ ambition: why we believe it's consistent with the Paris goals, our planned actions to deliver this decade and our progress to date. We have chosen to focus on our activity up to 2030 as the actions we are taking now will help set the foundations for achieving net zero after that, by 2050, or sooner.

It complements information provided in our 4Q 2021 investor disclosures, the bp Annual Report 2021 and other materials on our strategy, financial frame, investor proposition and sustainability frame, available at bp.com/investors.

In preparing this report, we have considered a broad range of guidance (including from the TCFD, IIGCC and CA100+) and in anticipation of forthcoming UK regulation in this area.

How to navigate this report

➡ Another page of this report

🌐 A website

Links to other reports

🌐 bp.com/investors
– 4Q 2021 results (script and slides)

– bp Annual Report 2021

🌐 bp.com/governance
– bp Notice of Meeting 2022

🌐 bp.com/TCFD

🌐 bp.com/sustainability

🌐 bp.com/ESGdata

🌐 All of our reports and data are available at bp.com/reportingcentre



★ See glossary on pages 38-39

Chair's letter

Progress towards net zero



You have an opportunity to voice your support for our net zero ambition. //

Helge Lund
chair

Dear shareholders,

When I joined the board of bp in 2018, I knew that part of my job would be helping to guide bp through two transitions.

First was a leadership transition, which was successfully achieved with the appointment of Bernard Looney as CEO in early 2020.

Second was the energy transition – and bp's transition within it. This will take longer to achieve; but with bp's clear purpose, net zero ambition, aims and strategy, we now have the foundations of that transition firmly in place. And bp is making progress towards diversifying, de-risking and decarbonizing the business.

This report summarizes bp's net zero ambition and the actions we plan to pursue it in this decade, as well as our progress so far. bp's net zero ambition has been shaped by regular and constructive engagement with our many stakeholders, including shareholders. We are grateful for that engagement. Over the past two years it has encouraged bp to keep pushing ourselves – to go further and faster.

Accordingly, in February 2022 we updated two of the aims that underpin bp's net zero ambition. Our decision shows that we are prepared to accelerate or expand our targets and aims – where we believe that to do so is in the interests of our shareholders and having regard to other stakeholders, as we monitor the energy transition and the opportunities it creates.

While there is no formal requirement to do so, the board has concluded that it is appropriate and timely to give shareholders an advisory vote on the net zero ambition at this year's AGM. By voting for resolution 3, you have an opportunity to voice your support for our net zero ambition – including the acceleration of our aims that we announced in February.

Please join us in voting in favour of our net zero ambition to enable us to focus on delivery.

Helge Lund
chair
March 2022



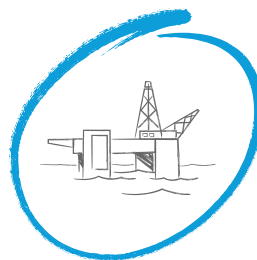
Read more about resolution 3 and how to vote in the **bp Notice of Meeting 2022**

CEO summary

Net zero across operations, production and sales

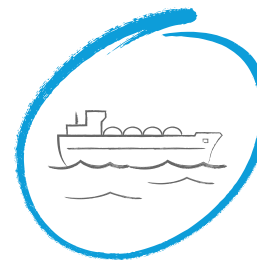


Net zero
operations



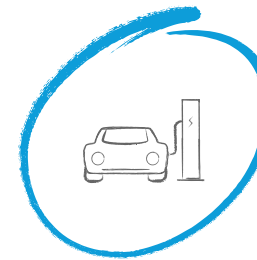
Scope 1 + 2
emissions

Net zero
production



Scope 3
emissions

Net zero
sales



Full value chain
emissions

In February 2020, we set a new direction for bp, with two considerations in mind. First, that the global carbon budget is finite and running out – around 70% of global greenhouse gas (GHG) emissions come from the transport, industry and energy sectors. To meet the Paris climate goals, many, many thousands of businesses, organizations, cities and regions around the world have to transform themselves from higher carbon today to low carbon by 2050 or sooner.

Second, there is a huge business opportunity in the energy transition for companies like bp. While the scale and pace of the transformation needed is complex, we believe bp has the reach, relationships and capabilities needed to play a part in greening the global energy system.

These two considerations led us to announce our new purpose and ambition to be a net zero company by 2050 or sooner and to help the world get to net zero. In mid-2020, we introduced our new strategy to pivot from an international oil company (IOC) to an integrated energy company (IEC) and undertook the biggest reorganization in bp's history in order to focus the company on that strategy.

Our strategy positions us to provide more and more of the reliable, affordable and clean energy the world needs. And it enables us, as we and the global energy system transition, to help the world meet the challenge of security of supply which – in the face of events in Ukraine – is ever more critical.

Getting bp to net zero

We are aiming, by 2050 or sooner, to get to net zero:

- Across our entire operations (Scope 1 and 2).
- For the carbon in our upstream oil and gas production (Scope 3).
- For the energy products we sell (full value chain).

We believe we are unique among our peers in aiming to be net zero across operations, production and sales.

For each of these, we have also set emissions reduction targets and aims covering the short term (to 2025) and medium term (to 2030). We've set these on an absolute basis for our operations and production. And we use a lifecycle (full value chain) carbon intensity basis for the energy products we sell.

Our route to net zero

We believe our ambition and aims, taken together, are consistent with the goals of the Paris Agreement – including pursuing efforts to limit temperature rise to 1.5°C above pre-industrial levels. By setting a path that enables us to make a positive contribution, working to build and participate in many of the new net zero value chains the world will need, our ambition and aims support the world's progress towards the Paris goals.

CEO summary



We believe we are unique among our peers in aiming to be net zero across operations, production and sales. //

Bernard Looney

chief executive officer

Our ambition and aims enable flexibility and promote our resilience to the uncertainties ahead, whether economic, environmental or geopolitical. This year we tested bp's strategic resilience to Paris-consistent scenarios developed by the World Business Council for Sustainable Development (WBCSD) (including 1.5°C) and published the results as part of our TCFD (Task Force on Climate-related Financial Disclosures) disclosures in the bp Annual Report 2021.



Read our TCFD disclosures in the [bp Annual Report 2021](#) on [pages 55-66](#)

Finally, as we work to deliver our net zero aims, we aim to do so in ways which support a just energy transition – one that delivers decent work, quality jobs, and supports the livelihoods of local communities, while developing new skills for the future energy system.

The actions we are taking

We are driving practical actions to take bp towards net zero, and help the world get there. These include:

- **Reducing emissions** from our oil and gas operations and production – for example, by improving efficiency, switching to renewable electricity sources, eliminating flaring, identifying and eliminating methane leakages, focusing our hydrocarbons portfolio, and deploying carbon capture and storage (CCS).
- **Scaling up low carbon businesses** in bioenergy, electric vehicle (EV) charging, renewables and hydrogen.
- **Integrating low carbon solutions** to provide reliable, affordable, clean energy for corporate customers, regions and cities.
- **Advocating** for government policies which support low carbon choices and activities over higher carbon ones, and enable companies, cities and countries across the world to realize their net zero ambitions.
- **Incentivizing our people** by connecting remuneration to the delivery of our emissions reductions and other transformation goals.
- **Reporting our progress** transparently so that it can be independently assessed and challenged.

Our progress so far

We have made significant progress reducing emissions associated with operations and production. Since 2019, we have delivered a 35% reduction in the emissions across our operations and a 16% reduction in the Scope 3 emissions associated with the carbon in the upstream oil and gas we produce, putting us on track to achieve our aims for 2030.

Regarding sales, the average carbon intensity of our energy products was roughly flat compared to our 2019 baseline. The diversification inherent in our strategy provides us with a range of levers – including our transition growth businesses and trading activity – as we pursue delivery of our 2025 target and 2030 aim.

Accelerating our ambition

Two years into our transformation, our confidence in getting bp to net zero by 2050 or sooner is increasing. First, we have begun to generate real momentum and, second, society is aiming for a faster pace on climate issues.

Therefore, in February 2022, we accelerated our ambition and the greening of bp. We now expect more than 40% of our capital expenditure by 2025 to be in transition growth businesses – including bioenergy, convenience, EV charging, renewables and hydrogen – and around 50% by 2030.

Growth in these areas will support our accelerated net zero ambition. We now aim to cut our operational emissions in half by 2030 (up from 30-35%), and to reduce the carbon intensity of the energy products we sell to net zero by 2050 or sooner – up from a 50% reduction previously. We have also expanded this metric to include physically traded sales of energy products.

Conclusion

As is clear from the IPCC's^a latest reports, it will need action from everyone if the world is to meet the Paris goals.

This is why our ambition goes beyond reducing our Scope 1, 2 and 3 emissions to include advocating for policies that help others do so too. It is why we are scaling up our renewables businesses and partnering with others to establish the new low carbon value chains the world will need.

This report demonstrates that we are guided by our purpose to reimagine energy for people and our planet. Our business performance is an early indicator that our transformation is working. Purpose and profit need not be a choice – they are reinforcing. We are more determined than ever to deliver our net zero ambition and create long-term sustainable value for all our stakeholders.

Bernard Looney

chief executive officer
March 2022

^a We see the Intergovernmental Panel on Climate Change (IPCC) as the most authoritative source of information on the evolving science of climate change. The IPCC highlights that there is a range of global pathways by which the world can meet the Paris goals, with differing implications for regions, industry sectors and sources of energy.

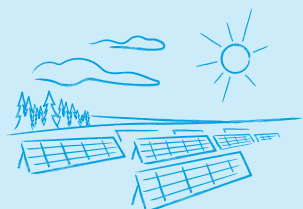
Building blocks of our net zero ambition

Ambition supports the

Paris goals

including pursuing efforts to limit temperature rise to 1.5°C

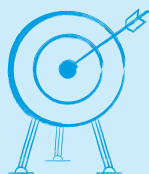
➔ See [page 11](#)



A clear strategy

to deliver our aims and create long-term value

➔ Read more in the [full-year/4Q 2021 financial results and update on strategic progress](#)



Aiming for net zero

across operations (Scope 1 and 2), production (Scope 3) and sales (full value chain)

➔ See [page 10](#)

Short-, medium- and long-term

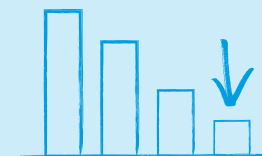
targets and aims for emissions reductions

➔ See [page 40](#)

Reducing methane intensity

based on a measurement methodology

➔ Read more on [page 20](#)



Actions towards our 2025 targets and 2030 aims, along with our progress since 2019

➔ See [pages 13-19](#)

A capital investment

framework consistent with the Paris goals

➔ See [page 33](#)

Resilience testing

consistent with the TCFD recommendations

➔ Read more in the [bp Annual Report 2021](#) and at [bp.com/TCFD](#)

Support for a just transition

➔ Read more on [page 29](#)



Robust governance for climate-related matters

➔ See [page 31](#)

Remuneration linked to emissions reductions

➔ See [page 25](#) and read more on [pages 116-141 of the Directors' remuneration report in the bp Annual Report 2021](#)



Our net zero ambition

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The scenarios which inform our net zero ambition

The bp Energy Outlook 2022 explores the forces shaping the global energy transition out to 2050 and the key uncertainties surrounding that transition.

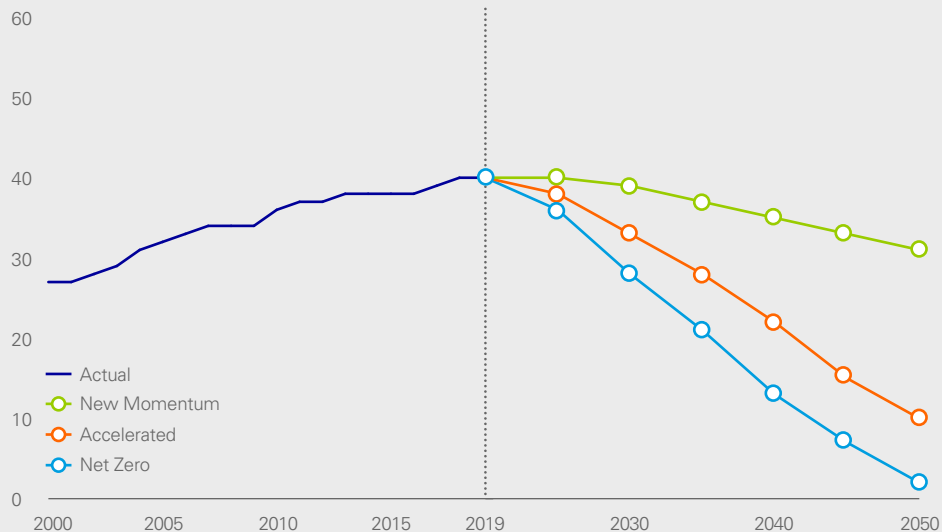
bp Energy Outlook

The bp Energy Outlook 2022^a uses three main scenarios (Accelerated, Net Zero and New Momentum) to explore the range of pathways for the global energy system to 2050.

They inform bp's core beliefs about the energy transition and help chart a direction which is resilient to that uncertainty.

Carbon emissions^b

Gt of CO₂e



^a The scenarios included in the bp Energy Outlook 2022 were prepared before the outbreak of the military action in Ukraine and do not include any analysis of its possible implications for economic growth and global energy markets.

^b Carbon emissions include CO₂ emissions from energy use, industrial processes, natural gas flaring and methane emissions from energy production.

Three scenarios to explore the energy transition

Accelerated

Is conditioned on the assumption of a significant tightening in carbon pricing and other climate policies driving a sustained fall in CO₂e emissions. Emissions in Accelerated peak in the early 2020s and by 2050 are around 75% below 2019 levels. The pace and extent of decarbonization is broadly aligned with a range of IPCC scenarios consistent with maintaining average temperature rises to well below 2°C.

By 2050, emissions in Accelerated are around **75%** below 2019 levels

Net Zero

Is conditioned on a similar tightening in climate policies as in accelerated, together with the assumption that the fall in carbon emissions is aided by a change in societal behaviour and preferences which further supports gains in energy efficiency and the shift to low carbon energy sources. Emissions peak in the early 2020s and by 2050 are around 95% below 2019 levels. The pace and extent of decarbonization are broadly aligned with a range of IPCC scenarios which are consistent with maintaining average temperature rises to 1.5°C.

By 2050, emissions in Net Zero are around **95%** below 2019 levels

New Momentum

Is designed to capture the broad trajectory along which the global energy system is currently progressing. It places weight both on the marked increase in global ambition for decarbonization and achieving net zero seen in recent years and the likelihood that those aims and ambitions will be achieved, and on the manner and speed of progress seen over the recent past. Emissions in New Momentum peak in the late 2020s and by 2050 are around 20% below 2019 levels.

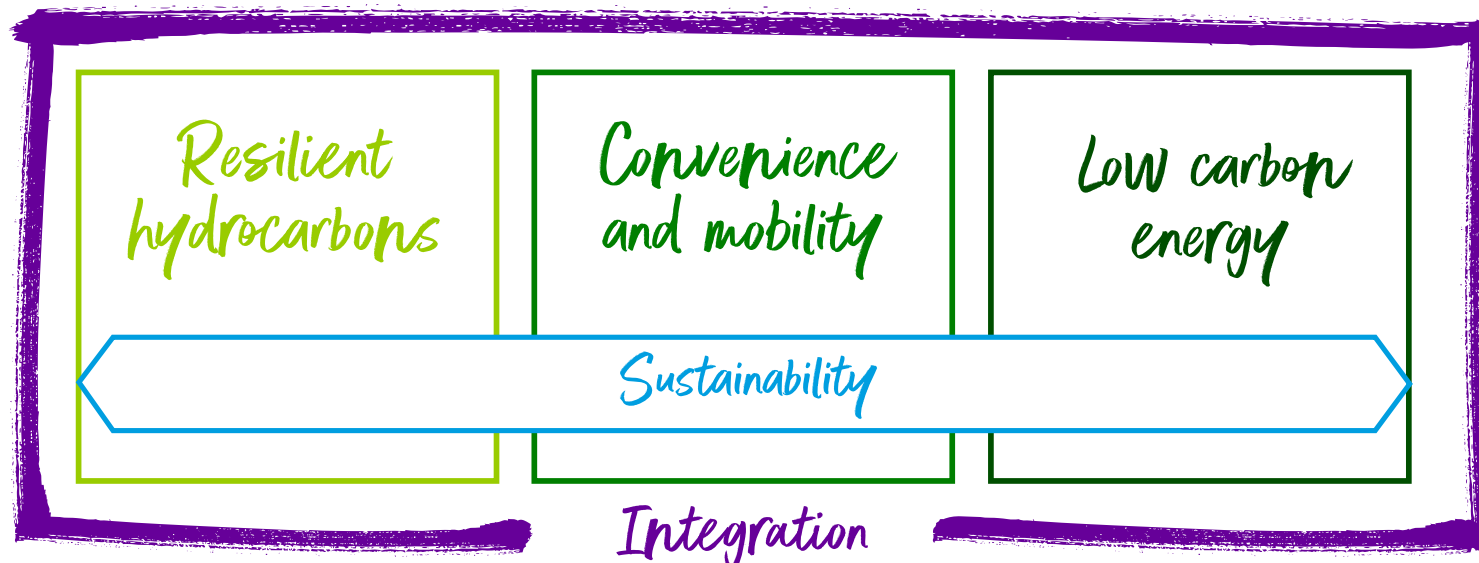
By 2050, emissions in New Momentum are around **20%** below 2019 levels



Read more at [bp.com/energyoutlook](https://www.bp.com/energyoutlook)

A clear strategy: from IOC to IEC

In 2020, we set out our ambition to get to net zero and a new strategy to become an integrated energy company. And in February 2022, we announced that we expect to increase the proportion of capital expenditure★ in transition growth businesses to more than 40% by 2025 and around 50% by 2030.



Sustainability

Embedded across our strategy is our sustainability frame, which sets out our aims for getting to net zero, improving people's lives and caring for our planet.

Integration

Binding our strategy together is integration. Harnessing our collective capabilities to help more customers get the energy they want, creating value for our shareholders.

Resilient hydrocarbons

High-grading our portfolio, lowering our emissions and driving returns, through three focus areas: oil and gas, refining and bioenergy.



Transition growth engine:

– Bioenergy

Convenience and mobility

Growth from our differentiated convenience and fuels offers, acceleration of our EV charging and *Castrol*, aviation, B2B and midstream businesses.



Transition growth engines:

– Convenience
– EV charging

Low carbon energy

Building renewables at scale with capital discipline, a returns focus and growing scale in hydrogen in key, regionally integrated markets.



Transition growth engines:

– Renewables
– Hydrogen

★ See glossary on pages 38-39

Our net zero aims

Five aims to get bp to net zero

Aim 1

*Net zero
operations★*

Net zero across our entire operations by 2050 or sooner.

 Read more on [pages 13-14](#)

Aim 2

*Net zero
production★*

Net zero across the carbon in our upstream oil and gas production by 2050 or sooner.

 Read more on [page 15](#)

Aim 3

*Net zero
sales★*

Net zero across the energy products we sell by 2050 or sooner.

 Read more on [pages 16-19](#)

Aim 4

*Reducing
methane*

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.

 Read more on [pages 20-21](#)

Aim 5

*More \$ for
more energies*

Increase the proportion of investment we make into our non-oil and gas businesses.

 Read more on [page 22](#)

Five aims to help the world get to net zero

Aim 6

Advocating

More actively advocate for policies that support net zero, including carbon pricing.

 Read more on [page 24](#)

Aim 7

*Incentivizing
employees*

Incentivize our global workforce to deliver on our aims and mobilize them to become advocates for net zero.

 Read more on [page 25](#)

Aim 8

*Aligning
associations*

Set new expectations for our relationships with trade associations around the globe.

 Read more on [page 26](#)

Aim 9

*Transparency
leader*

To be recognized as an industry leader for the transparency of our reporting.

 Read more on [page 27](#)

Aim 10

*Clean cities
and corporates*

Launch a new team to create integrated clean energy and mobility solutions.

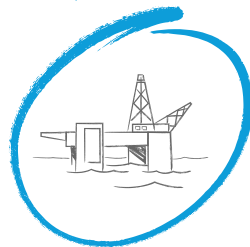
 Read more on [page 28](#)

★ See glossary on pages 38-39

Net zero operations, production and sales

Aim 1

Net zero operations



Scope 1 + 2
emissions

Actions



Interim targets and aims Absolute

2025 target

20%

2030 aim

50%

Progress to date

2019 baseline

54.4

MtCO₂e

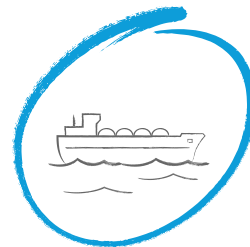
2021

35%

Reduction

Aim 2

Net zero production



Scope 3
emissions

Actions



Interim targets and aims Absolute

2025 target

20%

2030 aim

35-40%

Progress to date

2019 baseline

361

MtCO₂e

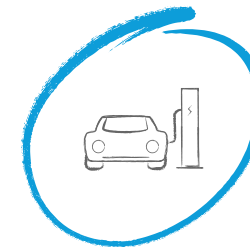
2021

16%

Reduction

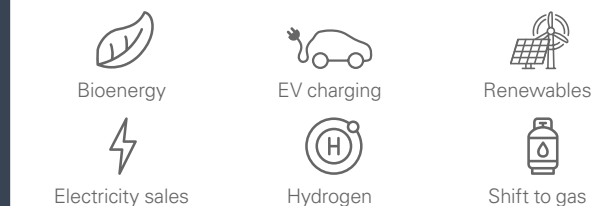
Aim 3

Net zero sales



Full value chain
emissions

Actions



Interim targets and aims Intensity

2025 target

5%

2030 aim

15-20%

Progress to date

2019 baseline

79

gCO₂e/MJ

2021

Flat

Consistency of our ambition and aims with the Paris goals

We believe that our net zero ambition and aims, taken together, set out a path for bp that is consistent with the goals of the Paris Agreement.

The Paris Agreement has the goal of “holding the increase in the global average temperature to well below 2°C and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels.”

There are many different ways in which a company at the heart of the energy sector can contribute to this goal.

Our view of Paris consistency is based on three key principles:

1 Informed by Paris-consistent energy transition scenarios

We see the Intergovernmental Panel on Climate Change (IPCC) as the most authoritative source of information on the evolving science of climate change and we use it and other sources to inform our direction. bp’s ambition, aims and underpinning actions are designed to drive progressive decarbonization, while remaining flexible and adaptable to the many different potential pathways the energy transition may take.

2 Positioned for strategic resilience

Our ambition and aims, and our strategy for delivering them, are designed to position bp for success and resilience in a Paris-consistent world – a world that is progressing on one of the many global trajectories considered to be Paris consistent, and ultimately meeting the Paris goals.

3 Contributing to net zero

Our ambition and aims enable us to make a positive contribution to the world’s efforts to meet the Paris goals. There are many different ways in which a company at the heart of the energy sector can make a meaningful contribution – including action on greenhouse gas emissions (GHG). Paris consistency also includes consideration of a range of other activities, such as technology development, policy advocacy, low carbon collaboration and investments in low carbon. The importance of all of these can go well beyond any GHG reductions for bp itself.

In a world heading for net zero, we believe that bp is best positioned for success if we are also heading for net zero – working to build and participate in net zero value chains, and using our capabilities to integrate along and across those value chains.

We believe that our ambition and our 10 net zero aims need to be considered as a package for Paris consistency. That is because, as described in this report, they combine to set bp’s direction for net zero, supporting society’s drive towards the Paris goals and enabling bp to succeed in a Paris-consistent world.

Our ambition and aims enable us to make a positive contribution to the world meeting the Paris goals and getting to net zero, including to its pursuit of efforts to limit global average temperature rise to 1.5°C above pre-industrial levels.

Testing resilience using WBCSD scenarios

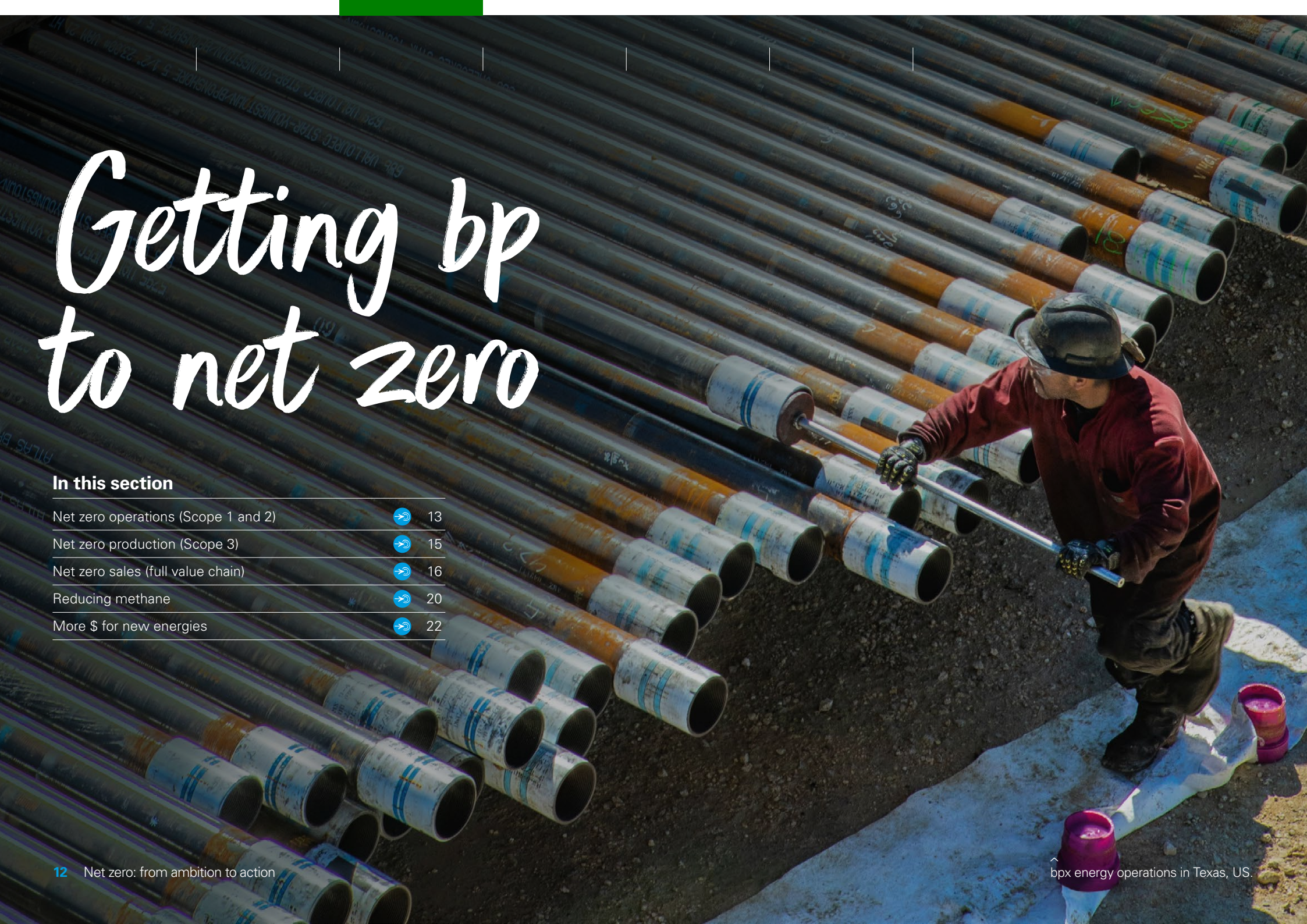
In keeping with others, such as the IPCC and IEA, we believe that there are a range of global pathways to achieve the Paris goals, with differing implications for regions, industries and sectors, so business strategies need to be resilient to this uncertainty.

We have conducted analysis to test our strategic resilience to different climate-related scenarios, using the WBCSD (World Business Council for Sustainable Development) Scenario Reference Catalogue, which was developed at the request of the TCFD (Task Force on Climate-related Financial Disclosures). This Catalogue includes scenarios that are classified by WBCSD as consistent with well below 2°C and 1.5°C outcomes.

The Scenario Catalogue comprises three ‘Climate Scenario Reference Families’: ‘Paris Ambitious 1.5°C’, ‘Paris Aligned Well-Below 2°C’ and ‘Current Policies/BAU’. We have drawn on this to test the resilience of our strategy and understand the potential implications of a range of possible energy transition scenarios for key elements of a potential 2030 bp portfolio mix. Our approach to this scenario analysis and resilience test, and our key insights from them, are discussed in our TCFD Strategy disclosures in the bp Annual Report 2021. Overall, while recognizing the limitations of any such analysis, this work reinforces our confidence in the resilience of our strategy to a wide range of ways in which the energy system could evolve throughout the next decade.



Read more on how we conducted our scenario analysis and resilience test, together with our key insights from them in the [bp Annual Report 2021 on pages 55-66](#)



Getting bp to net zero

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Net zero operations (Scope 1 and 2)

① Net zero operations★

Our aim 1 is to be net zero across our entire operations on an absolute basis by 2050 or sooner.

This aim relates to our Scope 1 (from running the assets within our operational control boundary) and Scope 2 (associated with producing the electricity, heating and cooling that is bought in to run those operations) GHG emissions. These emissions were 54.4MtCO₂e in 2019. We're targeting a 20% reduction in our aim 1 operational emissions by 2025 and will aim for a 50% reduction by 2030 against our 2019 baseline.

The 2030 aim was updated from 30-35% to 50% in February 2022.

The actions we are taking

Operational efficiency

We are implementing energy efficiency measures, electrification of centralized facilities, reducing flaring and managing methane across our operations. Emission reduction activities could include powering refineries and onshore upstream assets with renewable power as we are already doing at our Gelsenkirchen refinery in Germany. In addition, we plan to convert up to two of our existing refineries to biorefineries, complementing other emissions reduction work at these sites.

CCS

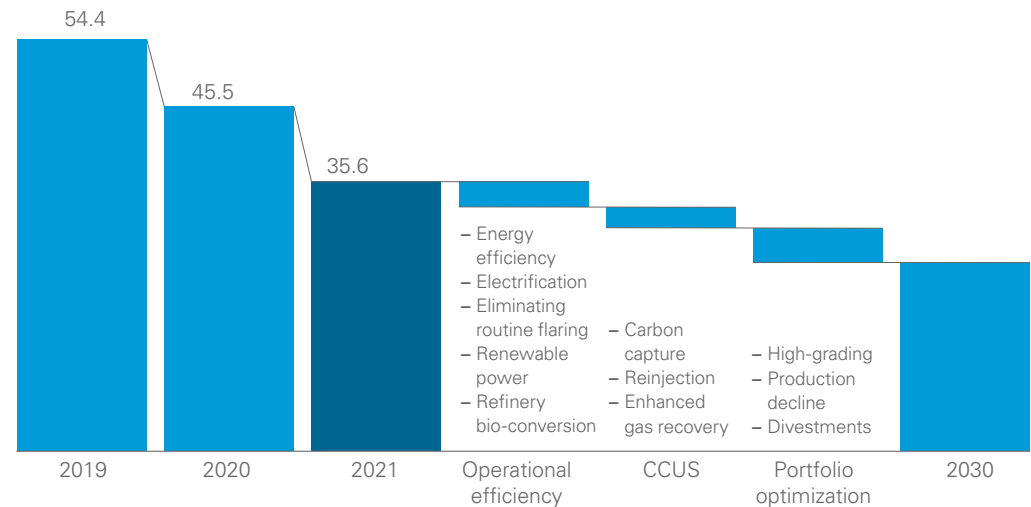
Where conditions are suitable, extraction of CO₂ from produced gas streams and reinjection underground can serve to reduce overall operational emissions, such as at our Tangguh LNG facility in Indonesia, where we are progressing the Tangguh Enhanced Gas Recovery and CCS scheme, designed to inject CO₂ back into the reservoir.

Portfolio optimization

As we high-grade our portfolio and focus on our most resilient assets, we expect the emissions of our operations to reduce over time. In our refining business we are planning for biofuel conversions, consolidation of less advantaged units and divestments where it makes sense.

Actions driving aim 1 delivery

MtCO₂e



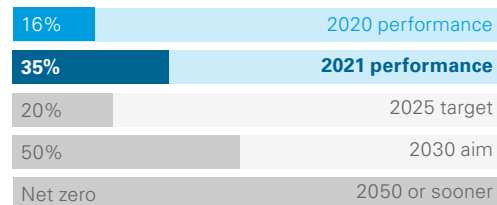
★ See glossary on pages 38-39

Net zero operations (Scope 1 and 2)

Progress to date

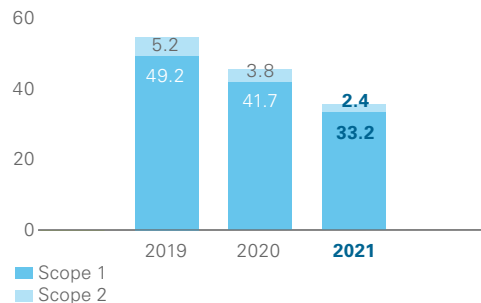
Performance and targets

Cumulative reduction in emissions against the 2019 baseline (absolute).



Scope 1 (direct) and Scope 2 (indirect) GHG emissions (operational boundary)^a

(MtCO₂e)



In 2021, our combined Scope 1 and 2 emissions, covered by aim 1 were 35.6MtCO₂e, a decrease of 35% from our 2019 baseline of 54.4MtCO₂e. The total decrease since 2019 of almost 19MtCO₂e includes 1.6MtCO₂e in sustainable emission reductions (SERs)[★] and 14.7MtCO₂e in divestments. Compared to 2020 (45.5MtCO₂e), Scope 1 and 2 emissions in 2021 decreased by 22%.

★ See glossary on pages 38-39

^a Operational control data comprises 100% of emissions from activities operated by bp, going beyond the IPIECA guidelines by including emissions from certain other activities such as contracted drilling activities.

While we have exceeded our 2025 target, we have more work to do to achieve our overall net zero aim by reducing emissions while bringing new projects online.

Scope 1 (direct) emissions, covered by aim 1, were 33.2MtCO₂e in 2021, a decrease of 20% from 41.7MtCO₂e in 2019. Emissions decreased due to delivery of SERs, permanent operational changes and divestments.

Scope 2 (indirect) emissions decreased by 1.4MtCO₂e to 2.4MtCO₂e in 2021, a 37% reduction compared to 2019. This decrease resulted from lower carbon power agreements, including at our Gelsenkirchen site, and the divestment of bp's petrochemicals business at the end of 2020.

SERs across our business and activities over the last two years included:

- Gelsenkirchen refinery reduced their Scope 2 emissions from purchased electricity by 520ktCO₂e through new lower carbon power agreements.
- Our Azerbaijan, Georgia, Turkey (AGT) region delivered reductions of 118ktCO₂e including 36ktCO₂e from waste heat recovery modifications.
- The Oman region delivered further reductions of 65ktCO₂e in 2021 through green completions and 28ktCO₂e through well-testing without flaring.



Thunderhorse platform in the US Gulf of Mexico.

- One of our offshore facilities in the AGT region delivered 55ktCO₂e of reductions in 2020 through optimizing the efficiency of their water injection pump operation leading to savings in fuel consumption.
- The Angola and Oman regions delivered further reductions in flaring during 2020 of 240ktCO₂e and 120ktCO₂e respectively.
- Our Rotterdam refinery installed an off-gas treatment unit which recovers LPG from fuel and reduces the carbon intensity of gas burned for fuel in the furnaces, providing 8ktCO₂e of emissions reduction in 2020.
- Total hydrocarbons flared increased from 831kt to 967kt in 2021 due to operational variances including temporary flaring associated with a new production start-up, while remaining well below the 2019 figure of 1,395kt.
- Divestments accounted for 9.3MtCO₂e of the Scope 1 and 2 emissions decrease including the divestment of our operations in Alaska, petrochemicals business and bpx energy divestments – in addition to the 5.4Mt of Scope 1 emissions decrease in 2020.

In 2021:

- The delivery of SERs reduced Scope 1 and 2 emissions by 1.6MtCO₂e – in addition to the 1MtCO₂e delivered in 2020.
- Other permanent reductions in 2021 included the repurposing of Kwinana refinery (0.7MtCO₂e reduction) and cessation of production at Foinaven FPSO (0.2MtCO₂e reduction).
- Temporary production-related changes accounted for an increase of 1.1MtCO₂e associated with higher activity levels, particularly in refining and temporary flaring increases – in addition to the 1.5MtCO₂e delivered in 2020.

We report our operational (Scope 1 and 2) GHG emissions with reference to two boundaries, operational control and bp equity share. The discussion in this report focuses on the operational control boundary used in aim 1, which broadly covers bp-operated assets – where we have greater influence.



Our Scope 1 and 2 data are in the [bp ESG datasheet](#)

Net zero production (Scope 3)

② Net zero production★

Our 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 is our Scope 3 aim and is based on bp's net share of production^a (around 361MtCO₂ in 2019). It is associated with the CO₂ emissions from the assumed combustion of upstream production of crude oil, natural gas and natural gas liquids (NGLs).

We are targeting a 20% reduction by 2025 and will aim for 35-40% by 2030 against our 2019 baseline.

The actions we are taking

Portfolio optimization

Becoming net zero on an absolute basis across the carbon in our upstream oil and gas production is largely linked to reducing that production. We believe that the Scope 3 emissions associated with our upstream oil and gas production will not exceed their peak in 2019 and have stated that we expect a fall in production by around 40% by 2030 (from 2.6 million barrels of oil equivalent per day (Mboe/d) in 2019 to 1.5Mboe/d in 2030). We will not seek to explore in countries where we do not already have upstream activities.

This reduction is an outcome of anticipated base decline of existing fields, new projects coming online and the ongoing strategic high-grading of our portfolio – which we are designing to be not only operationally and economically robust, but also resilient to unplanned or unexpected factors such as price volatility and geopolitical risk.

Our exploration and access capital expenditure has been in decline over the course of a decade, from a peak of \$4.6 billion in 2010, to around \$250 million in 2021.

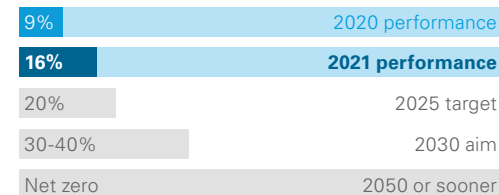
CCUS and blue hydrogen

In future, the Scope 3 emissions under aim 2 can also be reduced by the application of carbon capture, use and storage to our equity gas in the production of blue hydrogen★ or gas-fired power.

Progress to date

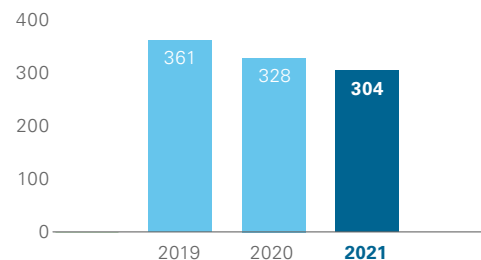
Performance and targets

Cumulative reduction in emissions against the 2019 baseline (absolute).



Estimated emissions from the carbon in our upstream oil and gas production

(MtCO₂)



The estimated Scope 3 emissions from the carbon in our upstream oil and gas production★ were 304MtCO₂e in 2021, a reduction of approximately 7% from 328MtCO₂e in 2020, mainly associated with portfolio changes, including divestments and existing field decline. This takes full account of major project start-ups and new well deliveries.

Since 2019, estimated Scope 3 emissions have reduced by 16%. We are on track to meet our 2025 target of a 20% reduction against our 2019 baseline.

★ See glossary on pages 38-39

^a Excluding bp's share of production in Rosneft. On 27 February 2022, following the military action in Ukraine, the bp board announced that bp intends to exit its 19.75% shareholding in Rosneft Oil Company (Rosneft).

Net zero sales (full value chain)

③ Net zero sales★

Our aim 3 is to reduce to net zero the carbon intensity of the energy products we sell by 2050 or sooner.

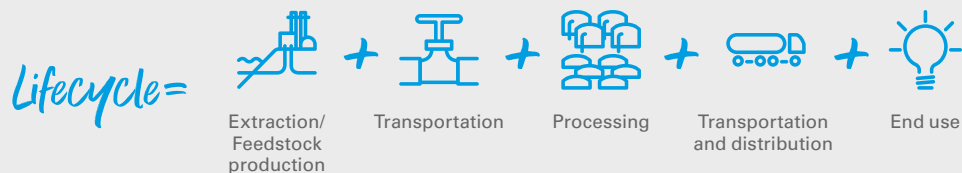
This aim applies to the average carbon intensity of the energy products we sell★. It is estimated on a lifecycle (full value chain) basis from the use, production, and distribution of energy products per unit of energy (MJ) delivered. For the 2019 to

2021 reporting years, it covers marketing sales of energy products (79gCO₂e/MJ in 2019).

As updated in February 2022, the scope of aim 3 for future reporting years is expanding to include physically traded energy products★ as well as marketed sales. In future, it may also cover certain other products, for example, those associated with land carbon projects.

Full value chain emissions for energy products

This aim is estimated on a lifecycle basis covering our full value chain including production and extraction, transportation, processing, distribution and use of the relevant products, assuming the product is fully combusted.



The actions we are taking

Reducing the average carbon intensity of the energy products we sell is directly linked to growing the size of our low carbon presence and providing products with lower lifecycle emissions. We see this change in our sales portfolio accelerating as the market evolves. We expect the reduction in carbon intensity we're aiming for by 2030 to be underpinned by the execution of our strategy across our three strategic focus areas, our transition growth businesses and our trading and integration capability.

Bioenergy production★ and marketing

We aim to grow our bioenergy production to more than 100,000 barrels per day by 2030. Our refineries operate in regions where we expect to see strong growth in bioenergy demand, and our manufacturing processes are well positioned to adapt to this. We aim to triple production by 2030 across these sites. We plan to invest in five major biofuels projects including three adjacent to existing refineries and the conversion of up to two to bio-refineries★. We also aim to grow the volume of biofuels we sell to our customers, both blended with traditional road transport fuels and as sustainable aviation fuel (SAF) where we aim to capture a 20% market share by 2030.

Through our co-marketing agreement with Clean Energy Fuels, we are already the largest supplier of biogas in the US to heavy duty fleet customers. We aim to grow the number of biogas offtake contracts from 35 to more than 225 by 2030. We plan to retain our leadership position in the US and expand in the fast-growing European market. We aim to scale equity production around 20-fold, to over 10,000 barrels a day by 2030, and through additional offtake, we expect further margin capture.

EV charging

We are accelerating our EV charging ambition across key growth markets, through a focus on 'on-the-go' charging and fleets. Overall, we aim to grow our network to more than 100,000 EV charge points★ and to increase our energy sales from those by more than 100-fold from 2019 to 2030. Through numerous strategic collaborations, such as our Digital Charging Solutions partnership with Mercedes-Benz and BMW, we expect to connect EV drivers across Europe to our network of charge points.

We think there is also significant growth potential for bp, where we already have a substantial fleet business with customers who we aim to support in their transition to EV charging. We have acquired AMPLY Power, an EV charging and energy management provider for fleets in the US. This acquisition gives us a viable fleet business and has accelerated our entry into one of the fastest growing fleet charging markets in the world.

Renewable power and electricity sales to customers

We intend to grow our commercial and industrial customer portfolios, balance our electricity generation positions and aim to double our electricity trading to 500TWh by 2030.

Our capital investment into our low carbon energy businesses including renewables and hydrogen is growing. We expect to invest \$3 to \$5 billion per annum by 2025, rising to \$4 to \$6 billion per annum by 2030. We are rigorous in evaluating opportunities, selecting only what we see as the best projects. This momentum and discipline, gives us confidence in the quality of the business we are building.

★ See glossary on pages 38-39

Net zero sales (full value chain)

Hydrogen

We intend to significantly scale up our hydrogen business between today and 2030. We anticipate this to include a mix of both green hydrogen★ (electrolysis of water using renewable power), and blue hydrogen★ (generated from natural gas), combined with carbon capture and storage (CCS). We now have a hopper of 0.7 million tonnes per annum (mtpa), of which half has been announced including plans for H2 Teesside, Lingen and Oman. This hopper has the potential to grow to up to 1.3mtpa, as we continue to activate demand and scale up production, focused on key, regionally integrated markets, such as in the UK, Europe, and the US. We are leveraging capabilities and existing demand at our refineries to underpin first projects, while creating value through integration of marketing, trading and shipping; and deepening partnerships. And as hydrogen markets develop, we aim to create a portfolio of globally advantaged supply hubs leveraging our gas positions with CCS for blue hydrogen and integrating our growing renewables projects for green hydrogen.

We aim to capture a 10% share of core markets by 2030.


Shift to gas

We anticipate our energy product sales portfolio will respond to changing demand. As such, we expect the balance between refined products and natural gas in our sales portfolio to shift in favour of natural gas, supplemented by growth in biogas, through the decade.

Transition growth businesses

We aim to deliver between \$9 and \$10 billion of EBITDA from our transition growth businesses in 2030. The majority comes from five growth engines (bioenergy, convenience, EV charging, renewables and hydrogen), which can be thought of as non-fossil businesses in high growth sectors.

With convenience excluded as it is not an energy product, the remaining four transition growth engines each contribute to driving down the average carbon intensity of our sales portfolio.

 [Read more in the full-year/4Q financial results and update on strategic progress](#)

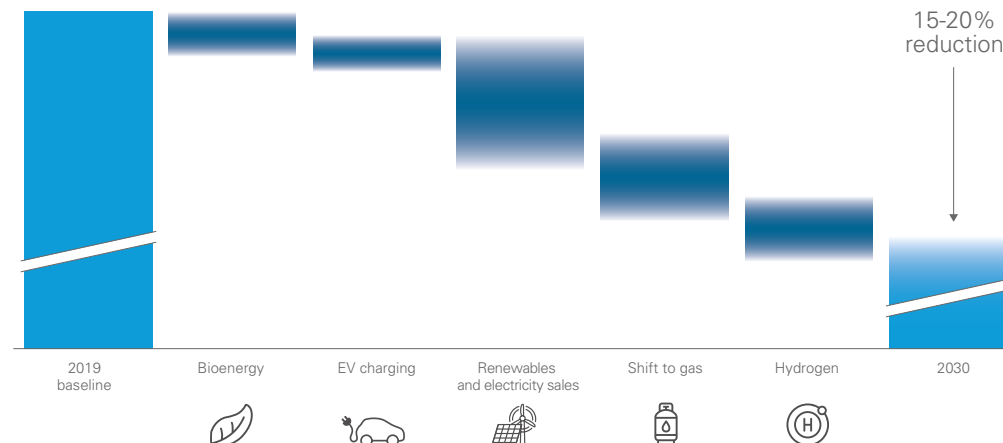
 bp.com/investors

a Includes ScotWind lease option award in January 2022.

		2021	2030 aims
Bioenergy	Operational bio-refineries★		up to 2
	Global biogas offtakes	35	>225
	Bioenergy production	>26mbd	>100mbd
	Standalone bio-plants		3
EV charging	EV charge points★	13,100	>100,000
Renewables	Developed renewables to FID★	4.4GW	50GW developed to FID
	Offshore wind	5.2GW ^a pipeline	
	Solar	19.4GW pipeline	
Hydrogen	Hydrogen	0.7–1.3mtpa hopper	10% share of core markets

Actions driving aim 3 delivery

For aim 3, reducing the average carbon intensity of the energy products we sell is driven by our evolving portfolio, including investment in EV charging, bioenergy, renewables and hydrogen, as well as an energy product trading mix that reflects decarbonization of global energy and bp's activities over time.



★ See glossary on pages 38-39

Net zero sales (full value chain)

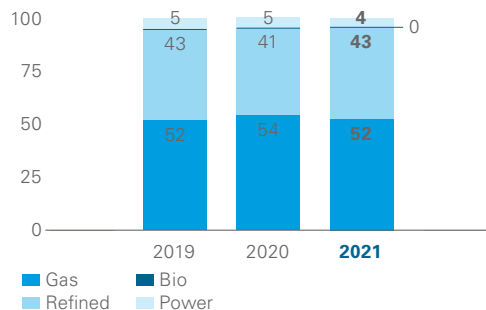
Progress to date

Progress and targets

Cumulative reduction in carbon intensity against the 2019 baseline (lifecycle).

<1%	2020 performance
0%	2021 performance
5%	2025 target
15-20%	2030 aim
Net zero	2050 or sooner

Share of energy delivered per energy product type^{b,c}



Average emissions intensity of marketed energy products^{a,d}

	2019	2020	2021
Average emissions intensity of marketed energy products	79	79	79
Refined energy products	93	92	92
Gas products	71	71	72
Bioproducts	29	28	27
Power products	44	43	38

The role of offsets in our net zero ambition

We believe that both natural and technological emission reductions and removals are critical to reaching the Paris goals. We believe that effective compliance and voluntary markets for high quality carbon credits are important to finance these activities. We expect that global demand for carbon credits is likely to grow as more companies use them to achieve their climate-related goals. So, we intend to continue to offer carbon credits and offsetting solutions to our customers to help them meet their goals.

We don't plan to rely on offsetting to meet our 2030 net zero aims. We consider that it makes sense to account for carbon credits directly related to our business, such as where carbon credits are 'bundled' with the energy we sell and looking ahead we plan to do so.

In 2021, the average carbon intensity of bp's marketing sales of energy products remained at 79gCO₂e/MJ^a, as in 2019 and 2020.

We are continuing to invest in activities that will decarbonize our business in the future. Reducing the average carbon intensity of our sales portfolio is directly linked to growing the size of our low carbon businesses and providing products with lower lifecycle (full value chain) emissions. Our investments in low carbon as part of aim 5 have increased from around \$750 million in 2020 to nearly \$2.2 billion in 2021.

Much of the low carbon investment we have made is expected to feed into carbon intensity reductions later in this decade and beyond.

The diversification inherent in our strategy provides us with a range of levers – including our transition growth businesses and the trading activity which is now included within the scope of this aim – as we pursue delivery of our 2025 target and 2030 aim.

Compared to the 2019 baseline, the carbon intensity of bp's marketing sales of energy products^a remained flat. This is because of a lower share in sales of gas and power products from 2019 to 2021, caused by a number of factors including a reduction in demand over the period and an increase in refined products demand post-COVID-19.

Our ESG datasheet provides the aggregated GHG and energy figures used to calculate aim 3 carbon intensity, which we consider the appropriate metric for our sales portfolio. Between 2019 and 2021, the aggregate annual lifecycle GHG emissions fell, primarily due to an overall reduction in sales of natural gas and refined products.

 Read more: bp.com/ESGdata

The actions we are taking, and plan to scale, help to build a portfolio of lower carbon intensity, in line with our aim. To date, this includes:

Bioenergy production and marketing

We produce more than 5,000 barrels per day of biofuels at three of our refineries through bio co-processing. And through our co-marketing agreement with Clean Energy Fuels, we are already the largest supplier of biogas in the US to heavy duty fleet customers.

EV charging

In 2021, we grew our network to around 13,100 charge points across core EV markets, with nearly half of our network now either rapid^a or ultra-fast^a.

^a We now report carbon intensity for aim 3 to the nearest whole number in gCO₂e/MJ. Following publication of the 2020 bp Annual Report and Form 20-F, Sustainability Report and ESG datasheet, we identified minor data reporting corrections and implemented methodological improvements which have impacted the previously reported aim 3 figures. Recognizing that amendments and methodological enhancements may continue to occur in the future, we believe that the rounding of aim 3 figures in this way provides a more reliable and consistent representation of our performance. Since this is the first year of reporting on this basis, our ESG datasheet on bp.com includes carbon intensity on the prior basis of rounding to one decimal place.

^b The share of energy is based on the total energy marketed by bp, with electricity represented as fossil equivalence of sold energy.

^c Due to rounding some totals may not agree exactly with the sum of their component parts.

^d The aggregate lifecycle emissions and energy values used in the calculation of the average emissions intensity of marketed energy products is provided in our ESG datasheet on bp.com.

^a See glossary on pages 38-39

Net zero sales (full value chain)

Renewables

We have increased the size of our pipeline of renewables projects for development to 23 gigawatts (GW) net to bp at end 2021.

In offshore wind, we completed the formation of a 50-50 strategic US offshore wind partnership with Equinor to jointly develop up to 4.4GW from two major lease areas off the US East Coast through two projects, Empire Wind and Beacon Wind. In the UK, bp and 50-50 partner EnBW were jointly selected as the preferred bidders for two 60-year leases in the UK's first offshore wind leasing round in a decade – development of these projects, Morgan and Mona, is expected to add up to 3GW offshore wind capacity in the UK. In January 2022, together with EnBW, we were awarded a lease option to develop a major offshore wind project 60km offshore from Aberdeen, Scotland. To be known as Morven, this project will have a potential generating capacity of around 2.9GW, sufficient to power more than three million homes.

In solar, Lightsource bp is further accelerating growth, now targeting up to 25GW by 2025 and will be exclusively developing a potential 9GW solar pipeline for bp following its acquisition from 7X Energy in 2021. Lightsource bp continued to grow its operational portfolio in the US, Europe and Australia in 2021, and now has active projects in 14 countries, including new markets in Greece and Poland. In June 2021, Vendima, five Lightsource bp solar projects, began commercial operations in Zaragoza, Spain. With a total capacity to provide around 250MWp of solar energy, producing electricity which is the equivalent of powering over 107,000 homes.

Hydrogen and CCUS

During 2021, we progressed projects in Australia, Germany, the Netherlands and Spain. We also identified several new opportunities and continued to explore opportunities across multiple geographies. In the UK, we have made several announcements, including our plan to build the UK's largest hydrogen production facility at Teesside in the North East of England to deliver up to 1GW of blue hydrogen★ by 2030, and the HyGreen Teesside project targeting 60MWe of green hydrogen★ production by 2025. In addition, we have established partnerships with the cities of Aberdeen and Houston to integrate city energy systems around hydrogen, solar and mobility solutions. Initial capital expenditure is expected to be deployed from 2022 onwards.

Hydrogen production is also set to play a part in the strategic partnership we have formed with ADNOC and Masdar to provide clean energy solutions for the UK and UAE as well as in our collaboration with Valencia regional government to explore decarbonization opportunities in the Valencia region. The Northern Endurance Partnership has been confirmed as one of the UK's first two carbon capture and storage projects as part of the East Coast Cluster. And we have awarded the first engineering contracts for Northern Endurance Partnership and Net Zero Teesside Power station. We are also building a hopper of options worldwide, including global export hubs for marine and shipping.



A Jio-bp pulse EV charge point in India.

★ See glossary on pages 38-39

Reducing methane

④ Reducing methane

Our 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^a of our operations.

And we will work to influence our joint ventures to set their own methane intensity targets of 0.2%.

There are two challenges in tackling methane emissions – the identification and quantification of emissions, and finding ways to reduce them. This aim addresses both. Our methane emissions intensity is currently calculated using a generally accepted industry methodology and, while it reflects progress in reducing intensity, it does not directly correlate with progress towards delivering our 2025 target, which is based on our new measurement approach.

^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).

Methane measurement

Our plans to install methane measurement at all our existing major oil and gas processing sites continued in 2021 with the ongoing installation of enhanced metering, software for flare efficiency and predictive emissions monitoring on gas turbines in line with our three-year timeframe.

At our US onshore operations we trialled new technologies for site level emissions detection and continued using drones and aircraft with methane sensors.

Methane reduction activity

Across our US onshore operations, we are working to achieve zero routine flaring by 2025 or sooner. This includes installing air assisted flares to improve combustion efficiency and thermocouple sensors on all flare stacks that notify bp operations teams of unlit flares. All bpx flares have auto-ignitors to attempt to remotely reignite extinguished flames.

At a number of our North Sea assets, we made improvements such as optimizing the restart sequence of our operations and changing operational parameters to minimize the potential for flares to extinguish under high winds.

Our actions on methane reduction enable our businesses to capture value by supplying the gas to customers. Otherwise the gas would be wasted with both an economic loss and an adverse impact on emissions.

Technology improvements

Technologies to detect and measure methane are evolving at pace. A flexible approach to using different technologies allows us to move towards increased continuous site and source-level measurement systems as more advanced technology becomes available. We use different methods, including drones, aircraft, satellites and fixed video monitoring. We continue to monitor emerging technologies to assess their potential as methane measurement tools.

Why methane reduction is important in slowing the rate of temperature increase

When methane is emitted into the atmosphere unburnt, it has a relatively short atmospheric lifespan of 10 to 12 years. But it is more than 25 times more potent than CO₂ over a 100-year time span.

Reducing methane emissions could dramatically reduce the pace of warming. According to the IPCC, methane was the second largest contributor to warming over the last decade to 2019, with almost 60% of the impact of carbon dioxide.

During the COP26 climate change conference in Glasgow, UK, 103 countries signed the Global Methane Pledge to reduce global methane emissions by 30% by 2030 against a 2020 baseline. In the US, the Environmental Protection Agency has proposed the adoption of federal regulations that will require oil and gas operators to detect and repair methane leaks.

This is a critical step toward helping the US reach net zero by 2050 or sooner and we look forward to continuing to engage with the Administration as it develops methane rules.

Autonomous methane measurement

In 2021, bp joined forces with five other operators in the North Sea and with the Net Zero Technology Centre to develop a method for offshore methane measurements using autonomous aircraft. The method is designed to meet emerging requirements for atmospheric measurements under the Oil and Gas Methane Partnership 2.0 (OGMP). It combines a state-of-the-art methane sensor with a fixed wing autonomous aircraft capable of operating in challenging environments, such as the North Sea. This allows emissions data to be collected while minimizing the requirement for personnel to be present in the offshore environment, reducing overall risk.

Reducing methane

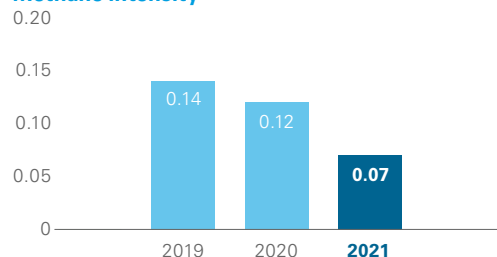
Progress to date

Performance and targets

Methane intensity^a

0.12%	2020 performance
0.07%	2021 performance
0.20%	2025 target ^b

Methane intensity^c



Our methane intensity in 2021 was 0.07%^a, down from 0.14% in 2019. Methane emissions from upstream operations, used to calculate our intensity, decreased by 40% to around 43.0kt, from 71.6kt in 2020. This continues a declining trend in absolute upstream methane emissions since 2016, when we reported 111kt. Variations in production and divestments accounted for approximately 78% of the absolute reductions reported for 2021, and we also achieved methane SERs. Marketed gas volumes decreased by 1% from 3,075bcf in 2020 to 3,058bcf in 2021.

Throughout 2021, we continued working to reduce our operational methane emissions – from upgrades in our current operations to advancing the design and use of new technology. Our aim to deploy methane measurement is focused on improving our understanding and confidence in our methane data in an effort to support our efforts to reduce methane intensity and absolute emissions.



Monitoring equipment at our operations.

- 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).
- b Based on our new measurement approach.
- c Methane intensity is currently calculated using our existing methodology and, while it reflects progress in reducing methane emissions, will not directly correlate with progress towards delivering the 2025 target under aim 4.

More \$ for new energies

⑤ More \$ for new energies

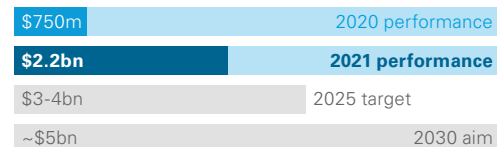
Our aim 5 is to increase the proportion of investment we make into our non-oil and gas businesses.

Over time, as investment goes up in low and zero carbon, we see it going down in oil and gas.

Progress to date

Performance and targets

\$ investment in low carbon



In 2021, low carbon capital expenditure increased to nearly \$2.2 billion from around \$750 million in 2020 and >\$500 million in 2019. This is due to our continuing acceleration in offshore wind and solar as well as advancing mobility with a bolder ambition in electrification.

★ See glossary on pages 38-39

a Excludes goodwill and cash and cash equivalent FY & 4Q 2021 financial results & update on strategic progress.

Our low carbon investment focus will be on renewables, biofuels, EV, hydrogen and carbon capture and storage (CCS). We are confident that bp's future capital expenditures in carbon intensive assets or products will not exceed the peak in 2013.

Our 2022-2025 capital expenditure frame is \$14-16 billion. We target increasing our low carbon investment★ to \$3-4 billion per year in 2025, and aim to increase it to at least \$5 billion per year in 2030 – a ten-fold increase on the 2019 baseline. With convenience included, capital expenditure invested into our transition businesses as a whole is expected to reach 40% of total spend by 2025, rising to around 50% by 2030, as stated in our update in February 2022.

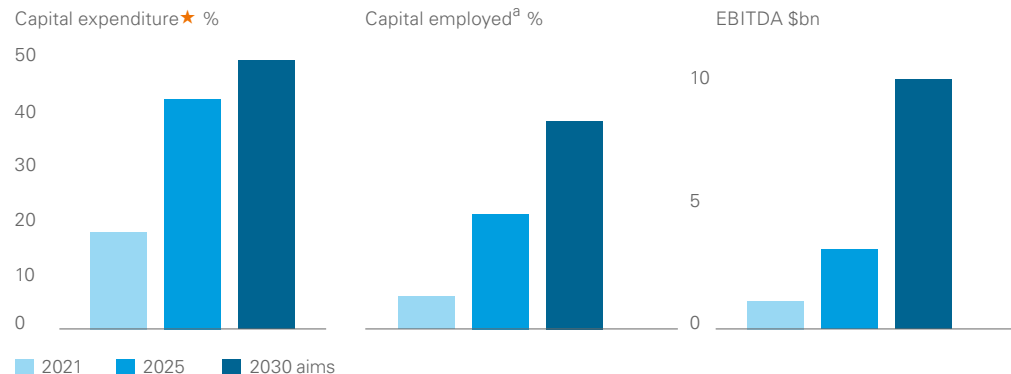
Increasing investment in transition growth businesses

We are increasing our exposure to businesses which are expected to see rapid growth through the energy transition.

This is driven by five transition growth engines: bioenergy, convenience, EV charging, renewables and hydrogen.

In 2021, transition growth businesses represented more than 15% of our capex. Together, these aim to deliver around \$9 to \$10 billion of EBITDA by 2030.

Increasing exposure to transition growth businesses



A biofuels facility in Brazil.

Helping the World get to net zero

In this section

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Clean cities and corporates	→	28
Supporting a just energy transition	→	29

Five aims to help the world get to net zero

⑥ Advocating

Our aim 6 is to more actively advocate for policies that support net zero, including carbon pricing.

We have stopped corporate reputation advertising campaigns, and this is enabling us to redirect resources to promote well-designed climate policies. In future, any corporate advertising will be to advocate for progressive climate policy; communicate our net zero ambition; invite ideas; or build collaborations.

We will continue to run recruitment campaigns and advertise our products, services and partnerships – although we aim for these to increasingly be low carbon.

Progress to date

Advocacy takes place at regional, country, state and local levels. We have focused on some consistent themes, including methane emissions reductions, electrification and the need to support reskilling for the energy transition. Our activities included:

- Supporting carbon pricing in the US, including actively advocating for the cap and invest programme within the Washington State Climate Commitment Act. This has now passed into law, and we are working with state agencies as they develop rules for implementation.


- Providing technical input to the US Environmental Protection Agency ahead of its proposal for new rules aimed at reducing methane emissions from the oil and gas industry. We advocate for direct federal regulation of methane in the US and we look forward to engaging with the EPA as it further develops its methane rules.
- Contributing to a series of actions from both industry and government to help accelerate the mass adoption of electric vehicles across the UK, as part of our membership of the Electric Vehicle Fleet Accelerator.
- Giving support and input to proposals for climate and Sustainability Reporting in the US and UK by responding to requests for information by the SEC in the US and the FCA and BEIS in the UK.
- Contributing to the UK Green Jobs Taskforce report calling for government, industry and the educational sector to take action to deliver on the promise of a green industrial revolution and net zero.
- Providing input to the development of the New Zealand Sustainable Biofuels Mandate.
- Supporting the drafting of EU methane regulations by collaborating on technical methane recommendation papers issued through industry bodies such as the Methane Guiding Principles, as well as more targeted bp-specific feedback. This effort will continue in 2022.

In addition, our CEO publicly welcomed the Fit for 55 legislative package – to help the EU to cut its emissions by at least 55% by 2030, compared with 1990 levels. We have also responded to multiple consultations on these proposals, for example, on the ramp-up of production of sustainable aviation fuel and increasing the overall share of renewables to at least 40%.

 Read more at bp.com/policyandadvocacy

Our advocacy hub

We have improved transparency about our global policy advocacy by publishing examples of our activity in support of aim 6. We plan to provide updates on key activities so that stakeholders can monitor our advocacy themes and performance throughout the year.

 Read more: [bp global advocacy](#)

Read more: [bp US activity](#)



Lightsource bp Impact
Solar project in Texas, US.

Five aims to help the world get to net zero

⑦ Incentivizing employees

Our 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 continuing to allocate a percentage of remuneration linked to emissions reductions for leadership and around 22,000^a employees.

Progress to date

To help our employees deliver our strategy and sustainability aims, we are engaging with them about the importance of net zero, incentivizing them to become advocates and providing the support they need to do so.



Read more in the [bp Sustainability Report 2021](#)

Incentivization

Our annual bonus for all eligible employees, including the bp leadership team, has been linked to a sustainability measure since 2019. The bonus scorecard against which our employees are measured incentivizes our people based on three themes: safety and sustainability (30%), operational performance (20%) and financial performance (50%).

For sustainability this includes a measure related to sustainable emissions reductions. In 2022, our annual bonus scorecard will remain unchanged for employees. And we will expand sustainability measures in the long-term incentive plan scorecard for group leaders, through two social measures; employee engagement and improved ethnic minority representation within our senior level leader population, and the inclusion of an aim 1 net zero operations measure.

In addition, from 2022, over 40% of the performance-based share awards for our senior leaders will be related to low carbon actions and delivering our strategy.

We offer sustainable benefits to eligible UK employees, including the choice of electric fleet vehicles. And as part of our employee engagement, through our carbon offsetting scheme bp employees offset a combined 75ktCO₂e for domestic carbon and travel, including corporate aviation, in 2021. The offsetting scheme is set to be rolled out globally in 2022. These two employee schemes are unconnected to bp's operational emissions, which are not being offset.

2021 annual bonus scorecard

These measures were set out under the terms of our 2021 policy.

Measures		Weighting
Safety and sustainability (30% weighting)	Process safety tier 1 and tier 2 events	15%
	Sustainable emissions reduction (million tonnes)	15%
Operational performance (20% weighting)	bp-operated reliability and availability	10%
	Margin share from convenience and electrification	10%
Financial performance (50% weighting)	Free cash flow, ex Deepwater Horizon costs (\$bn)	25%
	Cumulative cash cost reductions 2021 v. 2019 (\$bn)	25%



Read more in the Directors' remuneration report in the [bp Annual Report 2021 on pages 116-141](#)

^a This figure was approximately 37,000 in February 2020. It has been updated to reflect the number of employees eligible for a cash bonus in 2021.

Five aims to help the world get to net zero

⑧ Aligning associations

Our 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 are prepared to leave.

Progress to date

We published our first trade association review in early 2020. As a result we left three associations that we deemed not to be aligned with our position.

We belong to trade associations that offer opportunities to share good practice and collaborate on issues of importance to us, not just policy and advocacy. bp's voice is one among many, but we work hard to make our case and enlist the support of like-minded companies for progressive climate policies.

Progress is sometimes challenging and uneven because associations need to take account of members' differing views. We recognize this and will continue using our influence to make our case. We regularly assess the alignment of key associations with our position on climate.

In 2021, we published an update on the progress made by five associations that we had found to be only partially aligned in our 2020 inaugural report:

- Following advocacy by members, including bp, the American Petroleum Institute (API) declared support for direct federal regulation of methane in its Climate Action Framework, in which it also states that it will support carbon pricing mechanisms. We are encouraged by the Framework's focus on transparency and reporting.
- bp was among the companies urging the US Chamber of Commerce to take a more active and positive approach to climate policy, which it did in the January 2021 policy update. This included support for 'market-based approach to accelerate GHG emissions reductions' and the direct regulation of methane emissions.
- The National Association of Manufacturers' position has evolved in the area of carbon pricing as the organization has stated support for 'market based options'.
- We were also encouraged by progress made concerning support for progressive climate policy by the Australian Institute of Petroleum and the Canadian Association of Petroleum Producers.

In our progress update, we listed our 66 most significant memberships where fees exceeded \$50,000. We plan to publish a comprehensive trade associations review in the second quarter of 2022.

Throughout 2021 in the US, we pushed for constructive engagement on climate policy proposals with API, the US Chamber of Commerce, the National Association of Manufacturers, and other organizations.



Employees at our Sunbury site in England.

 Read more at bp.com/tradeassociations

Five aims to help the world get to net zero

⑨ Transparency leader

Our 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 (TCFD).

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.

We know that our stakeholders need to be able to evaluate the progress we are making against our strategy and net zero ambition. That is why we support:

- Simplified and harmonised standards.
- Consistent and standardised reporting to monitor and compare.
- Taxonomies that include transitional or greening activities and technologies, as well as the 'pure green'.

Progress to date

We have taken steps to increase the transparency of our reporting – on climate-related matters and sustainability more broadly, including:

- Published our SASB index, reporting against metrics from the exploration & production standard.
- Resumed submission to the CDP (Climate Disclosure Project) climate questionnaire and received an A- score.

 Read more at bp.com/ourreporting

We have also actively participated in the development of carbon and net zero standards and benchmarks. We are currently piloting the new IIGCC Net Zero Standard for Oil & Gas alongside some of our peers which is expected to integrate into TPI (Transition Pathway Initiative) and Climate Action 100+ analysis. Through 2021, we have responded to consultations from CA100+, SBTi and others.

Expanded TCFD disclosures

For 2021, we have reported in line with the FCA listing rule for premium listed companies: LR 9.8.6(8)a and made climate-related financial disclosures against each TCFD Recommended Disclosure that we consider to be consistent both with the Recommended Disclosure and the related Recommendations. You can read these full disclosures covering governance, strategy, risk and metrics and targets in the **bp Annual Report 2021 pages 55-66**.

TCFD index table

Our expanded TCFD disclosures can be found on the following pages in the **bp Annual Report 2021**.

TCFD recommendation	TCFD recommended disclosure	Where reported
Governance Disclose the organization's governance around climate-related issues and opportunities.	a. Describe the board's oversight of climate-related risks and opportunities. b. Describe the management's role in assessing and managing climate-related risks and opportunities.	<ul style="list-style-type: none"> • Page 55-57 • Page 57-58
Strategy Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's business, strategy and financial planning where such information is material.	c. Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term. d. Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning. e. Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	<ul style="list-style-type: none"> • Pursuing a strategy that is consistent with the Paris goals – page 30 • Strategy – page 12 • Risk factors – page 77 • Risk factors – pages 77 – description of principal risks • Strategy – page 12 • Our strategy – page 12 • Pursuing a strategy that is consistent with the Paris goals – page 30
Risk management Disclose how the organization identifies, assesses and manages climate-related risks.	a. Describe the organization's processes for identifying and assessing climate-related risks. b. Describe the organization's processes for managing climate-related risks. c. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	<ul style="list-style-type: none"> • Risk management – page 65 • How we manage risk – page 74 • Risk factors – page 77 • Risk management – page 65 • How we manage risk – page 74 • Risk management – page 65 • How we manage risk – page 74 • Risk factors – page 77
Metrics and targets Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.	a. Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process. b. Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 GHG emissions, and the related risks. c. Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	<ul style="list-style-type: none"> • Our strategic focus areas and metrics – page 16 • Our group-wide principal metrics and relevant targets – page 67 • GHG emissions data – pages 51-54 • Our net zero targets and aims page 51



Five aims to help the world get to net zero

⑩ Clean cities and corporates

Our aim 10 is to launch a new team to create integrated clean energy and mobility solutions.

We launched our regions, cities and solutions team in 2020, to help countries, cities and corporations around the world decarbonize.



Progress to date

In 2021, we continued to work towards our target of partnering with 10-15 cities globally by 2030.

We already have partnerships with the cities of Houston in the US and Aberdeen in Scotland. We signed a memorandum of understanding (MoU) with Aberdeen Harbour to explore the possibility to reduce emissions and lower air and noise pollution from vessels arriving there.

In the Valencia region of Spain, in January 2022, we signed MoUs with the state government and ceramic industry associations to explore ways to decarbonize public and private mobility, port and airport operations and industry in the region. This builds on our plans to transform our Castellon refinery to be capable of producing green hydrogen, biofuels and renewable energy.

Our regions, cities and solutions team is working to meet corporates' complex decarbonization needs through access to a 'one stop shop' of low carbon energy solutions from across bp's businesses.

We made progress against our intent to partner with corporates in the heavy industry, heavy transport, mobility and hi tech and consumer products sectors.

Heavy industry

We signed an MoU with CEMEX, a global leader in the building materials industry, to support its 2050 ambition to deliver net zero concrete. We intend to work with CEMEX to potentially develop decarbonization solutions for the production and transportation of their cement products.

Heavy transport

We have agreed to work with corporates from the shipping, aviation and trucking industries. Together with the Maersk Mc-Kinney Møller Center for Zero Carbon Shipping, we signed a partnership agreement committing to a long-term collaboration on the development of new alternative fuels and low carbon solutions for the shipping industry.

We also signed an MoU with the shipping and logistics company NYK Line to collaborate on future fuel and transportation solutions to help shipping and other sectors decarbonize. In relation to shipping, the collaboration will focus on ways of transitioning from current marine fuels to future fuels and associated value chains such as CO₂ shipping.

We announced plans to create a decarbonized air corridor between the UAE and UK through a strategic partnership with Masdar and ADNOC. We also progressed our partnership with Qantas to supply sustainable aviation fuel to the airline from 2022 for selected flights from London to Australia departing from London's Heathrow Airport.

Mobility

We have joined forces with leading OEMs such as BMW and Mercedes-Benz to further accelerate the growth of electrification. We've continued to expand our electrification joint venture with DiDi and now provide all customers using our network of charging sites across China with carbon neutral charging.

In 2020, we announced a deal with ride-hailing giant Uber to help their EV drivers access more affordable, reliable charging infrastructure in the UK. Under the deal, Uber drivers in London benefit from discounts on our rapidly expanding network, including access to our latest >150kW ultra-fast charge points and rapid charge hubs.

Hi-tech and consumer products

We signed an agreement with Infosys to develop and pilot an 'energy as a service' solution and digital platform, with a pilot to be carried out at its Pune campus. We have also signed an MoU with Schneider Electric to collaborate on jointly offering integrated energy solutions to customers.

In 2020, we also deepened our relationship with Amazon in support of both of our ambitions to reduce our emissions and help our customers reduce theirs. We have agreed to more than triple the renewable power that bp will supply to Amazon's operations in Europe – helping Amazon get a step closer to their goal to power operations with 100% renewable energy. At the same time, Amazon will help bp with innovative technologies that will accelerate our programme to digitize our infrastructure and operations.

Partnership updates

In Aberdeen, we have formed a joint venture with Aberdeen City Council to build and operate Scotland's first green hydrogen hub, supplying hydrogen for the city's mobility and heating needs. The addition of the ScotWind offshore wind lease brings the potential for greater scale, enabling the hydrogen hub to supply neighbouring regions.

In July, we progressed our partnership with Microsoft to create renewable energy deal structures for Microsoft's data centres. Microsoft and bp are also working together to find innovative low carbon solutions – exploring concepts such as the development of clean energy parks powered by next-generation technologies. bp is also using Microsoft's Azure cloud services to access its machine learning and data analytics tools.

Supporting a just energy transition

Our aim is to support a just energy transition that advances human rights and education. We support the Paris Agreement, which recognizes the importance of a just transition – one that delivers decent work, quality jobs and supports the livelihoods of local communities.

We will do this by developing just transition plans in priority areas and helping the workforce to develop skills for the future energy system, taking a socially inclusive approach. We aim to build stronger relationships with local communities, based on mutual trust and respect, and will support civic dialogue, greater transparency and capacity building, where we work.

Progress to date

In 2021, we advanced initiatives that support a just transition for the bp workforce and for people living in communities where we operate.

Just transition for the workforce

We aim to provide our people with the skills they need for their current roles and for the energy transition. We use skills forecasting and capability plans to help us make decisions about recruitment and development.

We support education and employability activities that help people develop transferable skills needed for careers in energy and other sectors, often with a focus on disadvantaged and under-represented communities.

We are committed to advancing social mobility and this year our EVP for people & culture, joined the Levelling Up Goals initiative in the UK as a commissioner. Many of our education initiatives support social mobility, as do our apprenticeship programs. In 2022, we intend to share our approach to advancing social mobility across bp.

Just transition for local communities

In 2021, we worked to develop collaborations to support the just transition in local communities where we work. In the UK we are scoping an initiative that supports research and engagement with local communities in Aberdeen to understand their views on a just transition. It will inform future initiatives and actions plans.

In 2021, we engaged extensively with the local community in Teesside to help us develop our proposals for H2Teesside and NZT Power projects. Based on this engagement, we included plans to help local people build skills and capabilities, to foster community regeneration and to advance social mobility. We also committed to continue creating future plans and initiatives with the local community if we are successful in 2022.

 [Read more about our sustainability aims and progress in the bp Sustainability Report 2021 at \[bp.com/sustainability\]\(https://bp.com/sustainability\)](#)



An engineer at our Australian operations.

Governance and capital allocation

In this section

- Governance 31
- Evaluating capital investment for consistency with Paris 33

Governance

We are strengthening the ways we build sustainability into our wider governance structure and business practices, including our capital investment decisions.

Focusing on shareholder value

Our investor proposition combines committed distributions, profitable growth and sustainable value – all in service of delivering long-term shareholder value. The board is responsible for setting the strategy and for monitoring bp's management and operations as they work to execute strategic delivery against our targets and aims. Value is supported by:

- The high-grading of our resilient hydrocarbons portfolio, to drive returns, while acting on operational emissions. The depth of our resource base provides flexibility, including allowing us to realise value through the divestment of assets.
- A commitment to the disciplined allocation of capital. We expect to maintain a capital frame of \$14-16 billion per annum through to 2025.
- A standardized approach to investment allocation and stringent investment hurdles.
- Deepening our investment in business sectors we believe are likely to see rapid growth through the energy transition – we expect these transition growth businesses to account for greater than 40% of the capital frame by 2025 and around 50% by 2030.
- Building on our capabilities in integrating energy, managing complexity and meeting customer needs.

- Monitoring our strategic resilience against the uncertainty of the energy transition. This year we tested that resilience against different energy transition pathways, including several that are considered to be consistent with well-below 2°C and 1.5°C temperature rises.

 Read more at bp.com/governance
Read more in our [bp Annual Report 2021](#)

Accountability and decision making

The role of the board is to promote the long-term success of the company for the benefit of its members, generating value for shareholders while having regard to the interests of our other stakeholders, the impact of our operations on the communities where we operate and the environment. In performing this role, the board establishes bp's strategy and is responsible for monitoring bp's management and operations and obtaining assurance about the delivery of its strategy.

Climate-related risks and opportunities were discussed at every board meeting covering strategy, of which six were held in 2021. The other board committees consider climate-related issues where they consider it appropriate to do so in the execution of their responsibilities.

The remit of the safety and sustainability committee includes the provision of oversight of the effectiveness of the implementation of bp's sustainability frame, including reviewing progress against our net zero aims.

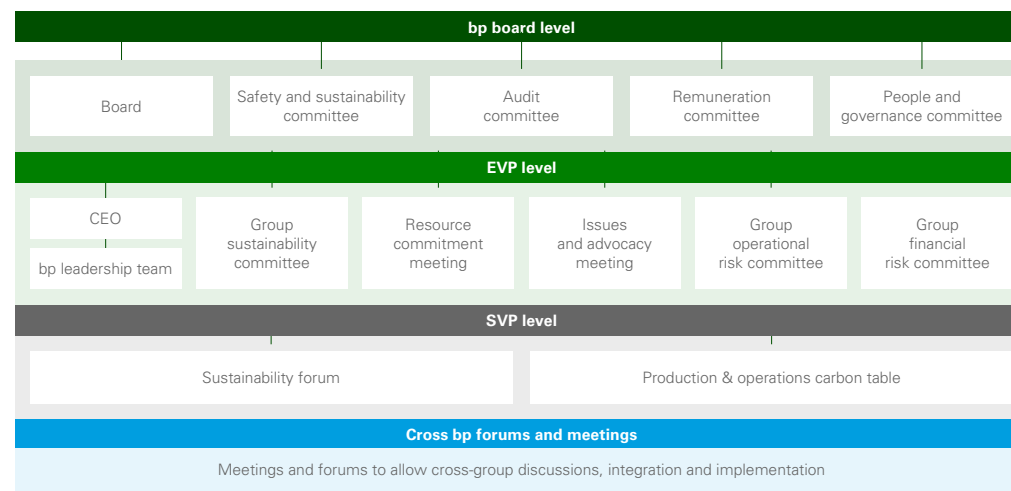
The board, subject to certain conditions and limitations, delegates day-to-day management of the business of the company to the CEO. Under his delegation, the CEO has the responsibility to oversee the implementation of a comprehensive system of internal controls that are designed to, among other things (a) identify and manage risks that are material to bp, (b) protect bp's assets, and (c) monitor the application of bp's resources in a manner which meets external regulatory standards.

Risks, for these purposes, include the climate-related risks and opportunities for bp associated with the issue of climate change and the transition to a lower carbon economy. This is set out in the CEO role profile at bp.com/board.

At an executive level, the group sustainability committee was established to provide oversight, challenge and support in the implementation of bp's sustainability frame and management of potentially significant non-operational sustainability (including climate-related) risks and opportunities.

We provide more information on our governance of climate-related matters in the bp Annual Report 2021.

 Read more in our [bp Annual Report 2021 on page 57](#)



Governance

Active shareholder resolutions


In 2019 and 2015, the board recommended that shareholders support two Special Resolutions, both of which were passed and form part of bp's constitution.

In 2019, the resolution requisitioned by Climate Action 100+, directs the company to include in its annual reporting, a description of its strategy which the board considers, in good faith, to be consistent with the Paris goals. This includes: metrics and targets, anticipated levels of investment, an annual estimate of the carbon intensity of the company's energy products and progress over time, linkage of these targets with executive remuneration, and evaluating the Paris consistency of new material capex investments.

You can read our reporting in line with the CA100+ resolution in the bp Annual Report 2021.

In 2015, a resolution requisitioned by shareholders directs that routine annual reporting from 2016 includes further information about ongoing operational emissions management, asset portfolio resilience to the IEA's scenarios, low carbon energy research and development and investment strategies, relevant strategic key performance indicators (KPIs) and executive incentives, as well as public policy positions relating to climate change.

★ See glossary on pages 38-39

Element of the CA100+ resolution	Related content	 Where in the bp Annual Report 2021 ^a
Strategy that the board considers in good faith to be consistent with the Paris goals.	Our strategy and business model	Page 12
	Pursuing a strategy that is consistent with the Paris goals	Page 30
How bp evaluates each new material capex investment★ for consistency with the Paris goals and other outcomes relevant to bp strategy.	Our investment process	Page 32
Disclosure of bp's principal metrics and relevant targets or goals over the short, medium and long term, consistent with the Paris goals.	Key performance indicators	Page 24
	Sustainability: net zero targets and aims	Page 51
	See 'TCFD metrics and targets' for an overview	Page 66
Anticipated levels of investment in: (i) Oil and gas resources and reserves. (ii) Other energy sources and technologies.	Financial frame	Page 20
bp's targets to promote operational GHG reductions.	Sustainability: net zero targets and aims	Page 51
Estimated carbon intensity of bp's energy products and progress over time.	Sustainability: aim 3	Page 52
Any linkage between above targets and executive pay remuneration.	Directors' remuneration report	Page 116
	2021 annual bonus outcome	Page 122
	2021 remuneration policy	Page 137

^a Page numbers relate to the bp Annual Report 2021.

Evaluating capital investment for consistency with Paris

Capital allocation

Financial discipline is at the heart of bp's value proposition. We aim to deploy more capital into our non-oil and gas businesses, to the extent that returns are accretive and consistent with our net zero ambition and strategy. Our commitment to aligning our strategy, capital expenditure and net zero targets and aims is shown by the planned capex progression that we set out under our aim 5 (to increase investment in new energies).

 [See page 22](#) for more on aim 5

Governance framework

bp's investments fall within a governance framework. This seeks to ensure investments align with our strategy, fall within our prevailing financial frame, and add shareholder value. It also means that investments can be assessed consistently and against a range of outcomes relevant to our strategy, including a range of environmental and sustainability criteria. Our investment governance process, including the role of the board, is described in the [bp Annual Report 2021 on page 33](#).

Paris consistency evaluation process

The CA100+ resolution described on page 32, requires bp to disclose how we evaluate the consistency of new material capex investments★ with (i) the Paris goals and (ii) a range of other outcomes relevant to bp's strategy. bp's evaluation of consistency of such investments with the Paris goals was undertaken for new material capex investments sanctioned in 2021. bp's evaluation of an investment's consistency with 'a range of other relevant outcomes' is achieved by considering its merits against bp's balanced investment criteria, described on page 34.

When evaluating the consistency of our 2021 new material capex investments★ with the Paris goals, a focus of the evaluation was on their competitiveness and financial robustness as the prices of different forms of energy and products adjust in response to the changing market environment. Investments in scope for evaluation are defined as:

- **New:** Investment in a new project or extension of an existing project/asset or share of an entity that is new to bp or a substantial increase in bp's share.
- **Material:** More than \$250 million capex investment.

The evaluation used our central price assumptions. Our key investment appraisal assumptions for oil and natural gas, shown in the table to the right, are in line with a range of scenarios consistent with the Paris goals. Starting in the third quarter we also evaluated investments using our lower-price case. It also used our carbon price assumptions when relevant, applied to the anticipated operational greenhouse gas emissions associated with the investment, for the period to 2050. These include a price of \$100/tCO₂ in 2030 which rises to \$250/tCO₂ in 2050 (2020 \$ real).

Quantitative evaluations

We consider two quantitative guide levels to inform the evaluation of each investment's consistency with the goals of the Paris Agreement. These are described in further detail in the [bp Annual Report 2021 on page 35](#).

Sustainability

Where appropriate, we measure the operational carbon intensity of the investment relative to that of the 2021 portfolio average for the segment or the related business activity (upstream and refining).

Investment economics

We calculate economic indicators using our central and lower price cases, and applying our carbon price assumptions to relevant operational GHG emissions.

Investment process price assumptions

All investments are evaluated against our long-term price assumptions across a range of alternative prices (central, upper and lower) for oil, natural gas and refining margins. In addition, all investment cases with anticipated annual greenhouse gas (GHG) emissions (bp net basis) from operations above 20,000 tonnes of CO₂ equivalent must estimate those anticipated GHG emissions and include an associated carbon price in the investment economics.

All price assumptions place some weight on scenarios in which the transition to a low carbon energy system is sufficiently rapid to meet the goals of the Paris Agreement, as well as scenarios in which the transition is not, or may not be, sufficiently rapid. They also place some weight on a range of other factors, which can drive prices, and which are not related to the Paris goals.

These price ranges do not link to specific scenarios or outcomes, but instead try to capture the range of different possibilities surrounding the future path of the global energy system. The nature of the uncertainty means that these price ranges inevitably reflect considerable judgement. The ranges are reviewed and updated on an annual basis as our understanding and judgement about the energy transition evolves.

In addition to consideration of a range of price assumptions, investment cases are asked to assess the impact of alternative assumptions covering a range of other variables related to the economics of the investment, such as cost, resource, policy changes and schedule, to highlight the robustness of investment cases to a range of other factors.

Key investment appraisal assumptions

2020 \$ real

	2022	2025	2030	2040	2050
Brent oil (\$/bbl)	60	60	60	55	45
Henry hub gas (\$/mmBtu)	3.00	3.00	3.00	3.00	2.75
Refining marker margin	11	12	12	10	10

Carbon price (US\$/tCO₂e)

2020 \$ real

	2022	2025	2030	2040	2050
	50	50	100	200	250

These price assumptions create a framework that seeks to ensure investments align with our strategy and add shareholder value.

 Read more about our investment process in the [bp Annual Report 2021 on page 34](#)

★ See glossary on pages 38-39

Evaluating capital investment for consistency with Paris

All group-wide investment cases must set out the investment merits, including consistency with the Paris goals, and are considered against a set of balanced investment criteria.

Balanced investment criteria

Our standardized approach is intended to create a level playing field for decision-making and allows portfolio-side comparisons of investment cases. Further, the decision to endorse an investment based on the information provided represents bp's evaluation that the investment is consistent with what the 2019 CA100+ resolution^a refers to as "a range of other outcomes relevant to bp's strategy".

In 2021, the standardized approach for investment cases was reviewed to place more prominence on how the investment cases fit with our sustainability aims.

The intent is to facilitate the discussion of an investment case's consistency with the Paris goals, any significant sustainability issues that have been identified, and any impact on our contribution to our aims 1 to 3, in the context of the strategic rationale for the investment case. This helps to maintain the consistency of our investment framework with our strategy.

When taking investment decisions, decision makers in bp are expected to consider six investment criteria, although their decisions may also take other factors into account as appropriate.



Strategic alignment

For all investment cases, we consider whether the investment supports delivery of our strategy, to become an integrated energy company and our net zero aims.

Safety and risks

For all investment cases, we provide an assessment of the key risks unique to the investment which have a significantly higher probability than usual or have a significantly greater impact (relative to the size of the project) were they to occur. Safety risk management at bp is underpinned by our operating management system★, which is designed to sustainably deliver safe, reliable and compliant bp operations.

Sustainability

For all investment cases, we consider how any proposed business opportunity is connected to the energy transition and societal needs and the environment. This approach is underpinned by our sustainability frame and purpose. Investment cases above defined thresholds for anticipated annual greenhouse gas emissions from operations must estimate those anticipated emissions and factor carbon pricing for those emissions in the investment economics.

Investment economics

For all investment cases, we consider investment economics against a range of measures, including internal rate of return, net present value, discounted payback, profitability index, using relevant commodity prices, margins and carbon prices.

Investments are considered against differentiated hurdle rates at different price assumptions.

1. For our resilient hydrocarbons portfolio, a payback of less than 10 years for upstream oil and refining and 15 years for upstream gas; together with an internal rate of return hurdle of 15-20%.
2. For our convenience and mobility business, we seek a portfolio-level return in excess of 15%.
3. For renewables, which typically receive debt financing, we seek levered internal rates of return of 8-10%.

Each investment's expected internal rate of return in our lower-price case is also considered against a cost of capital hurdle rate.


Volatility and rateability

Our investment economic metrics also consider the degree of uncertainty of the cash flow when considering investment cases. Variations in net present values for the key variables on an investment case are quantified by sensitivity analysis to give a range of potential outcomes against our key investment hurdles.

Optionality and integration

Our assessments seek out integration along value chains. We also look for integration across multiple geographies and customers. For example, we explore ways to couple renewable power supply from wind and solar with gas-fired generation and investments in green hydrogen★ to address intermittency, which can offer customers more reliable electricity.

We are also investing in technology companies with offerings designed to optimize energy use – these have the potential to leverage our trading activity and complement our own customer offers.

 [Read more in the bp Annual Report 2021](#)

★ See glossary on pages 38-39

a See page 32.

Conclusion

In this section

Summary: from ambition to action



Summary: from ambition to action

This report highlights the clear direction our net zero ambition and aims set for bp, and our conviction that they enable us to contribute to the world meeting the Paris goals. It shows how the actions we plan to take this decade will help us deliver our 2030 aims and realize our net zero ambition for 2050 or sooner. Together with the progress we have already made, it shows we are moving **from ambition to action**.

We have achieved a lot since 2020, setting firm foundations to deliver further progress. We are strengthening the resilience of our portfolio against the uncertainties of the global energy transition, including in Paris-consistent global trajectories, while advocating for the low carbon policies that will help us and many others like us to achieve our ambitions.

We believe that our net zero ambition, summarised in this report, will help bp create long-term value for its shareholders and wider stakeholders. Having your continued support for this ambition allows us to proceed with confidence.

The board recommends that you vote in favour of resolution 3 at the 2022 AGM, showing your support for this report, Net Zero – From Ambition to Action, because it:

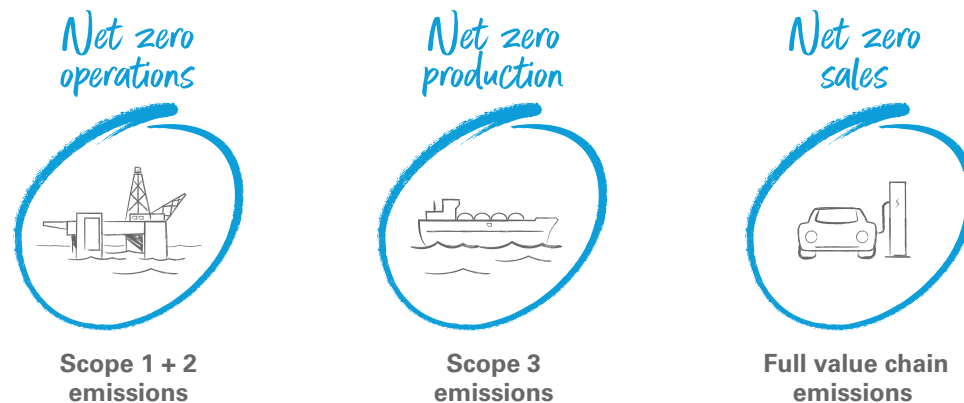
- Reaffirms bp's net zero ambition, aims and targets, our commitment to delivering them and our belief that they are consistent with the world meeting the Paris goals including the pursuit of efforts to limit temperature rise to 1.5°C.

- Shows how our board and management are prepared to accelerate our aims – as we did in February 2022 – where we believe that to do so is in the interests of our shareholders and having regard to other stakeholders, as we monitor the pace of the transition and the opportunities it creates.
- Demonstrates the concrete progress and investments that bp has already made, to turn our net zero ambition into action.
- Shows how our plans to change our business and scale our transition growth engines help to deliver bp's 2025 targets and 2030 aims across Scopes 1, 2 and 3, and the carbon intensity of the energy products we sell – which in turn will support getting to net zero beyond these dates.
- Describes the governance of our net zero ambition and how, in line with our aim for transparency, our shareholders and other stakeholders can monitor our progress.

Helge Lund
chair

Bernard Looney
chief executive officer




Our net zero ambition



// We are asking for your continued backing by voting in support of management, for our net zero ambition. In the last two years, we can demonstrate acceleration and clear progress on the actions that will underpin delivery of our targets and aims, and of our strategy. //

Glossary and appendices

In this section

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Glossary

Average emissions intensity of marketed energy products

The weighted average GHG emissions per unit of energy delivered (in grams CO₂e/MJ), estimated in respect of marketing sales of energy products. GHG emissions are estimated on a lifecycle basis covering production, distribution and use of the relevant products (assuming full stoichiometric combustion of the product to CO₂).

Bioenergy production

Bioenergy production is average thousands of barrels of biofuel production per day during the period covered, net to bp. This includes equivalent ethanol production, bp Bunge biopower for grid export, biogas and refining co-processing and standalone hydrogenated vegetable oil (HVO).

Bio-refinery

A facility that is dedicated to processing biological materials (including waste oil and crop waste) to produce biofuels such as bio-diesel and sustainable aviation fuel, which may be blended to customer specifications with other components such as hydrocarbons at co-located or adjacent terminals and tanks.

Blue hydrogen

Hydrogen produced by reforming of natural gas or gasification of coal, with CO₂ captured and stored (CCS).

Capital expenditure

Total cash capital expenditure as stated in the group cash flow statement. Capital expenditure for the operating segments and customers & products businesses is presented on the same basis.

Carbon intensity of the energy products we sell

The weighted average GHG (CO₂, methane, N₂O) emissions per unit of energy delivered (in grams CO₂e/MJ) estimated in respect of marketed sales of energy products and sales of physically traded energy products★. GHG emissions are estimated on a lifecycle basis covering production extraction, transportation, processing, distribution and use of the relevant products (assuming, where the energy product is a fuel for combustion, full stoichiometric combustion of the product to CO₂).

Developed renewables to final investment decision (FID)

Total generating capacity for assets developed to FID by all entities where bp has an equity share (proportionate to equity share). If asset is subsequently sold bp will continue to record capacity as developed to FID. If bp equity share increases developed capacity to FID will increase proportionately to share increase for any assets where bp held equity at the point of FID.

Emissions from the carbon in our upstream oil and gas production

Estimated CO₂ emissions from the combustion of upstream production of crude oil, natural gas and natural gas liquids (NGLs) 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.

Energy products

An energy product is a product that is used by an ultimate end user to satisfy an energy demand. In the case of fuels, to burn them to release their calorific content, and in the case of electricity to provide work or heat. A refined product such as a lubricant base stock does not count as an energy product as it is not used to provide energy in its use phase. Crude oil does not count as an energy product except in the rare cases where it is used by an end user to satisfy an energy demand.

EV charge points

Defined as the number of connectors on a charging device, operated by either bp or a bp joint venture.

Green hydrogen

Hydrogen produced by electrolysis of water using renewable power.

Low carbon investment

Capital expenditure on low carbon energy or technologies with investment on low carbon energy or technologies through bp ventures and Launchpad.

Net zero

References to global net zero in the phrase, 'to help the world get to net zero', means achieving '...a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases... on the basis of equity, and in the context of sustainable development and efforts to eradicate poverty', as set out in Article 4(1) of the Paris Agreement. References to net zero for bp in the context of our ambition and aims 1, 2 and 3 mean achieving a balance between (a) the relevant Scope 1 and 2 emissions (for aim 1), Scope 3 emissions (for aim 2) or product lifecycle emissions (for aim 3) and (b) the aggregate of applicable deductions from qualifying activities such as sinks under our methodology at the applicable time.

Glossary

Net zero★ operations

bp's aim to reach net zero operational greenhouse gas (CO₂ and methane) emissions by 2050 or sooner, on a gross operational control basis, in accordance with bp's aim 1 which relates to our reported Scope 1 and 2 emissions. Any interim target or aim in respect of bp's aim 1 is defined in terms of absolute reductions relative to the baseline year of 2019.

Net zero★ production

bp's aim to reach net zero CO₂ emissions, in accordance with bp's aim 2, from the carbon in our upstream oil and gas production, in respect of the estimated CO₂ emissions from the combustion of upstream production of crude oil, natural gas and natural gas liquids (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). Aim 2 is bp's Scope 3 aim and relates to Scope 3 category 11 emissions. Any interim target or aim in respect of bp's aim 2 is defined in terms of absolute reductions relative to the baseline year of 2019.

Net zero★ sales

bp's aim to reach net zero for the carbon intensity of the energy products we sell★, in accordance with bp's aim 3. Any interim target or aim in respect of bp's aim 3 is defined in terms of reductions in the carbon intensity of the energy products we sell (in grams CO₂e/MJ) relative to the baseline year of 2019. (Work is ongoing to confirm an assured baseline for this aim to incorporate the inclusion of physically traded energy products).

New material capex investment

A decision taken by the resource commitment meeting (RCM) in 2021 to incur inorganic or organic investments greater than \$250 million that relate to a new project or asset, extending an existing project or asset, or acquiring or increasing a share in a project, asset or entity.

Marketed sales

Marketed sales include branded and unbranded sales of refined fuel products and lubricants to business-to-business and business-to-consumer customers, including service station dealers, jobbers, airlines, small and large resellers such as hypermarkets, and the military.

Operating management system (OMS)

bp's OMS helps us manage risks in our operating activities by setting out bp's principles for good operating practice. It 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.

Physically traded energy product

For the purposes of aim 3, this includes trades in energy products which are physically settled in circumstances where bp considers their inclusion to be consistent with the intent of the aim. It therefore excludes, for example, financial trades and physical trades where the purpose or effect is that the volumes traded net off against each other.

Sustainable emissions reductions (SER)

SERs result from actions or interventions that have led to ongoing reductions in Scope 1 (direct) and/or Scope 2 (indirect) greenhouse gas (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: a specific intervention that has reduced GHG emissions, the reduction must be quantifiable and the reduction is expected to be ongoing. Reductions are reportable for a 12-month period from the start of the intervention/action.

Rapid/Rapid charging

Rapid charging includes electric vehicle charging of greater or equal to 50kW and less than 150kW.

Ultra-fast/Ultra-fast charging

Ultra-fast charging electric vehicle charging of greater than or equal to 150kW.

Overview of aims 1–5

Summary of our five aims to get bp to net zero and the progress we have made.

Aims	Measure/coverage	2019	2020 performance	2021 performance	2025 targets	2030 aims	aims for 2050 or sooner
Aim 1 <i>Net zero operations</i> ★	Scope 1+2	baseline 54.4 MtCO ₂ e	16% ^a cumulative reduction since 2019	35% ^a cumulative reduction since 2019	20% ^a	50% ^a	<i>Net zero</i> ★
Aim 2 <i>Net zero production</i> ★	Scope 3	baseline 361 CO ₂ e	9% ^a cumulative reduction since 2019	16% ^a cumulative reduction since 2019	20% ^a	35-40% ^a	<i>Net zero</i> ★
Aim 3 <i>Net zero sales</i> ★	Full value chain (including end use emissions)	baseline 79 ^b gCO ₂ e/MJ	<1% ^{b,c}	0% ^{b,c}	5% ^d	15-20% ^d	<i>Net zero</i> ★
Aim 4 <i>Reducing methane</i>	Methane intensity	0.14% ^e	0.12% ^e	0.07% ^e	0.20% ^f	50% ^g reduction	
Aim 5 <i>More \$ for new energies</i>	Investment (\$)	\$500m	\$750m	\$2.2bn ^h	\$3-4bn	~\$5bn	

a Cumulative reductions against the 2019 baseline on an absolute basis.

b We now report carbon intensity for aim 3 to the nearest whole number in gCO₂e/MJ. Following publication of the 2020 bp Annual Report and Form 20-F, Sustainability Report and ESG datasheet, we identified minor data reporting corrections and implemented methodological improvements which have impacted the previously reported aim 3 figures. Recognizing that amendments and methodological enhancements may continue to occur in the future, we believe that the rounding of aim 3 figures in this way provides a more reliable and consistent representation of our performance. Since this is the first year of reporting on this basis, our ESG datasheet on bp.com also includes carbon intensity on the prior basis of rounding to 1 decimal place.

c Cumulative impact on average emissions intensity of marketed energy products ★ against the 2019 baseline.

d Cumulative reduction in the carbon intensity of the energy products we sell ★ against the 2019 baseline.

e The methane intensity for these years is calculated using existing methodology and, while it reflects progress in reducing methane emissions, will not directly correlate with progress towards delivering the 2025 target under aim 4.

f Based on our new measurement approach which we aim to have in place by the end of 2023.

g Reductions against a new baseline which we intend to be based on our new measurement approach, which we aim to have in place by the end of 2023.

h The majority of this \$2.2 billion related to investments in offshore wind, electric vehicle charging infrastructure and solar.

★ See glossary on pages 38-39

Cautionary statement

In order to utilize the 'safe harbor' provisions of the United States Private Securities Litigation Reform Act of 1995 (the 'PSLRA'), bp is providing the following cautionary statement. This document contains certain forward-looking statements – that is, statements related to future, not past, events and circumstances which may relate to one or more of 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 are generally, but not always, 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, among other statements, statements relating to: bp's net zero ambition and bp's targets, aims and objectives in connection with that ambition including bp's five aims to get bp to net zero (including aims for Scope 1, Scope 2 and Scope 3 emissions and emissions and carbon intensity of bp's production and marketed products) and bp's five aims to help the world get to net zero; the resilience of bp's strategy and portfolio across multiple climate scenarios and the uncertainties in the energy transition; bp's expectations, targets and aims for capital expenditure including the proportion of investment allocated to and capital employed in non-oil and gas businesses and transition growth businesses over time; and bp's 2030 EBITDA aims for its oil and gas businesses and transition growth businesses. By their nature 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 may differ from those expressed in such statements, depending on a variety of factors including the risk factors set forth in our most recent Annual Report and Form 20-F under 'Risk factors' and in any of our more recent public reports.

No material in this document forms any part of any of those documents. No part of this document 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, all of which are separate legal entities. Unless otherwise stated, the term bp and terms such as 'we', 'us' and 'our' are used in this document for convenience and simplicity and collectively refer to BP p.l.c. and the bp group of companies. Our most recent Annual Report and Form 20-F and other period filings are available on our website at www.bp.com, or can be obtained from the SEC by calling 1-800-SEC-0330 or on its website at www.sec.gov

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