



Net zero ambition *progress update*

March 2023

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

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About this report

This report is an update on progress against bp's net zero★ ambition. Our ambition to achieve net zero across operations, production and sales, by 2050 or sooner, remains unchanged.

It includes a reminder of why we believe our ambition is consistent with the Paris goals and our planned actions this decade. We chose 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 and for our efforts to help the world reach net zero.

We have updated our progress to date to take account of our performance in 2022 and reflected the updates to some of our aims announced in February 2023.

This progress update complements information provided in our 4Q/full year 2022 results and update on strategic progress, the bp Annual Report 2022 and other materials on our strategy, financial frame, investor proposition, sustainability report and sustainability frame, available at bp.com.

Introduction

Net zero across operations, production and sales

We want to be a net zero company by 2050 or sooner, and to help the world get to net zero. We are aiming to be net zero across our operations, production, and sales.

“ bp’s strategy is deliberately set up to help us contribute to a rapid and orderly energy transition. ”

Bernard Looney

Chief executive officer



The last three years have been transformational for bp. We set a new direction for the company, with a new purpose and a new net zero ambition. We introduced a new strategy, underpinned by our sustainability frame with 20 aims – 10 specific to net zero. And we introduced a new organizational structure. All during an extremely volatile and uncertain time – with a pandemic, a war in Europe and a cost-of-living crisis.

The energy trilemma

One thing that has become clearer than ever during this time, is that energy is the lifeblood of society. Clearer too, is that the world wants and needs a better and more balanced energy system. One that is more flexible and resilient to shocks. One that delivers energy that is secure and affordable as well as lower carbon – all three facets are known as the energy trilemma.

To deliver on all three, action is needed to accelerate the energy transition. And at the same time, it has to be an orderly transition at pace, so that affordable energy keeps flowing where it is needed. *And*, not *or*. We have to do both.

The integrated energy strategy we introduced in 2020 is very deliberately set up to help on both counts – and in our update on strategic progress in February 2023 we set out a pathway that enables us to do more of each.

Investing to do more

We now plan to invest even more into our transition – up to \$8 billion more – than previously planned a year ago to help accelerate our transition and the energy transition. This investment – into what we call our transition growth engines (bioenergy, convenience, EV charging, hydrogen and renewables and power) – will include a focus on solutions that can help people and businesses decarbonize sooner, such as EV charging and sustainable aviation fuels. Our cumulative investment in these transition growth engines is expected to be in a range of \$55-65 billion between 2023 and 2030.

We also plan to invest up to \$8 billion more than previously planned into focusing and improving our core oil and gas business so we can keep delivering energy that’s needed today. We are determined to play our part – helping meet energy needs, as governments around the world have been asking companies like us to do.

This additional investment will also be focused in areas where we can deliver quickly. And where we can, we will use our existing infrastructure to allow us to maximize our contribution to energy security and affordability while minimizing additional emissions.

The progress we have made over the last three years – growing new businesses and beginning to decarbonize bp while delivering for shareholders – gives us confidence to lean in further to a strategy that is working. We expect to accelerate growth in EBITDA and are aiming to generate EBITDA of \$51-56 billion in 2030^a.

^a At the upper end of the relevant capital expenditure range.

Introduction

Growing new businesses

In 2019 around 3% of bp's total capital investment went into what we now call our transition growth engines – bioenergy, EV charging, convenience, hydrogen and renewables and power. In 2022 this was around 30% of capital expenditure.

This shift has supported a tripling in size of our global EV charging network, from 7,500 charge points to around 22,000 today.

We have established new businesses in hydrogen and offshore wind – with wind projects in some of the world's sector-leading regions and a number of hydrogen projects in concept development across Africa, Australia, Europe, Middle East, UK and the US.

In bioenergy – following our acquisition last year of US biogas company Archaea Energy – we have one of the largest renewable natural gas plants under construction. And we have five major projects underway for sustainable aviation fuel production at our refineries, with production already underway in Germany and Spain.

Decarbonizing bp

Since 2019 we have reduced emissions from our operations by 41% (aim 1), reduced the carbon intensity of the products we sell by 2% (aim 3), and decreased our methane intensity to less than half its previous value, from 0.14% to 0.05% (aim 4).

In 2022 we adjusted two of these net zero aims in response to the progress being made. In our aim 1, for operational emissions reductions, our 2030 aim was adjusted from a 30-35% reduction to 50% compared with 2019. Aim 3 was increased from 50% to a 100% reduction (net zero) by 2050 or sooner in the average carbon intensity of sold energy products★. It was also extended to cover physically traded energy products as well as marketed sales.

Based on our further experience, and the world's heightened energy security needs, in 2023 we made two further adjustments as we flex our strategy in response.

We are aiming for a reduction in bp production from 2.6 million barrels a day in 2019 to around 2 million barrels a day in 2030. This 2019 baseline does not take into account that bp's total production is already 40% lower than in 2019 following our decision to exit Russia in response to its war in Ukraine, forfeiting bp's share of 1.1 million barrels per day of Rosneft production.

- As a result we have adjusted our aim 2 – relating to emissions associated with the carbon in our production. Compared to our 2019 aim 2 baseline we are now targeting a 10-15% reduction by 2025 (previously 20%) and are aiming for 20-30% reduction by 2030 (previously 35-40%).
- We have also adjusted our aim 5 so that it is now specific to investment in our transition growth engines of bioenergy, convenience, EV charging, hydrogen and renewables & power. Building on the tenfold increase since 2019, we expect investment in these areas to be above 40% of total bp investment in 2025 and are aiming for it to be around 50% in 2030.

Heading for net zero

In 2022 we were pleased with the support we received from shareholders for our net zero ambition report, with 88.5% of votes cast in favour. The scale of support we received has increased our confidence that the strategy we set out in 2020 is working. I hope you find this latest update useful.

Back in February 2020 I said bp's direction was set, we are heading for net zero, there is no turning back. Since then, confidence in the company has grown – both in our strategy and in our ability to deliver it.

We are performing well, the strategy is working, and we are leaning further into it. Our emissions are coming down. Our investment in transition is going up. And we are delivering for the people looking to companies like us to help address the energy trilemma. We see that as our job, and the embodiment of our purpose to reimagine energy for people and our planet.

We will not get every step right, which is why we are building flexibility and resilience alongside investment for the future. Flexibility in exactly how we will execute the strategy is what allows us to maintain resilience and, therefore, our unwavering focus on the destination. While we have much more to do, with your support we can and will deliver.

Bernard Looney

Chief executive officer
10 March 2023

Aims	2025 target	2030 aim	2050, or sooner, aim
① Net zero operations ★ Scope 1 and 2	20% ^a	50% ^a 30-35% ^b	Net zero★
② Net zero production ★ Scope 3	10-15% ^{ac} 20% ^b	20-30% ^{ac} 35-40% ^b	Net zero★
③ Net zero sales ★ Average lifecycle carbon intensity ^g	5% ^d	15-20% ^d >15% ^b	Net zero★ 50% ^b
④ Reducing methane	0.20% ^e	50% reduction ^e	
⑤ More \$ into transition	\$6-8bn ^f \$3-4bn ^f	\$7-9 bn ^f ~\$5bn ^f	

a Reduction in absolute emissions against the 2019 baseline.

b Previous target/aim set in 2020.

c Updated February 2023. We are now targeting a 10-15% reduction by 2025 compared to the 2019 baseline (previously a 20% reduction) and aiming for 20-30% reduction by 2030 (previously a 35-40% reduction).

d Reduction in the average carbon intensity of our sold energy products★ against the 2019 baseline.

e The 0.20% methane intensity★ target is based on our new measurement approach, which we aim to have in place across the relevant operations by the end of 2023. The 50% reduction we are aiming for is against a new baseline which we plan to set based on that new measurement approach.

f 2025 target has been updated from \$3-4 billion (in low carbon activity investment★) to \$6-8 billion in transition growth investment★ and 2030 aim has increased from ~\$5 billion to \$7-9 billion respectively.

g Average carbon intensity of our sold energy products★. As explained on [page 18](#), aim 3 emissions can be thought of as combining elements of bp Scopes 1, 2 and 3.

For terms with ★ refer to the glossary on [pages 34-35](#).

Our net zero ambition

We are in action in the North Sea preparing for our offshore wind projects, Morgan and Mona. Two remote sensing buoys are currently collecting data, such as windspeed and ocean direction, that will be used to inform the project development.

Liverpool, UK



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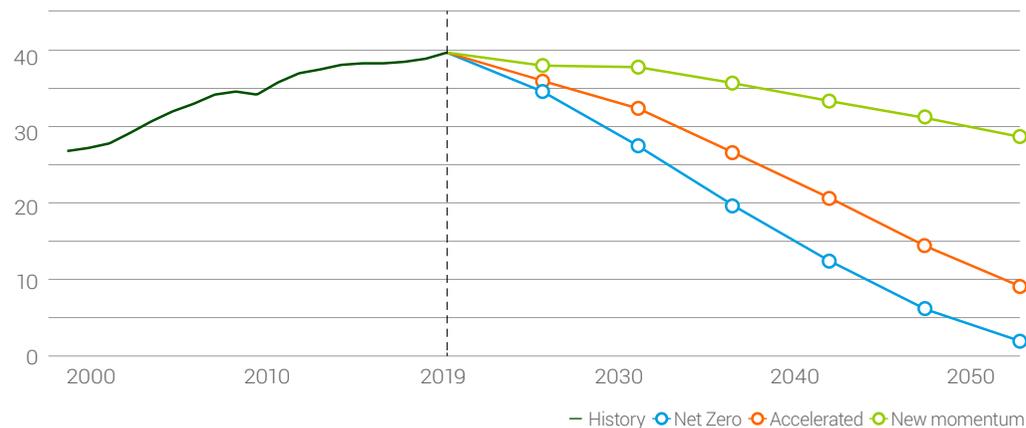


The scenarios which inform our net zero ambition

The *bp Energy Outlook 2023* explores the forces shaping the global energy transition out to 2050 and the key uncertainties surrounding that transition.

Global carbon emissions^b

Gt of CO₂e



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

Three scenarios to explore the energy transition

New momentum

Captures the broad trajectory of the current global energy system. Places weight on the marked increase in global ambition for decarbonization in recent years, as well as on the manner and speed of decarbonization seen in recent past. CO₂e emissions peak in the late 2020s and by 2050 are around 30% below 2019 levels. This scenario is not considered to be a Paris-consistent pathway.

Net zero

A shift in societal behaviour and preferences further supports gains in energy efficiency and the adoption of low carbon energy, with global energy system CO₂ emissions falling by more than 95%, relative to 2019 levels. This scenario is broadly aligned with a 1.5°C pathway.

Accelerated

Explores what elements of the energy system might need to change if the world collectively takes action for CO₂-equivalent emissions (CO₂e) to fall by around 75% by 2050, relative to 2019 levels. This scenario is broadly aligned with a well-below 2°C pathway.

bp Energy Outlook

The *bp Energy Outlook 2023*^a uses three main scenarios (New momentum, Net Zero and Accelerated) to explore the range of possible 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. The uncertainty associated with the energy transition is substantial, and these scenarios are not predictions of what is likely to happen or what bp would like to see happen. They explore the possible implications of different judgements and assumptions concerning the nature of the energy transition.

Updates to 2023 Energy Outlook

The scenarios in the *bp Energy Outlook 2023* have been updated to account for two major developments: the Russia-Ukraine war and the passing of the US Inflation Reduction Act (IRA).

Russia-Ukraine war: The Russia-Ukraine war is likely to have a persistent effect on the future path of the global energy system. The *2023 Outlook* models this impact through three main channels:

- **Energy security:** The increased focus on energy security triggered by concerns about energy shortages and vulnerability to geopolitical events is assumed to increase countries' and regions' preference for energy produced domestically rather than imported.

- **Economic growth:** The higher food and energy prices associated with the Russia-Ukraine war have led to a sharp slowing in global economic growth. Further out, the war is assumed to reduce somewhat the pace of global integration and trade.
- **Composition of global energy supplies:** The scenarios in this year's Outlook assume there is a persistent reduction in Russian exports of hydrocarbons.

US Inflation Reduction Act (IRA): Also included in the modelling is the IRA which includes a significant package of largely supply-side measures supporting low carbon energy sources and decarbonization technologies in the US.

The impact of the IRA is concentrated in the New momentum scenario, which represents the current pace of the energy transition and acknowledges ambition from governments and the corporate sector. In this scenario emissions fall from 40Gt of CO₂e in 2019 to 29Gt of CO₂e by 2050.

The Accelerated and Net Zero scenarios are less affected by the IRA given the scale of policy support already embodied in these scenarios. Net Zero delivers emissions reductions of 95% by 2050 versus 2019, in line with a 1.5°C rise. In Accelerated, emissions are reduced by 75% by 2050 and can be considered consistent with Paris, in line with a well-below 2°C pathway.

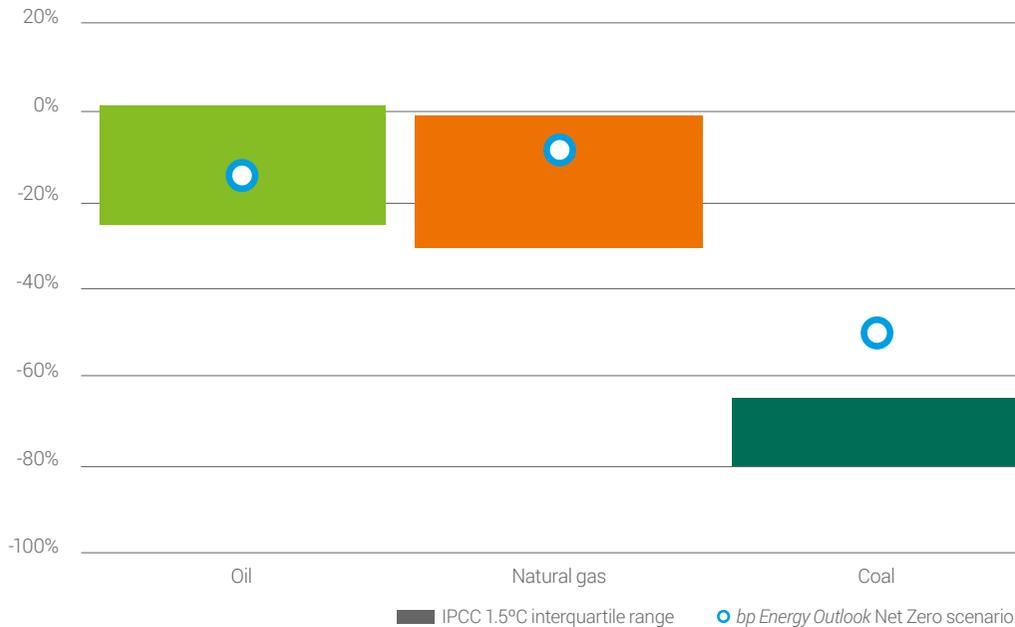
^a Analysis contained in the *bp Energy Outlook 2023* should be treated as subject to change, depending on future developments.

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

The scenarios which inform our net zero ambition

Change in oil, natural gas and coal consumption in IPCC 1.5°C scenarios with limited or no overshoot

2019-2030 change



The Intergovernmental Panel on Climate Change (IPCC) document a range of scenarios exploring possible future emissions pathways, the main underlying forces driving them, and how these might be affected by policy interventions.

The chart above shows the change in primary energy of oil, natural gas and coal in this decade under IPCC scenarios that limit global temperature rise to 1.5°C with no or limited overshoot.

The median reduction in oil, natural gas and coal across these scenarios is driven largely by a 75% fall in global coal consumption by 2030, with

more modest falls of around 10% in oil and natural gas consumption.

The reductions in oil and natural gas by 2030 in the *bp Energy Outlook 2023* Net Zero scenario, shown on the chart for comparison, are consistent with the range of IPCC 1.5°C scenarios, but the fall in coal consumption is significantly smaller.

This reflects the continuing importance of coal as an affordable and relatively abundant fuel in many emerging economies where energy demand is expanding rapidly.

How scenarios inform our strategy

The use of scenarios described in the *bp Energy Outlook* and from other organizations aids our understanding of the energy transition and the global energy system. This helps us to think about different outcomes and how they might impact our strategy.

The use of a broad range of scenarios to inform our strategy supports our efforts to make it robust and resilient to the range of uncertainty we face. Given that, we believe that it is neither useful nor sensible to try to identify one scenario as being more or less likely than another.

Testing resilience of our strategy

In keeping with others, such as the IPCC and International Energy Agency, 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).

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 on bp's reference group outlook to 2030.

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 2022*. 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 trajectories 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 on pages 58-61 of the *bp Annual Report 2022*.](#)

Our strategy

Our strategy is to become an integrated energy company. We believe we are set up to deliver energy security and affordability today, and to accelerate the energy transition.

Our three-pillar strategy is focused on investing in our transition growth★ engines and at the same time, investing in today's energy system. And integration connects it all.

We aim to generate adjusted EBITDA★ of between \$51-56 billion in 2030^a.

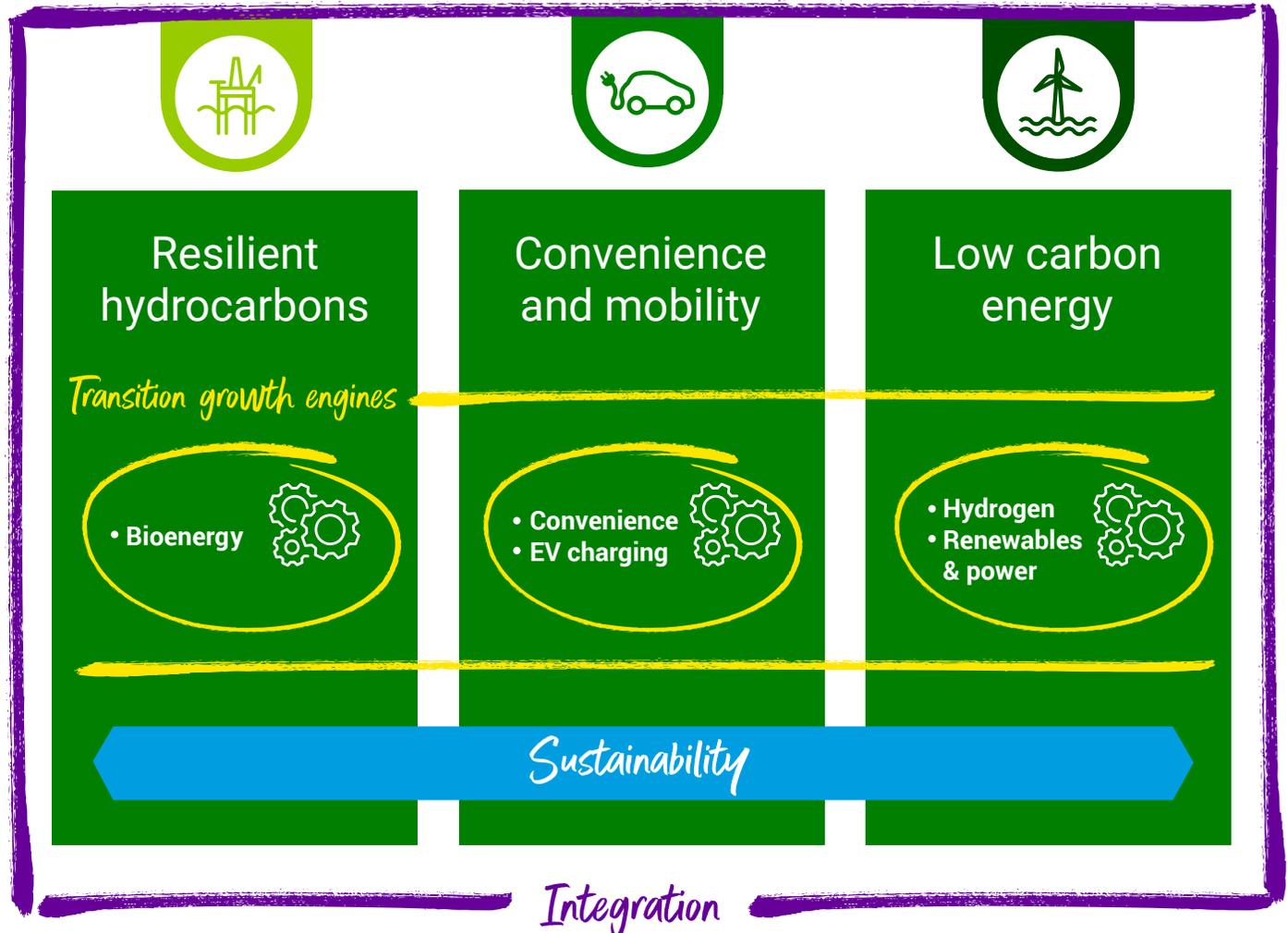
We plan to invest more than under our previous plans to accelerate our transition growth engines. We aim for these to deliver between \$10-12 billion of our total adjusted EBITDA in 2030^a.

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

Connecting our strategic focus areas together is integration. We believe we are distinctively set up to create integrated energy solutions for customers and generate attractive returns.



^a At the upper end of the relevant capital expenditure range. For terms with ★ refer to the glossary on page 389 of the [bp Annual Report 2022](#).

Our *net zero* ambition and aims

We launched our five aims to help the world get to net zero in February 2020, alongside five aims to get bp to net zero.

1

Net zero operations★

Net zero across our entire operations by 2050 or sooner.

 [Read page 12 for more](#)

2

Net zero production★

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

 [Read page 14 for more](#)

3

Net zero sales★

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

 [Read page 16 for more](#)

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 page 19 for more](#)

5

More \$ into transition

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

 [Read page 20 for more](#)

6

Advocating

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

 [Read page 24 for more](#)

7

Incentivizing employees

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

 [Read page 24 for more](#)

8

Aligning associations

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

 [Read page 25 for more](#)

9

Transparency leader

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

 [Read page 26 for more](#)

10

Clean cities and corporates

Our regions, corporates and solutions team is working to help countries, cities and corporations around the world decarbonize.

 [Read page 27 for more](#)

For terms with ★ refer to the glossary on [pages 34-35](#).

Consistency of our ambition and aims with the Paris goals

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

When we refer to ‘consistency with Paris’ we consider this to mean consistency with the world meeting the goals set out in Articles 2.1(a) and 4.1 of the Paris Agreement on Climate Change★. Both the Sharm el-Sheikh Implementation Plan agreed by the Parties at COP27 in November 2022 and the Glasgow Climate Pact agreed by the Parties at COP26 in November 2021 reaffirmed the temperature goal set out in Article 2 of the Paris Agreement.

We believe that our ambition and our 10 net zero aims need to be considered as a package for Paris consistency. That is because 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 in its pursuit of efforts to limit global average temperature rise to 1.5°C above pre-industrial levels.

Our view of Paris consistency continues to be based on three key principles:

1 Informed by Paris-consistent energy transition scenarios

We are confident that our approach is science-based. We see the Intergovernmental Panel on Climate Change (IPCC) as the most authoritative source of information on the science of climate change and we use it and other sources to inform our strategy. The IPCC highlights that there are 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.

The *bp Energy Outlook 2023* has been updated to reflect the significant developments in global energy markets over the past year, including the possible impact of the Russia-Ukraine war on the pace of the energy transition. It includes three main scenarios – two of which we regard as Paris-consistent (Accelerated and Net Zero scenarios) – that we use to inform our strategy, see [page 4](#).

2 Positioned for strategic resilience

We believe our strategy positions 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 meets the Paris goals.

The strategy diversifies bp’s portfolio and business interests, reducing the risk that challenges facing a single business area might adversely affect bp’s strategic resilience. In addition, within the inevitable constraints associated with factors such as long-term capital investments, contractual commitments and organizational capabilities at any given time, bp’s ability to maintain its strategic resilience rests, in part, on the governance used to keep the strategy under review in light of new information and changes in circumstances.

3 Contributes to net zero

There are many ways a company at the heart of the energy sector can make a meaningful contribution to the world getting to net zero. These include: policy advocacy and seeking to use the company’s influence with trade associations (who conduct climate-related advocacy); low carbon collaboration and support for others in their own decarbonization efforts (such as cities and companies); and investment in low carbon and technology development.

bp seeks to advance these areas through our aims 1-5 in support of our ambition to be a net zero company by 2050, or sooner, and aims 6-10 which are focused on activities which can help the world get to net zero, see [page 9](#) and [page 22](#).

 [Read more about consistency with Paris on page 28-31 of the bp Annual Report 2022.](#)

For terms with ★ refer to the glossary on page 389 of the [bp Annual Report 2022](#).

Getting bp to *net zero*

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Grand Slam – an electrified central oil, gas and water handling facility – has helped bpx substantially reduce methane intensity and flaring intensity across its Permian basin operations. It uses low carbon electricity, instead of gas as its primary energy source.

Orla, Texas, United States



Net zero operations, production and sales

Aim 1

Net zero operations



Scope 1 + 2 emissions

Actions



Operational efficiency



CCS



Portfolio optimization

Interim targets and aims Absolute

2025 target

20%

2030 aim

50%

Progress to date

2019 baseline

54.4

MtCO_{2e}

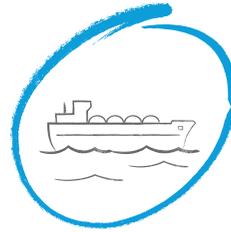
2022

41%

Reduction

Aim 2

Net zero production



Scope 3 emissions

Actions



CCS



Hydrogen



Portfolio optimization

Interim targets and aims Absolute

2025 target

10-15%

2030 aim

20-30%

Progress to date

2019 baseline

361

MtCO₂

2022

15%

Reduction

Aim 3

Net zero sales



Average lifecycle carbon intensity

Actions



Bioenergy



EV charging



Renewables



Electricity sales



Hydrogen

Interim targets and aims Intensity

2025 target

5%

2030 aim

15-20%

Progress to date

2019 baseline

79

gCO_{2e}/MJ

2022

2%

Reduction

Net zero aims 1-5 update

Five aims to get bp to net zero – progress summary

Aims	Measure/coverage	2019	2022 update	2025 targets	2030 aims	Aims for 2050 or sooner
① <i>Net zero operations</i> ★	Scope 1+2	Baseline 54.4 MtCO ₂ e	41% cumulative reduction in emissions against 2019 baseline	20% ^a	50% ^a 30-35% ^b	Net zero★
② <i>Net zero production</i> ★	Scope 3	Baseline 361 MtCO ₂	15% cumulative reduction in emissions against 2019 baseline	10-15% ^a 20% ^b	20-30% ^a 35-40% ^b	Net zero★
③ <i>Net zero sales</i> ★	Average lifecycle carbon intensity ^j	Baseline 79 ^c gCO ₂ e/MJ	2% ^{cd} cumulative reduction in carbon intensity against 2019 baseline	5% ^d	15-20% ^d	Net zero★ 50% ^b
④ <i>Reducing methane</i>	Methane intensity★	0.14% ^e	0.05% ^e	0.20% ^f	50% ^f reduction	
⑤ <i>More \$ into transition</i>	Transition growth investment★	\$634m ^g	\$4.9bn ^h	\$6-8bn ⁱ \$3-4bn ⁱ	\$7-9bn ⁱ ~\$5bn ⁱ	

a Reduction in absolute emissions against the 2019 baseline.

b Previous target/aim set in 2020.

c The previously reported aim 3 figures have been recalculated in accordance with the expanded sales boundary (now the average carbon intensity of sold energy products★), methodology improvements for power, and updated carbon intensity factors and physical/chemical properties, and so differ from those presented in the 2019-2021 bp Annual Report and Form 20-F, sustainability report and ESG datasheet. For more detail on how this metric is calculated see the basis of reporting.

d Reduction in the average carbon intensity of sold energy products★ against the 2019 baseline.

e The methane intensity★ for these years is 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.

f The 0.20% methane intensity target is based on our new measurement approach, which we aim to have in place across the relevant operations by the end of 2023. The 50% reduction we are aiming for is against a new baseline which we plan to set based on that new measurement approach.

g Values have been restated to align with transition growth investment★.

h In 2022, capital expenditure★ against aim 5 activities (transition growth investment) increased from \$2.4 billion on an equivalent basis in 2021 (\$2.2 billion based on previous aim 5 low carbon investment metric). Most of this spend related to investments in biogas, EV charging, offshore wind, power and convenience.

i 2025 target has been updated from \$3-4 billion (in low carbon activity investment) to \$6-8 billion in transition growth investment and 2030 aim has increased from ~\$5 billion to \$7-9 billion respectively.

j Average carbon intensity of our sold energy products★. As explained on [page 18](#), aim 3 emissions can be thought of as combining elements of bp Scopes 1, 2 and 3.

For terms with ★ refer to the glossary on [pages 34-35](#).

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 are 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.

Progress and targets

Reduction in emissions against the 2019 baseline (absolute basis).

16%	2020 performance
35%	2021 performance
41%	2022 performance
20%	2025 target
50%	2030 aim
Net zero	2050 or sooner

Our actions

Operational efficiency

We are implementing energy efficiency measures, electrifying our centralized facilities, reducing flaring and venting, and managing methane across our operations. Emissions reduction activities may include powering refineries and onshore upstream assets using power with lower carbon attributes, as we are already doing at a number of our European refineries.

Carbon capture and storage (CCS) and hydrogen

Where conditions are suitable, extraction of CO₂ from produced gas streams and reinjection underground can serve to reduce overall operational emissions. We believe this could be the case 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. We also plan to increase the use of blue and green hydrogen★ at our refineries, reducing the emissions associated with the use of natural gas and grey hydrogen.

Portfolio optimization

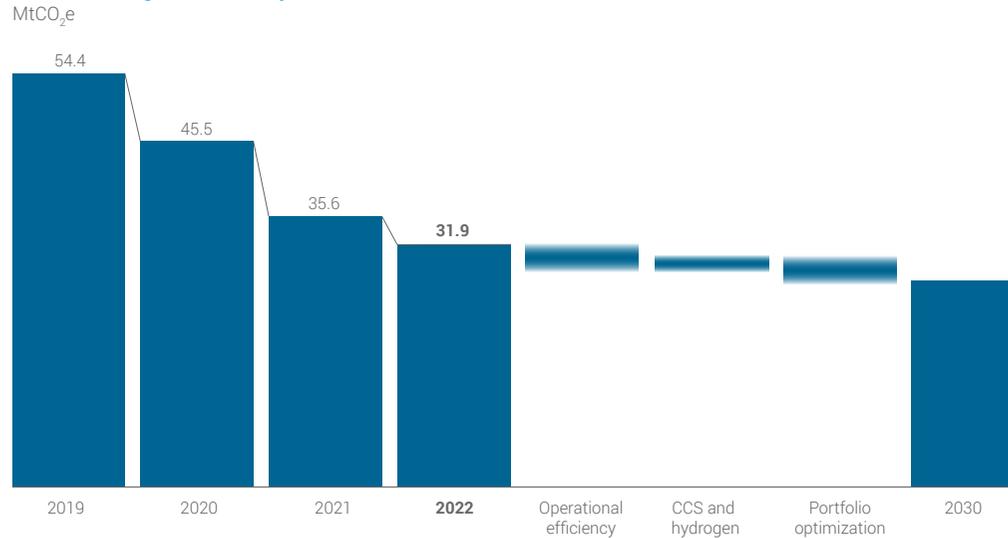
As we high-grade our portfolio and focus on our most resilient assets, we expect emissions from our operations to reduce over time.

Our progress in 2022

We made further progress against our operational emissions reduction targets. Our combined Scope 1 and 2 emissions, covered by aim 1 were 31.9MtCO₂e – a decrease of 41% from our 2019 baseline of 54.4MtCO₂e. The total decrease of almost 22.5MtCO₂e includes 16.0MtCO₂e attributable to divestments and 4.1MtCO₂e in sustainable emission reductions (SERs)★. Compared with 2021 (35.6MtCO₂e), Scope 1 and 2 emissions decreased by 10%.

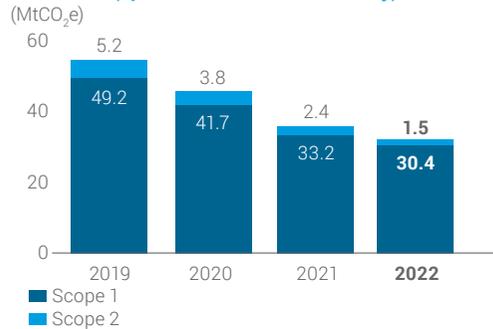
We have already exceeded our 2025 target of 20% emission reductions against our 2019 baseline. However, we plan to bring new projects online and continued investment will be needed to meet our 2030 aim. SERs have been a core focus for us, allowing us to apply our skills to emission reductions we intend to maintain that focus. So, to support delivery of this aim, we are continuing to identify and progress potential projects, including flaring and venting reduction, energy efficiency, electrification and CCS.

Actions driving aim 1 delivery^a



^a This chart is intended to be illustrative of a range of contributions that individual aspects of our plans may make relative to others. They should not be taken to represent specific expectations of actual impacts of actions driving delivery. For terms with ★ refer to the glossary on [pages 34-35](#).

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



Scope 1 (direct) emissions, covered by aim 1, were 30.4MtCO₂e – a decrease of 8% from 33.2MtCO₂e in 2021. Of these Scope 1 emissions, 29.7MtCO₂e were CO₂ and 0.7MtCO₂e methane. Emissions decreased due to divestments, delivery of SERs★ and other temporary operational changes.

Scope 2 (indirect) emissions decreased by 0.9MtCO₂e, to 1.5MtCO₂e, a 38% reduction compared with 2021. This decrease resulted from lower carbon power agreements, including those at our Cherry Point, Gelsenkirchen and Rotterdam sites.

Getting bp to net zero

- Divestments accounted for 1.2MtCO₂e of the Scope 1 and 2 emissions decrease, including bpx energy divestments and the transition of our Angola business to the Azule integrated joint venture.
- Delivery of SERs reduced Scope 1 and 2 emissions by 1.5MtCO₂e.
- Other permanent reductions, partly delivered in 2021, included the repurposing of the Kwinana refinery (0.1MtCO₂e. reduction) and ending production at Foinaven floating production storage and offloading vessel (0.1MtCO₂e reduction).
- Temporary production-related changes accounted for a decrease of 1.0MtCO₂e.
- Total hydrocarbons flared decreased from 967kt to 654kt due to operational flaring reductions and the transition of the Angola business to the Azule integrated joint venture.

SERs from our businesses and activities included:

- Cherry Point, Gelsenkirchen and Rotterdam refineries and Gelsenkirchen Chemicals reduced Scope 2 emissions from purchased electricity by 662ktCO₂e through further lower carbon power agreements.
- Tangguh LNG achieved emissions reductions of 86ktCO₂e through the addition of a steam heat recovery project.
- bpx energy reduced operational emissions by 351ktCO₂e, through projects including further electrification, the introduction of new technologies such as at the Grand Slam facility, and the installation of vapour recovery at Eagle Ford.

bp equity share emissions

We report our operational (Scope 1 and 2) GHG emissions with reference to two boundaries – operational control and bp equity share^b – in our ESG datasheet. Operational control boundary broadly covers bp-operated assets^a. bp equity share covers 100% of emissions from subsidiaries and the percentage of emissions equivalent to our share of joint arrangements and associates^b. Our Scope 1 and 2 emissions reduced on both an operated and equity share basis, compared with 2021.

Read more: bp.com/ESGdata

Our position on divestments

The bp sustainability report 2021 described our approach to divestment activities, which remains unchanged, and how divestments – which continue to be an important part of our strategy – contribute to our aims 1, 2 and 3.

Read more in the bp sustainability report 2021: bp.com/reportingcentre.

^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.

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

For terms with ★ refer to the glossary on [pages 34-35](#).

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 now targeting a 10-15% reduction by 2025 and will aim for 20-30% by 2030 against our 2019 baseline.

Progress and targets

Reduction in emissions against the 2019 baseline (absolute basis).

9%	2020 performance
16%	2021 performance
15%	2022 performance
10-15%	2025 target
20-30%	2030 aim
Net zero	2050 or sooner

Our actions

Portfolio optimization

Becoming net zero on an absolute basis across the carbon in our upstream oil and gas production is in part linked to reducing that production. We believe that the Scope 3 emissions associated with our upstream oil and gas production will not exceed their 2019 peak and have stated that we are aiming for a reduction in oil and gas production by around 25% by 2030, compared to 2019 (excluding production from Rosneft)^a.

This 2030 aims takes account 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 operationally and economically robust, and also resilient to unplanned or unexpected factors such as price volatility and geopolitical risk.

Our exploration and production capital expenditure★ has declined from a peak of \$4.6 billion in 2010, to around \$500 million in 2022.

Carbon capture and storage and blue hydrogen

In future, the Scope 3 emissions under aim 2 could also be reduced by other mitigation actions. For example, the use of carbon capture and storage (CCS) for the production of blue hydrogen★ or electricity from our equity production.

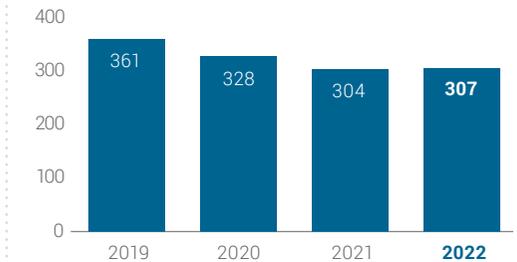
Our progress in 2022

Since 2019, our estimated Scope 3 emissions covered by aim 2 have reduced by 15% which is at the upper end of our revised 2025 target of a 10-15% reduction against our 2019 baseline. However, between now and 2025, we expect to see growth in underlying production due to major project start-ups, deferred divestments and growth in bpx production. Our aim to reduce our oil and gas production from 2019 levels by around 25% by 2030, underpins our 2030 aim of a 20-30% reduction in Scope 3 emissions covered by aim 2 against a 2019 baseline.

The estimated Scope 3 emissions from the carbon in our upstream oil and gas production were 307MtCO₂ in 2022 – a slight increase from 304MtCO₂ in 2021, mainly associated with an increase in underlying production due to the ramp-up of major projects and higher asset performance.

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

(MtCO₂)



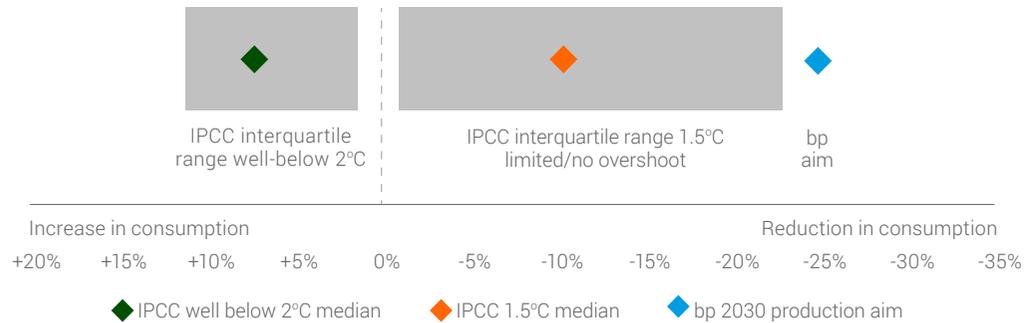
Estimated emissions from the carbon in our upstream oil and gas production by product

(MtCO₂)

	2019 baseline	2020 performance	2021 performance	2022 performance
Total	361	328	304	307
Oil	185	177	157	152
Gas	165	140	138	145
NGL	11	11	9	10

^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). For terms with ★ refer to the glossary on [pages 34-35](#).

2030 oil and gas changes from 2019 baseline^a



As described on [page 8](#), 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. We do not consider a narrow focus on individual aims as being particularly useful. However, for readers who may welcome such a comparison, the chart above shows the median and interquartile range of changes (2019-2030) in consumption of oil and gas as primary energy in the IPCC's 1.5°C scenarios with no or limited overshoot and in their well-below 2°C scenarios. These scenarios suggest a median 9.8% reduction in consumption of oil and gas (within an interquartile range of reductions of between 1.5% and 24.5%) in the 1.5°C limited / no overshoot scenarios, and a median increase of 7.7% (within an interquartile range of increases of between 1.3% and 11.1%) in the well-below 2°C scenarios. These compare with bp's aim to reduce oil and gas production by around 25% by 2030.

The chart does not separate out oil from gas; for context, median oil consumption reduces by 9.5% in the 1.5°C limited / no overshoot scenarios and increases by 2.2% in the well below 2°C scenarios. Median gas consumption reduces by 9.8% in the 1.5°C limited / no overshoot scenarios and increases by 11.1% in the well-below 2°C scenarios.

^a Primary energy oil and gas used as a proxy for production.

^b 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).

For terms with ★ refer to the glossary on [pages 34-35](#).

Our aim 2 pathway

Our destination is unchanged: we are aiming to be net zero for aim 2 by 2050, or sooner. We expect our pathway to net zero to be fine-tuned over time, to reflect emerging opportunities and challenges as the world transitions to a better, and more balanced, energy system.

As part of our 'update on strategic progress' on 7 February 2023, we announced our plan to increase investment in today's energy system, compared to our previous plans.

As a result, we are now aiming to reduce our oil and gas production^b by around 25% by 2030 compared to 2019. Because aim 2 mirrors our oil and gas production profile, we have updated the medium-term pathway out to 2030 for aim 2. We are now targeting a 10-15% reduction by 2025 compared to the 2019 baseline (previously a 20% reduction) and aiming for 20-30% reduction by 2030 (previously a 35-40% reduction).

These reductions do not include production volumes from our shareholding in Rosneft, which we announced on 27 February 2022 that we would exit. Including Rosneft, our oil and gas production in 2022 was around 40% lower than in 2019.

To support a balanced as well as rapid energy transition, during this decade we now plan to slow the pace of planned divestments and invest in appropriate, short cycle-time oil and gas development opportunities. Slowing divestments means we will operate these assets for longer and the volume of emissions abatement projects undertaken this decade may increase as we work to meet our aims and targets under aim 1 (Scopes 1 and 2 operated emissions reductions).

Our position on project evaluation remains unchanged. As with any investment, we plan to consider new oil and gas development opportunities against our balanced investment criteria. For new material capital investments, we will continue to evaluate their consistency with the goals of the Paris Agreement, as part of our reporting against the requirements of a shareholder resolution requisitioned by CA100+★ in 2019.

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 sold energy products per unit of energy (MJ) delivered.

In February 2022 we expanded aim 3 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. We are reporting on this basis for the first time this year and have recalculated our 2019-2021 data accordingly.

Progress and targets

Reduction in the carbon intensity of our sold energy products★ against the 2019 baseline.

2%	2020 performance
1%	2021 performance
2%	2022 performance
5%	2025 target
15-20%	2030 aim
Net zero ^a	2050 or sooner

Read more about how our aim 3 approach relates to the concept of Scope 1, 2 and 3 emissions on [page 18](#)

Our actions

Progress on our aim 3 is directly linked to our strategy to grow our low carbon presence and provide products that have lower lifecycle emissions. We anticipate that this change in our sales portfolio will accelerate as the market evolves.

We are aiming for around 50% of our capital investment to be in our transition growth engines – which includes low carbon activity – in 2030. Our aim 5 is to increase the proportion of investment into non-oil and gas.

Read more about our transition growth investment on [page 20](#).

Our strategic themes

We expect the execution of our strategy across our three strategic pillars – resilient hydrocarbons, convenience and mobility, and low carbon energy – to support delivery of our aim 3 up to, and beyond, 2030.

In charting our aim 3 path, we recognize that significant benefits from this work will be realized over the longer term. For example, some of the hydrogen or offshore wind projects we’re working on through this decade will become operational after 2030; utilization rates for EV charge points will increase in later years as EV uptake grows; and we are investing now in convenience and retail platforms to introduce lower carbon transport offers as our customers’ energy needs evolve.

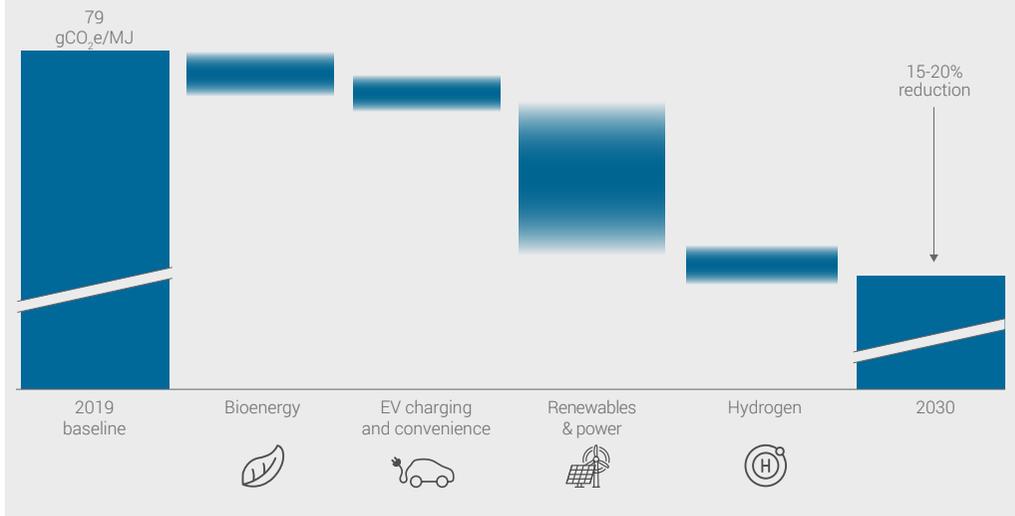
^a At the point of net zero, our net zero carbon intensity aim 3 also means we will be net zero on an absolute basis.

^b This chart is intended to be illustrative of a range of contributions that individual aspects of our plans may make relative to others. They should not be taken to represent specific expectations of actual impacts of actions driving delivery.

For terms with ★ refer to the glossary on [pages 34-35](#).

Actions driving aim 3 delivery^b

For aim 3, reducing the average carbon intensity of sold energy products★ is driven by the efforts of the energy sector, including ours, to decarbonize the products we sell today and investments in EV charging, bioenergy, renewables and power and hydrogen as well as the transition of our energy product★ trading mix in line with the decarbonization of our activities and global energy over time.



Examples of actions to advance aim 3 across our three strategic pillars include:

Resilient hydrocarbons

We are in action to grow our bioenergy businesses. We aim to grow our biofuels production★ to around 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.

Convenience and mobility

EV charging is moving at pace, and we see significant value through our focus on fleets and fast★ charging to on-the-go customers. We have around 22,000 charge points and almost all charge points we roll out now are rapid★ or ultra-fast★. Overall, we aim to grow our global network to more than 100,000 EV charge points★ and to increase our energy sales from those by more than 100-fold from 2021 to 2030.

Low carbon energy

Where we see strategic value in doing so, we intend to integrate our electricity generation positions with a growing commercial and industrial (C&I) customer portfolio, and aim to significantly increase our electricity trading volumes.

Hydrogen

We intend to significantly scale up our hydrogen business and aim to deliver 0.5-0.7Mtpa of hydrogen production by 2030. We anticipate this will primarily be green hydrogen★ (electrolysis of water using renewable power), while selectively pursuing blue hydrogen★ (generated from natural gas) opportunities where there is regulatory support and CCS access. As markets evolve, we expect to invest to build global export hubs for hydrogen and hydrogen derivatives. These are in advantaged geographies where we have an established presence.

Momentum in our strategic delivery

Metrics	2019	2022	2025 target	2030 aim
 Biofuels production 	23kb/d	27kb/d 2021 26kb/d	~50kb/d	~100kb/d
 Biogas supply volumes 	10mboe/d	12mboe/d ^a 2021 10mboe/d	~40mboe/d ^b	~70mboe/d ^b
LNG portfolio★	15Mtpa	19Mtpa 2021 18Mtpa	25Mtpa	30Mtpa
 Customer touchpoints★ per day 	>10 million	~12 million 2021 >12 million	>15 million	>20 million
 Strategic convenience sites★ 	1,650	2,400 2021 2,150	~3,000	~3,500
 Electric vehicle charge points★ 	>7,500	~22,000 2021 13,100	>40,000	>100,000
 Hydrogen production (net) 	—	—	—	0.5-0.7Mtpa
 Developed renewables to final investment decision★ 	2.6GW	5.8GW 2021 4.4GW	20GW	50GW
 Installed renewables capacity★ (net) 	1.1GW	2.2GW 2021 1.9GW	—	~10GW

a Excludes Archaea.

b Includes Archaea.

c Reported to the nearest 50.

For terms with ★ refer to the glossary on page 389 of the [bp Annual Report 2022](#).

Aim 3 update

Following the changes to aim 3 we announced in February 2022, we have updated our aim 3 metric from the average carbon intensity of our marketed energy products to the average carbon intensity of our sold energy products★ (including physically traded energy products★). In addition, a number of methodological changes have been made. These include methodology improvements for power, updated carbon intensity factors and physical and chemical properties of various energy products in line with the latest editions of industry publications.

As a result of these changes, the energy included under aim 3 for 2019 – our baseline year – has increased from 12.6EJ to 20.9EJ and the emissions have increased from 993MtCO₂e to 1,638MtCO₂e. Overall, the 2019 carbon intensity remained at 79gCO₂e/MJ.

All figures, up to and including our baseline year of 2019, have been recalculated on this revised basis.

Our progress in 2022

In 2022 the average carbon intensity of sold energy products★ was 77gCO₂e/MJ. This represents a 2% decrease from our 2019 baseline, primarily driven by a reduction in the lifecycle emissions associated with the sold energy products★.

We are also continuing to invest in activities that contribute to our transition and net zero aims. In 2022 our acquisitions included EDF Energy Services and Archaea Energy – both of which are expected to further reduce the average carbon intensity of sold energy products★ in 2023 and beyond.

[Read more about our transition growth investment on page 20](#)

Getting bp to net zero

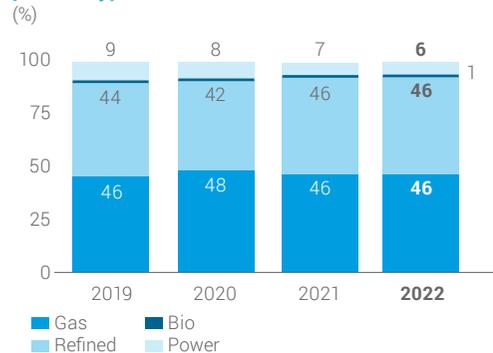
Average carbon intensity of sold energy products^a



Average carbon intensity of sold energy products★^b

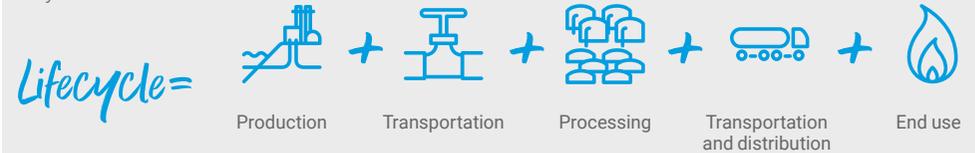
	2019	2020	2021	2022
Average emissions intensity of energy products	79	77	78	77
Refined energy products	95	92	92	92
Gas products	68	67	67	67
Bioproducts	47	44	43	43
Power products ^c	57	59	56	52

Share of energy delivered per energy product type^{bd}



Full value chain emissions for energy products

Aim 3 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.



How does aim 3 relate to Scope 1, 2 and 3 emissions?

We are sometimes asked how our aim 3 relates to the Scope 1, 2 and 3 based approach we use for aim 1 (net zero operations) and aim 2 (net zero production).

At a high level, it is straightforward^e – because, by covering the full ‘lifecycle’ emissions associated with the energy products we sell (see the graphic above), aim 3 covers many of the emissions that people might think of as bp’s Scope 1, 2 or 3 emissions:

- Such as when someone drives a vehicle using fuel we sold, or heats their home with natural gas we sold. Aim 3 covers those emissions, which are labelled as ‘End use’ in the graphic above.
- Or other emissions associated with fuels we sell – such as when bp sells diesel or gasoline. For us

to be able to sell the fuel, the oil from which it was made had to be produced and transported to a refinery, where it was refined into fuel, and then it was delivered to where we finally sold it to a user.

Each of these activities may have been completed by bp or other companies, so the emissions from those activities could be Scope 1, Scope 2 or Scope 3 emissions for bp. Either way, aim 3 covers those emissions (‘Production’, ‘Processing’, ‘Transportation’ or Distribution emissions in the graphic above).

So, while aim 3 considers the emissions as relating to the ‘lifecycle’ of the product, the GHG emissions bp reports under our aim 3 can be thought of as aggregating the relevant Scope 1, 2 and 3 emissions for bp – in other words, as combining elements of bp’s Scope 1 + 2 + 3 emissions, with the most significant Scope 3 categories being 1, 3, 4, 9 & 11^f.

a The aggregate lifecycle emissions and energy values used in the calculation of the average carbon intensity of sold energy products is provided in our ESG datasheet on bp.com.
 b The share of energy is based on the total energy associated with sales of energy products, with electricity represented as fossil equivalence of sold energy.
 c Covers all power, including renewable and non-renewable.
 d Due to rounding the sum of the component parts may not exactly equal 100%.
 e Note that in technical GHG accounting terms, the situation can be more complex. For example, the GHG Protocol has separate standards or guidance for the product lifecycle approach and for Scopes-based reporting. Using industry GHG accounting guidance, a vertical integrated company such as bp, which can have activities at any of the stages depicted in the graphic, may select various boundaries for a Scope 3 category, such as category 11. For bp’s aim 2, we selected the ‘upstream’ boundary for our Scope 3, category 11 reporting.
 f Category 1 is purchased goods and services; category 3 is fuel- and energy-related activities (not included in Scope 1 or Scope 2); category 4 is upstream transportation and distribution; category 9 is downstream transportation and distribution; category 11 is use of sold products.

For terms with ★ refer to the glossary on [pages 34-35](#).

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%.

Progress and targets

Methane intensity^a

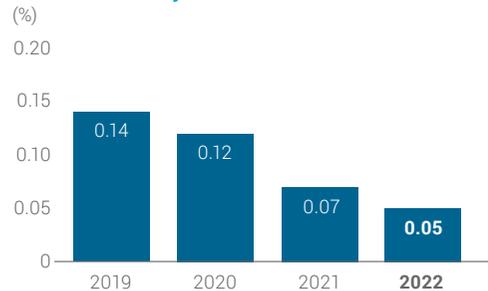
0.12% ^b	2020 performance
0.07% ^b	2021 performance
0.05%^b	2022 performance
0.20%	2025 target ^c
50%	Aim ^d

Our progress in 2022

Our methane intensity **★** in 2022 was 0.05% – an improvement from 0.07% in 2021^b. Methane emissions from upstream operations, used to calculate our intensity, continued on the declining trend they have followed since 2016 (when we reported 111kt), decreasing by 35% to around 28kt, from 43kt in 2021. Variations in production and divestments accounted for approximately 85% of the absolute reductions reported for 2022, and methane reductions from SERs **★**, accounted for 14%. Marketed gas volumes increased by 4.8% to 3,205bcf in 2022.

We continue to progress our work under the World Bank's Zero Routine Flaring Initiative by 2030 (and by 2025 in our bpx energy operations).

Methane intensity^{ab}



Methane measurement

We progressed the deployment of our methane measurement approach across all our existing major oil and gas processing sites in 2022, with the introduction of enhanced metering, software for flare efficiency and predictive emissions monitoring on gas turbines. We remain on course to deliver our methane measurement aim by the end of 2023.

We have taken different approaches at our facilities in order to align with the capabilities of available technologies. At our major facilities our approach focuses on the simultaneous use of multiple detection and measurement technologies.

One of many promising solutions we have piloted is provided by our partner, the methane sensor expert, SeekOps Inc. This solution utilizes highly advanced sensor technology deployed on remotely operated aerial vehicles to monitor methane emissions. It has been successfully used in the UK North Sea, Oman and the Azerbaijan-Georgia-Türkiye region.

Across bpx energy's operations in the US, we use a varied approach to detection and measurement, reflecting the dispersed nature of bpx facilities and the type and spread of methane sources. This approach centres on the integration of multiple solutions and the long-term goal is to reach a predictive operating state, with potential emissions anticipated and avoided.

bpx is also working with Kairos Aerospace to monitor methane emissions. Kairos's aircraft carry LeakSurveyor™ methane spectrometers that are linked to powerful computing software. Using this system, bpx can identify the most significant sources of emissions across the various basins and action change where necessary.

Methane reduction activity

We continued working to reduce our operational methane emissions – from upgrades in our current operations to advances in the design of our new facilities. Methane SERs **★** were around 2.2kt in 2022, delivered across multiple projects.

For example, at our offshore facilities in Trinidad we updated our internal vessel inspections to remove the need for depressurization. And on our Glen Lyon floating production, storage and offloading vessel in the North Sea, we optimized pressure control in our crude oil storage tanks.

Technology implementation

Technologies to detect and measure methane continue to evolve at pace. We have transformed the way we approach methane emissions thanks to a range of technologies, but it is essential that we monitor new developments and remain open to considering new solutions as they emerge.

For example, we are monitoring the potential of high-resolution satellite data to identify point sources of methane emissions at site level to support our leak detection and repair activities.

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 (OGCI).

b 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.

c Methane intensity based on our plans for increased source level measurement which we aim to have in place by the end of 2023.

d The 50% reduction we are aiming for is against a new baseline which we plan to set based on the new measurement approach. We aim to have the new measurement approach in place across the relevant operations by the end of 2023.

For terms with **★** refer to the glossary on [pages 34-35](#).

NOJV activities

Under the guidance of our non-operated joint venture (NOJV) centre of expertise, we are working to help our NOJVs reduce their methane emissions.

We have prioritized collaboration with NOJVs that have the greatest potential to reduce methane emissions, and we are working on multiple aspects related to methane emission reductions, including measuring and reporting, the use of technology and setting meaningful targets. We are helping different NOJVs make progress and in many instances we learn from them. We also encourage them to work in line with organizations such as the Methane Guiding Principles and the Oil and Gas Methane Partnership (OGMP).

Collaboration and methane advocacy

In 2022 we retained gold status for our plans to measure methane emissions under the OGMP 2.0 reporting framework. This award recognized the work of many bp teams and collaborations with our partners including NOJVs. Our work under OGMP is consistent with and goes beyond aim 4, as emissions from shipping and non-operated assets are also included in scope.

We have advocated for progressive methane policy, including the federal regulation of methane emissions in the US, and the development of policy and regulations in Europe through our response to the European upstream emissions reduction regulations.

[Read more: bp.com/advocacyactivities](https://bp.com/advocacyactivities)

5

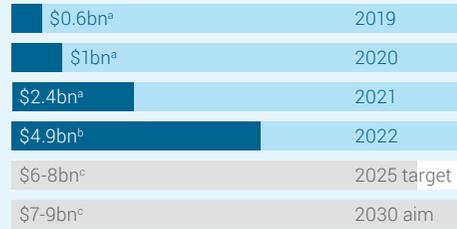
More \$ into transition

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 and targets

Annual \$ investment in transition growth engines★



Our progress in 2022

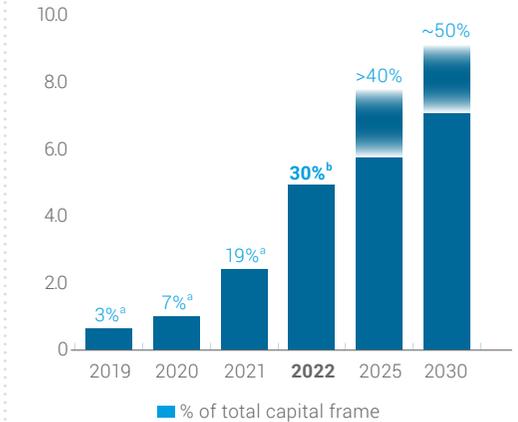
In 2022 transition growth investment★ was \$4.9 billion compared to \$2.4 billion in 2021 – this was around 30% of total capital expenditure★ for the year, up from around 3% in 2019.

As we pursue our net zero ambition, we see our annual transition growth investment reaching \$6-8 billion in 2025 and are aiming for it to reach \$7-9 billion in 2030.

As announced in February 2023, going forward we are targeting increasing the proportion of our annual capital expenditure invested in transition growth★ engines to more than 40% of total spend by 2025 and aiming for it to rise to around 50% by 2030.

Transition growth investment

(annual \$bn)



Changes to aim 5 reporting basis

Our transition growth engines are bioenergy, convenience, EV charging, renewables and power, and hydrogen. We have restated our aim 5 metric to align with our transition growth investment★.

As a result, the proportion of capital expenditure that counts towards our aim 5 2025 target has changed from \$3-4 billion in low carbon activity investment, to transition growth investment of \$6-8 billion, and our 2030 aim has changed from around \$5 billion in low carbon investment, to \$7-9 billion of transition growth investment.

Bioenergy

We plan to materially grow our established bioenergy businesses. In October 2022 we announced a significant investment through our ~\$3 billion deal to acquire Archaea Energy, a leading US producer of renewable natural gas (RNG). This will give us the opportunity to expand our presence in the US biogas industry and accelerate our strategic bioenergy transition growth engine.

Archaea is a fast-growing business. In addition to operating 50 RNG and landfill gas-to-energy facilities across the US, producing around 6,000boed of RNG today, it has a development pipeline of more than 80 projects with the potential to produce around five times more RNG by 2030.

^a Values have been restated to align with transition growth investment★

^b In 2022, capital expenditure★ against aim 5 activities (transition growth investment★) increased from \$2.4 billion on an equivalent basis in 2021 (\$2.2 billion based on previous aim 5 low carbon investment metric). Most of this spend related to investments in biogas, power and offshore wind, and convenience and EV charging.

^c 2025 target has been updated from \$3-4 billion (in low carbon activity investment) to \$6-8 billion in transition growth investment★ and 2030 aim has increased from ~\$5 billion to \$7-9 billion respectively.

For terms with ★ refer to the glossary on [pages 34-35](#).

EVs

Together with our strategic convenience site network, our investment in EV charging will help us to offer low carbon solutions to customers. We believe that, for road transport to decarbonize at the pace and scale that is needed to achieve the goals of the Paris climate agreement, it is necessary for the roll-out of EV charging infrastructure and usage of electric vehicles to be scaled up in parallel with – or even ahead of – the needed decarbonization of electricity grids. As a result, in some geographies it may be some years before grid decarbonization begins to drive down the lifecycle carbon intensity of EV charging – just as we expect in the coming years to see EVs making up a growing percentage of vehicles on the road, contributing to increased utilization of the charge points we and others are working to install now.

In 2022 we continued to grow our EV charging network, announcing the acceleration of our EV charging ambition across our key markets:

- In the US bp pulse and Hertz signed a memorandum of understanding to develop a national network of EV charging stations powered by bp pulse. Amply Power, acquired in 2021, is working towards installing charging infrastructure at 25 Hertz rental locations across multiple states.
- In the UK we plan to invest £1 billion over the next decade to support the roll-out of fast, convenient charging infrastructure.
- In Spain and Portugal we announced a strategic collaboration with Iberdrola with a €1 billion joint investment, to support the roll-out of fast, convenient charging infrastructure to support EV growth.

- In China, we signed a strategic collaboration agreement with AVATR technology to accelerate the development of an EV ultra-fast charging domestic network.

Convenience

We now have 2,400 strategic convenience sites and are aiming to grow to over 3,000 by 2025 and to over 3,500 by 2030. In the UK we negotiated an extension to our partnership with M&S until at least 2030.

We also signed a new global strategic partnership with Uber to make around 3,000 retail locations available on Uber Eats by 2025. This partnership extends current local arrangements in Australia, New Zealand, Poland, South Africa and the US west coast. We added the UK and eastern US locations during 2022 and continue to explore opportunities to launch in other markets.

We believe we are well positioned to bring together our capabilities and reach in convenience and EV charging – enabling us to provide customer-focused, lower carbon transport solutions.

Renewables and power

Going forward, we aim to build a portfolio, including a global position in offshore wind, in support of green hydrogen, e-fuels, EV charging and power trading, together with continued growth in Lightsource bp.

- In 2022 in offshore wind in the US, we progressed our Empire Wind 1 and 2 projects with Equinor, and development work continued on Beacon Wind.
- In January 2022 together with EnBW, we were awarded a 2.9GW gross offshore wind lease, named project Morven located off the east coast of Scotland.

- In March 2022 bp partnered with Marubeni Corporation, the major Japanese integrated trading and investment conglomerate, to explore a selected offshore wind development opportunity in Japan.

We have incorporated our power trading and marketing activities into this growth engine. This reflects our focus on creating value through integration across our own portfolio, as well as the opportunity, over time, to help customers decarbonize their power needs.

For example, in December 2022 we completed the purchase of EDF Energy Services, which will expand bp's presence in the US commercial and industrial (C&I) retail energy business. We expect the acquisition to bring new opportunities, over time, for enhanced lower carbon integrated energy solutions for C&I customers, integrating with other bp businesses and capabilities that can support decarbonization goals.

Hydrogen

bp aims to build a leading position globally in hydrogen globally, initially supplying its own refineries, scaling up to meet growing customer demand and in parallel, as markets develop, developing global export hubs for hydrogen and its derivatives.

In 2022 we progressed Net Zero Teesside and Northern Endurance Partnership projects through the define stage. Both form part of the East Coast Cluster which aims to remove nearly 50% of all UK industrial cluster CO₂ emissions.

In Western Australia, we acquired a 40.5% interest and will operate the Australian Renewables Energy Hub (AREH). AREH has the potential to be one of the world's biggest renewables and green hydrogen hubs.

Once operational, the renewable power it generates at full scale could be used to produce around 1.6 million tonnes of green hydrogen or 9 million tonnes of green ammonia annually, for use locally and internationally in decarbonizing industries such as mining, shipping and steel.

Low carbon activity capital expenditure

In 2022 low carbon activity investment★, a subset of our total transition growth investment★ – accounted for more than 80% of our total aim 5 investment. It increased from \$2.2 billion in 2021 to over \$4 billion. Most of this investment was in biogas, offshore wind, EV charging and hydrogen.

We anticipate that, in 2030, more than 80% of our aim 5 spend will be on low carbon activity★.

Our aim 5 pathway

Some capital investment goes into large transactions, like our acquisition of Archaea Energy and EDF Energy Services in 2022. It is often not possible to predict the timing of such investments, which means the progress we make on aim 5 may fluctuate.

The level – and proportion – of the overall investment going into our transition growth★ engines, or into the low carbon activity★ subset may vary as we pursue our target and aim.

Our disciplined approach to capital investment means that individual investments will be made when we consider there to be a clear and compelling business case.



Zo werkt het opladen van de auto:

1. Betaalmethoden
 - Betaalkaart: Houd je credit- of betaalkaart voor de betaalterminal.
 - Laadpas: Houd de kaart of spijlen voor de laadpas. Ook die van een andere mobiliteitsaanbieder.
 - App mobiliteitsaanbieder: In de app het laadpunt kiezen. Het nummer van de laadpas wordt automatisch ingevuld.

Charger-ID: NL19PE100040704

Hulp nodig? Help! roepers? 020 200 2002

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Helping the world get to net zero

At the end of 2022 bp had installed around 22,000 EV charge points and we are aiming for more than 100,000 by 2030 – with around 90% being rapid or ultra-fast charging.



Amsterdam, The Netherlands

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Five aims to help the world get to *net zero*

We advocate for policies that support net zero, incentivize our workforce, assess our alignment with trade associations and help corporates achieve their decarbonization goals. We also take steps to increase the transparency of our disclosures.

6

Advocating

What we have achieved
Advocated for policies that support net zero

Including our public support for hydrogen, EV infrastructure, renewables and bioenergy.

 [Read page 24 for more](#)

7

Incentivizing employees

What we have achieved
Linked our group leaders' incentive plan to our net zero operations aim

We have expanded the sustainability measures in our long-term incentive plan scorecard for group leaders, including linking performance to progress on our aim 1 (net zero operations).

 [Read page 24 for more](#)

8

Aligning associations

What we have achieved
Reviewed 51 of our most significant trade associations for alignment with our climate policy positions

We found 41 associations to be aligned and 10 to be partially aligned.

 [Read page 25 for more](#)

9

Transparency leader

What we have achieved
Continued taking steps to increase the transparency of our reporting on climate-related matters

Through our TCFD disclosures. And we have responded to consultations from CA100+, the ISSB and the SEC.

 [Read page 26 for more](#)

10

Clean cities and corporates

What we have achieved
Helped corporates meet their complex decarbonization needs

For example, we opened our first fast charging★ facilities for electric trucks at our Schwegenheim retail site in Germany.

 [Read page 27 for more](#)

For terms with ★ refer to the glossary on [pages 34-35](#).

6

Advocating

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

We have redirected resources to promote well-designed climate policies. In the future, any corporate advertising will be to push for progressive climate policy, communicate our net zero ambition or support delivery of our strategy, 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.

Our progress in 2022

Advocacy takes place at regional, country, state and international levels. It focused on several themes during 2022, including methane emissions reductions, the need for increased climate policy and regulation, and zero and low carbon transportation.

The Climate Action 100+ Net Zero Company Benchmark assessed our Climate Policy Engagement as 'Aligned' – on the basis that we take up Paris Agreement-aligned climate lobbying positions.

Our advocacy hubs

We have improved the transparency of our global climate policy advocacy by publishing our climate policy positions and examples of our relevant activities. We plan to provide updates on advocacy activities throughout 2023.

Our activities in 2022 included:

- Supporting ground breaking US climate legislation – the Inflation Reduction Act – which has now passed into law. We actively supported many of its climate and energy provisions.
- Advocating through technical input, advertising and public support, for the US Environmental Protection Agency to develop tougher direct federal regulation aimed at reducing methane emissions from the oil and gas industry.
- Responding to the UK Government-commissioned Net Zero Review consultation – including advocacy for the policy environment needed to support CCUS, hydrogen, offshore wind and EV charging.
- Supporting and inputting to proposals for climate reporting in the US by commenting on, and advocating for, the Securities and Exchange Commission new disclosure requirements.
- Providing comments and support for the Australian Senate Climate Change Bills – including the legislation of Australia's emission reduction targets and an enhanced role for the nation's Climate Change Authority.
- Advocating for ambitious sustainable aviation fuel (SAF) policies, including our response to the EU's proposed blending mandate consultation. We supported more ambitious targets compared with the proposal, including a consistent approach to feedstocks, and flexibility for fuel suppliers to meet their SAF blending mandate across the whole of the EU rather than at the level of individual airports. Across Europe, this included speaking at 25 events in 2022 and teaming up with several aligned companies and organizations.
- Responding to the Australian Government National Electric Vehicle Strategy consultation – including advocating for scaled fast-charging infrastructure, fuel efficiency standards and decarbonizing the Australian transport sector.

- Working with a coalition to support the passage of legislation to encourage future development of CCUS projects in the state of Indiana.

Acting on behalf of bp, our CEO has publicly advocated for an energy system that provides secure, affordable and lower carbon energy. His advocacy has included public statements in support of hydrogen, EV infrastructure, renewables and bioenergy.

 Read more: bp.com/USadvocacy

 Read more: bp.com/policyandadvocacy

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 32,000^a employees.

Our progress in 2022

To help our employees contribute to the delivery of our strategy and sustainability aims, we are educating them about the importance of net zero, incentivizing them to become advocates and providing the support they need to do so. In 2022 we made progress on incentivization, education and advocacy support.

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 eligible employees are measured was updated in 2021 to incentivize them through three themes: safety and sustainability (30%), including our sustainable emissions reductions which makes up 15%; operational performance (20%) and financial performance (50%).

We expanded the sustainability measures in our long-term incentive plan scorecard for group leaders for 2022-24. This included explicitly linking performance to progress on our net zero operations aim (aim 1). We also included two social measures – on employee engagement and on improved ethnic minority representation in our senior-level leader population. This is also included in the 2023-25 scorecard and collectively, these changes mean that more than 30% of our long-term incentive plan is linked to sustainability measures.

 Read more about remuneration on pages 112-147 of the [bp Annual Report 2022](#).

Employee advocacy

We continued building a community of employee advocates, supported by a growing communications and engagement network. These advocates supported a number of progressive climate policy campaigns.

We also held an educational summit, with 10 sessions and more than 1,000 employee advocates attending. The summit gave employees the chance to build their advocacy skills and learn more about the importance of net zero.

We are focused on growing the size and impact of our employee advocate network, and have a dedicated employee advocacy team to help achieve this.

^a This figure reflects the number of employees eligible for a cash bonus in 2022. The number of eligible employees in 2021 was 30,000.

8

Aligning associations

Our aim 8 is to set new expectations for our relationships with trade associations around the globe.

We are committed to getting bp to net zero and we make the case for our views on climate change within the associations we belong to. We are transparent where we differ and where we can't reach alignment, we are prepared to leave.

Our progress in 2022

Trade associations play a key role in fostering collaboration and bringing stakeholders together. They also offer opportunities to share good practice on issues of importance to bp. Our voice is one among many, but we believe everyone needs to work together to achieve net zero.

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 periodically assess the alignment of key associations with our position on climate. Our priority is to influence within trade associations, but we may publicly dissent or resign our membership if there is material misalignment on high priority issues.

We reviewed 51 of our most significant trade association memberships in 2022. In comparison, 30 memberships were reviewed in our inaugural 2020 report.

We found that 41 associations aligned with our climate positions, and 10 were partially aligned – this means we disagreed on some positions or they did not take a public stance. With these 10 groups, we plan to stay as members and continue to make a strong case for action in support of good climate policy.

The seven climate positions we used as the basis of this review related to the Paris Agreement, climate science, reducing emissions, carbon pricing, energy efficiency, technology and carbon credits.

We plan to provide an update on partially aligned associations in 2023.

New memberships in 2022

As we transition to being an integrated energy company, our trade association memberships are necessarily changing. The associations we joined in 2022, which have fees of \$50,000 or more per year, are:

- India Hydrogen Alliance (ih2a) – an industry led coalition focused on commercializing hydrogen technology and systems in India.
- Global Wind Energy Council (GWEC) – a global trade association for the wind power industry.
- Waterstof Nederland – a new Dutch hydrogen association that merges hydrogen-representing bodies currently operating in the Netherlands.

 [Read more including our trade associations reviews: bp.com/tradeassociations.](https://bp.com/tradeassociations)

Working with trade associations on climate issues

Our work with trade associations emphasized a number of areas related to climate change, including EVs, hydrogen and methane.

We pushed for constructive engagement on climate policy proposals throughout 2022. Some trade associations advocate on matters they consider to be important to their members; despite being a member, we may not always agree with the positions they take.

EVs

We believe electrification of transport is key to helping the world get to net zero and in 2022 we actively advocated for EV charging policies that will accelerate and simplify the roll-out of EV charging infrastructure. As a member of ChargeUp Europe, we called for faster grid connection and permitting procedures.

In the US we aim to reduce emissions from road transport by contributing to lower carbon transport options, such as using biofuels, renewable natural gas and EV charging. As well as direct advocacy, we are working with trade associations, such as CharIN, to advocate for technical standards in EV charging and infrastructure. bp pulse fleet, our wholly owned subsidiary, is also supporting the advocacy efforts of a number of different trade associations, including the Advanced Energy Economy, the Electrification Coalition, and the EV Charging Association, to facilitate EV expansion, from manufacturing to generation.

In our 2022 review of trade association memberships, we addressed the American Petroleum Institute's (API) opposition to certain policies designed to accelerate the adoption of EVs. We have made it clear that EV charging is a key part of our strategy.

Hydrogen

Hydrogen is one of our five transition growth★ engines and we believe it will play an important part in decarbonizing the transportation and industrial sectors.

In Europe we have promoted a pragmatic approach to classifying hydrogen as low carbon – encouraging incremental increases in the use of renewable power and supporting rapid development of the nascent renewable hydrogen market. We have worked with many trade associations, including Hydrogen Europe, to advocate for a more flexible approach than that set out in rules originally proposed by the European Commission.

Methane

We believe natural gas will play a significant role in the lower carbon energy system of the future. However, natural gas contains a significant proportion of methane, so it is important that it is regulated and that national standards are set. This is a fair way to ensure industry-wide prioritization of methane abatement.

With this in mind, in the US, we support the direct federal regulation of methane emissions from new and existing sources across the value chain, commend the EPA for advancing new rules aimed at reducing methane emissions and are working to encourage our trade associations, notably API, to adopt a constructive position in support of federal regulation for new, modified, and existing sources.

For terms with ★ refer to the glossary on [pages 34-35](#).

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 International Sustainability Standards Board (ISSB) – to develop good practices and standards for transparency.

Our progress in 2022

We take steps to increase the transparency of our reporting on climate-related matters and sustainability.

We have actively participated in the development of carbon and net zero standards and benchmarks. Whether or not we agree with a particular methodology, we welcome the perspectives they can provide.

Alongside some of our peers, we participated in a pilot of the new Net Zero Standard for Oil & Gas developed by the Institutional Investors Group for Climate Change. This standard is expected to be integrated into updates to the Climate Action 100+ (CA100+) Net Zero Company benchmark.

Throughout 2022 we responded to consultations from CA100+ and others.

We support work to align global reporting standards and want to play our part in the development of quality, reliable, comparable standards that enable companies to prepare and disclose material, decision-useful information to stakeholders. In 2022 we shared our views on consultations from the SEC, International Sustainability Standards Board (ISSB) and the UK Transition Plan Taskforce.

 [Read more: bp.com/advocacyactivities](https://bp.com/advocacyactivities)

Updated TCFD disclosures

For the second year running, we have reported in line with the FCA Listing Rule LR 9.8.6(8), which requires us to report on a 'comply or explain' basis against the TCFD Recommendations and Recommended Disclosures. We consider our 2022 climate-related financial disclosures to be consistent with all of the TCFD Recommendations and Recommended Disclosures, and consequently compliant with the Listing Rule.

We have continued evolving our TCFD analysis methodology and expanded the coverage to all of our business areas for the purposes of this analysis.

 [Read more on pages 50-62 of the bp Annual Report 2022.](#)

 [Read more: bp.com/TCFD](https://bp.com/TCFD)

CDP

We submit data as part of the CDP climate change questionnaire and make a copy available on our website. In 2022 we received a score of B (2021: A-).

 [Read more: bp.com/ourreporting](https://bp.com/ourreporting)

Testing the resilience of our strategy

Along with other organizations, including the IPCC and IEA, we believe there are a range of global pathways to achieve the Paris goals – each 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 TCFD.

The Scenario Catalogue comprises three 'Climate Scenario Reference Families':

- 'Paris Ambitious 1.5°C'
- 'Paris Aligned Well-Below 2°C'
- 'Current Policies/BAU'

We have drawn on these to test the resilience of our strategy and understand the potential implications of a range of possible energy transition scenarios on bp's reference group outlook to 2030.

Our approach to these scenario analyses and resilience tests, and our key insights from them, are discussed in our TCFD Strategy disclosures in the bp Annual Report 2022.

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 trajectories which the energy system could evolve to follow throughout the next decade.

 [Read more scenario analysis and resilience testing on pages 58-61 of the bp Annual Report 2022.](#)

EU taxonomy and CSRD

Subject to any 'equivalence' determination which may be made, we are planning for compliance with the EU Taxonomy Regulation and Corporate Sustainability Reporting Directive (CSRD) in respect of the financial year 2024, which would entail including the required disclosures in our annual report due in March 2025. See [page 20](#) for our current approach to reporting on our transition growth investment★ and low carbon activity investment★.

For terms with ★ refer to the glossary on [pages 34-35](#).

Clean cities and corporates

Our aim 10 is to provide integrated clean energy and mobility solutions.

Our regions, corporates and solutions team is working to help countries, cities and corporations around the world decarbonize.

To help meet industrial-scale demand for low carbon energy sources, we bring together expertise from across bp and from our partners to provide integrated energy solutions that help reduce their carbon emissions.

We are focusing on sectors that have significant emissions and are not straightforward to decarbonize – heavy industry (steel, mining, cement), heavy transport (shipping and road freight) and consumer goods. These sectors have interdependency along their value chains, creating more demand for integration, and creating opportunities to shape new markets and models. We are able to offer them decarbonization as a service – anticipating and adapting to their needs along a transition pathway as technology advances.

We also see opportunities to offer decarbonization at scale through integrated energy hubs, bringing together clusters of supply and demand for low carbon energy and fuels. Hubs provide a focus for accelerating the delivery of lower carbon alternatives and can offer economies of scale, and opportunities for job creation, investment and innovation.

For terms with ★ refer to the glossary on [pages 34-35](#).

Our progress in 2022

Integrated energy hubs

In Teesside in the UK, we have worked to advance components of the East Coast Cluster – a vision for decarbonizing local heavy industries at scale, with CO₂ from their emissions taken offshore for permanent storage through Northern Endurance Partnership's (NEP) CCUS facilities. There is potential to store up to 27 million tonnes of CO₂ emissions a year by 2030.

- In May 2022 bp and Equinor were awarded two carbon storage licences in the UK's Southern North Sea, supporting the NEP development.
- HyGreen Teesside aims to be one of the biggest green hydrogen facilities in the UK – targeting hydrogen production by 2025, with a planned first phase of 80MWe of installed capacity. In October 2022 we submitted a bid to the UK government's Hydrogen Business Model and Net Zero Hydrogen Fund. In addition, we signed four memorandums of understanding with local industries for the potential use of green hydrogen by businesses and communities.

Two bp-led low carbon projects – Net Zero Teesside Power (NZTP) and H2Teesside – were shortlisted for UK government support in 2022, as part of the next phase of the UK's CCUS cluster process.

- NZTP is a joint venture between bp and Equinor, with bp as operator. The natural gas-fired power plant will be fully integrated with carbon capture. It could generate up to 860MW of low carbon power.
- H2Teesside aims to be one of the UK's largest blue hydrogen★ production facilities, targeting 1GW of hydrogen production by 2030.

Decarbonizing sectors

Industrial emissions

- In Germany we signed a memorandum of understanding with thyssenkrupp Steel that focuses on developing a long-term supply of low carbon hydrogen and renewable power in steel production.
- In the US, bp and Linde announced plans to advance a major CCUS project in Texas that could enable low carbon hydrogen production at Linde's existing facilities. The development will also support storage of CO₂ captured from other industrial facilities, paving the way for large-scale decarbonization of the Texas Gulf Coast industrial corridor.

Logistics and transport emissions

Given the diversity of the logistics and transport sector, our work involves several different kinds of decarbonization solutions, including electrification, hydrogen, mobility and biofuels.

bp pulse, our EV charging business, is continuing to grow its network for both passenger cars and the truck industry – with a particular focus on fast charging★. We are also working with our fleet customers to install and operate charge points at their sites and charging hubs.

We aim to grow our worldwide public EV network to more than 100,000 charge points by 2030. In July 2022 we opened our first fast-charging facilities for medium and heavy-duty electric trucks at our Schwegenheim retail site in Rheinland-Pfalz, Germany.

bp and BOC, an industrial gases company, have completed a detailed nine-month feasibility study exploring designs for a hydrogen distribution and supply network for heavy-duty transport in the UK.

Rio Tinto and bp have agreed to work together on a one-year biofuel trial to help reduce carbon emissions from Rio Tinto's marine fleet. Under the trial, we are supplying Rio Tinto with marine biofuel, which will be trialled on the RTM Tasman vessel on transatlantic and Atlantic-Pacific routes. The results of the trial will help Rio Tinto assess ways to reduce its carbon emissions from its marine fleet and inform its future biofuel strategy.

We are aiming for a 20% share of global sustainable aviation fuel (SAF) supply by 2030. In March 2022 we announced our agreement to supply DHL Express with SAF until 2026 as part of a new strategic collaboration. This agreement is one of the largest publicly announced SAF deals in aviation to date.

Strategic partnerships in Iberia

In July 2022 we announced our intention to form a strategic collaboration with Iberdrola to help accelerate the energy transition. Through this collaboration, we aim to significantly expand fast EV public charging infrastructure, which will support the adoption of EVs in Spain and Portugal. We also intend to develop large-scale green hydrogen production hubs in Spain, Portugal and the UK.

We have also signed an agreement with the government of Spain's Valencia region to explore ways to reduce emissions from public and private transport and other carbon-intensive industries there. We have other collaboration agreements with ceramics industry bodies, ASCER and ANFFECC, to join forces on decarbonization of the ceramic industry in the Valencia region.

Supporting a just energy transition

We believe that a just energy transition must advance human rights and education. We support the Paris Agreement, which recognizes the importance of a just transition – one that delivers decent work and supports the livelihoods of local communities.

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

Progress to date

In 2022 we advanced initiatives that support a just transition for bp employees, the wider workforce and people living in local communities.

Just transition for bp employees and the wider 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. In 2022 our capability planning supported a range of sustainability-related learning activities for employees as well as reskilling activities and collaborations to expand our low carbon expertise.

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 our EVP for people & culture, is a commissioner for the UK Levelling Up Goals initiative. Many of our education initiatives support social mobility, as do our apprenticeship programmes.

Just transition for local communities

To help local communities benefit from the energy transition, we launch, participate in or support many different initiatives – focusing particularly on building new skills and retraining, community regeneration, social mobility, and education on clear energy. We engage people in local communities and use the insights they give us to help maximize our impact.

In 2022 our efforts were focused on several key locations, including Scotland, where we are involved in offshore wind projects that will be run from headquarters in Aberdeen. We have worked with our project partner EnBW and local organizations to run a reskilling project for local people in the city. We have also worked collaboratively to support education projects in Teesside, UK, where the H2Teesside, Net Zero Teesside Power and HyGreen Teesside projects are located. These projects have the potential to establish Teesside as a low carbon hub, dependent on an appropriately trained local workforce.

Outside the UK, we have sponsored the development of Oman's first solar training facility and, in the US, launched a clean energy grant programme with Equinor and other partners. This programme aims to support workforce and community development linked to New York's emerging offshore wind ecosystem.

 [Read more about our aim 12 in the bp Sustainability Report 2022 at bp.com/sustainability](#)



Our H2Teesside hydrogen production project is expected to support jobs and economic regeneration.

Governance and capital allocation

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H2-Fifty, our proposed 250MW green hydrogen project with HyCC, aims to help decarbonize industry and heavy transport in the Rotterdam region.

bp Rotterdam refinery,
The Netherlands



Governance

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

Focusing on shareholder value

We operate within a resilient and disciplined financial frame. Together with our strategy, this financial frame underpins our investor proposition to deliver long-term value for shareholders through:

Profitable growth

– growing value and returns

Committed distributions

– compelling cash distributions

Sustainable value

– investing in transition growth★ engines; driving down emissions

As we set out in the bp Annual Report 2022, shareholder value is supported through the hierarchy of priorities to govern how we intend to allocate the cash flow that we generate to strengthen our finances, grow distributions to shareholders and invest to create value through our strategic transformation.

This includes:

- Investing to grow our transition growth★ engines. Within our \$14-18 billion range (2023 \$16-18 billion range) for capital expenditure, we plan to allocate \$6-8 billion in 2025, aiming for this to rise to \$7-9 billion in 2030, to our

For terms with ★ refer to the glossary on [pages 34-35](#).

transition growth engines. This equates to over 40% of 2025 capital expenditure rising to around 50% of 2030 capital expenditure. Our cumulative investment in these transition growth★ engines is expected to be in a range of \$55-65 billion between 2023 and 2030.

- Investing to drive returns in resilient hydrocarbons. The balance of our capital expenditure will be invested outside our transition growth engines – into our oil, gas refining and other businesses. As we invest, our balanced investment criteria for final investment decisions include:
 - Seeking a payback of less than 10 years for investments in upstream oil and refining.
 - Seeking a payback of less than 15 years for upstream gas.
 - Testing against 15-20% investment hurdle rates in oil & gas at \$60 per barrel.

 [Read more on about our financial frame and investor proposition on page 24 and page 25 of the bp Annual Report 2022.](#)

Accountability and decision-making

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. The role of the board is to promote the long-term sustainable success of the company, generating value for our 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.

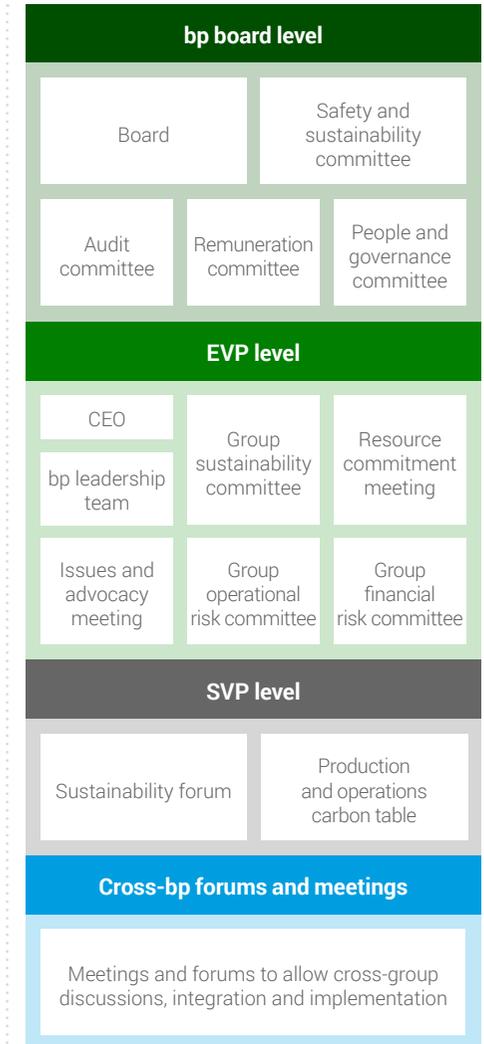
Climate-related risks and opportunities were discussed at every board meeting covering strategy, of which six were held in 2022. The other board committees consider climate-related issues where they consider it appropriate to do so in fulfilling their responsibilities. We provide more information on our governance of climate-related matters in the bp Annual Report 2022.

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 continues 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. It met four times in 2022.

 [Read more on page 50-52 of our bp Annual Report 2022.](#)

 [Read more at bp.com/governance](#)



Evaluating capital investment for consistency with Paris

Capital allocation

We are focused on the disciplined allocation of capital to deliver on our strategic objectives. In 2022 capital expenditure was \$16.3 billion. We expect capital expenditure to be in a range of \$16-18 billion in 2023 and \$14-18 billion per annum between 2024-30. This includes expenditure on inorganic opportunities. Investment is allocated across our businesses based on a set of criteria that balances strategic alignment, stringent hurdle rates, volatility, integration value, sustainability, and risk.

Governance framework

bp's investments fall within a governance framework. This seeks to ensure investments align with our strategy, can be accommodated 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 environmental and sustainability criteria. Our investment governance process, including the role of the board, is described in the bp Annual Report 2022, see [page 29](#).

Resource commitment meeting

For capital investments above defined financial thresholds for organic or inorganic spend, investment approval is conducted through the executive-level resource commitment meeting (RCM), which is chaired by the chief executive officer. The RCM reviews the merits of each investment case against a balanced set of criteria and considers any key issues raised in the assurance process.

Paris consistency evaluation process

The CA100+ resolution★, requisitioned in 2019, requires bp to disclose how we evaluate the consistency of new material capital expenditure investments★ with (i) the Paris goals and (ii) a range of other outcomes relevant to bp's strategy. bp's evaluation of the consistency of such investments with the Paris goals was undertaken by the RCM for new material capex investments sanctioned in 2022. 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. This is described on [page 32](#) and in the [bp Annual Report 2022](#) (pages 28-31).

We evaluated new material capital expenditure investment in scope using our central price assumptions (see below) and, where applicable, using our lower-price case. Where relevant the evaluation also incorporated our carbon price assumptions, applied to the anticipated operational greenhouse gas emissions associated with the investment, through 2050 (see below).

Key investment appraisal assumptions^a

Throughout 2022 we held our key investment appraisal price assumptions constant throughout the year at the levels set out in the bp Annual Report 2021. For relevant investment cases assessed in 2023, we have applied and plan to continue to apply the prices shown in the table below. Brent oil and Henry Hub gas assumptions average around \$61/bbl and \$3.8/mmBtu

2021 \$ real	2023	2025	2030	2040	2050
Brent oil (\$/bbl)	70	70	70	58	45
Henry Hub gas (\$/mmBtu)	4.0	4.0	4.0	3.5	3.5
Refining marker margin★	14	14	14	11	8.5

In addition to the prices shown we also test whether investments meet our return expectations (see page 32) using other prices, including a \$60/bbl Brent oil price series.

Carbon price (US\$/tCO₂e)

2021 \$ real	2023	2025	2030	2040	2050
	50	50	100	200	250

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

^a The values in this table represent the central case.

respectively (2021 \$ real) from 2023 to 2050. We consider these prices to be broadly consistent with a range of transition paths compatible with meeting the Paris goals, but they do not correspond to any specific Paris consistent scenario. We continue to apply carbon prices rising to \$100/tCO₂e in 2030 and \$250/tCO₂e by 2050 (2021 \$ real) for operational greenhouse gas (GHG) emissions in certain investment cases.

Decisions taken in 2022

In 2022 five new material capex investments (more than \$250 million) were approved. All were evaluated as being consistent with the Paris goals.

Archaea Energy biofuels acquisition: bp acquired Archaea Energy, a leading US biogas producer focused on converting naturally occurring waste emissions from landfills and anaerobic digesters into low carbon biogas and electricity.

EDF Energy Services energy supply: bp acquired EDF Energy Services LLC, a US-based commercial and industrial retail energy supply business. The acquisition of EDF ES expands bp's reach down the power value chain and broadens our geographical reach. The acquisition supports our aim 3, delivering energy sales with a lifecycle carbon intensity below our current portfolio average to end-use customer.

Angola New Gas Consortium: bp and Angola New Gas Consortium partners are developing non-associated gas and condensate from the Quiluma and Maboqueiro fields.

Cyprus development: a subsea tie-back to the existing Juniper platform in Trinidad & Tobago. Cyprus will access power from Juniper, eliminating the need for additional power generation, allowing increased production without any significant increase in bp Trinidad's operating emissions.

Kwinana Renewable Fuels: We approved detailed engineering design and long-lead contracts for the Kwinana renewable fuels project at our former refinery site in Western Australia. The project aims to produce renewable diesel, sustainable aviation fuel (SAF), and bio-naphtha.

 [Read more about the evaluation outcome on page 31 of the bp Annual Report 2022.](#)

For terms with ★ refer to the glossary on page 389 of the [bp Annual Report 2022](#).

Evaluating capital investment for consistency with Paris

Balanced investment criteria

All investment cases must set out their investment merits and are considered against a set of balanced investment criteria. This standardized approach is intended to create a level playing field for decision making and allows portfolio-wide comparisons of investment cases. The decision to endorse an investment based on the information provided represents our evaluation that it is consistent with what the 2019 CA100+ resolution★ refers to as ‘a range of other outcomes relevant to bp’s strategy’. In 2022 we further embedded sustainability into our investment governance process by developing our sustainability assessment template for investments linked to our sustainability frame, for use in all investment cases reviewed by the resource commitment meeting. The template provides information on a case’s impact on our net zero aims 1-3, its operational GHG intensity, and significant impacts on or contribution to certain aims concerning people and planet. This helps to maintain the consistency of our investments with our strategy and sustainability aims.

When taking investment decisions, we consider six investment criteria, although these 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, including our net zero aims. We also assess if the investment case involves distinctive capability that bp has, or intends to develop, and whether it adds to an existing ‘scale’ business within the portfolio or could help us create one.

Safety and risks

For all investment cases, we provide an assessment of the key risks to the investment that 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★ that is designed to help us 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, societal needs and the environment. This approach is underpinned by our purpose and sustainability frame. Investment cases above defined thresholds for anticipated annual GHG emissions from operations must estimate those anticipated emissions and incorporate carbon pricing for those emissions into the investment economics. All resource commitment meeting cases must consider significant impacts of an investment on key sustainability aims, informed by the sustainability assessment template, referred to above.

Investment economics

For all investment cases, we consider investment economics against a range of relevant measures. Depending on the nature of the investment case, these may include internal rate of return, net present value, discounted payback, and profitability index, reflecting assumptions about relevant commodity prices, margins and carbon prices. Investments are considered against differentiated return expectations, depending on business segment. We also refer to these expectations as hurdle rates, although as noted, each case is assessed according to its combined merit against our full set of balanced criteria.

1. For our resilient hydrocarbons portfolio, we seek 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 (IRR) of 15-20%.
2. For bioenergy, we seek an IRR in excess of 15%.
3. For our convenience and EV charging businesses, we seek a portfolio-level IRR in excess of 15%.
4. For our hydrogen investments, we expect double-digit (unlevered) IRR.
5. For renewables & power investments, we seek an unlevered IRR of 6-8%.

For investments in our oil and gas and refined products businesses, as well as any other investments that do not fall within one of the specific hurdles set out above, we also compare the internal rate of return in our lower-price case to a cost of capital hurdle rate. For additional capital discipline for investments in oil and gas production, we also consider a case in which the Brent oil price starts at \$60/bbl in 2023 and later declines to the level of our key appraisal assumptions by 2050 (see page 31).

Volatility and rateability

Our investment economics metrics also consider the degree of uncertainty of the cash flows when considering investment cases. For example, some cases have more certainty of future costs and revenue projections. Variations in net present values for the key variables in an investment case are quantified by sensitivity analysis to give a range of potential outcomes against our key investment hurdles.

Optionality and integration

Our assessment considers the degree of optionality offered by a project – the ability to adapt our business to changing circumstances. This could be an option to sell a product with a floor price, or the right to purchase additional equity in a joint venture at specific terms. Other types of options include the right to develop (or not develop) extensions to existing projects, or to change the course of a project’s development depending on market circumstances. We likewise seek out integration along value chains across multiple products, services, geographies and customers. For example, our gas production can supply liquefaction plants whose LNG is monetized by our trading business. Likewise, future carbon sequestration projects may allow us to add value to our gas production by converting it to low carbon power.

 [Read more on pages 28-31 of the bp Annual Report 2022.](#)

For terms with ★ refer to the glossary on [pages 34-35](#).

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Glossary and appendices

Glossary

Average carbon intensity of sold energy products

The rate of GHG emissions per unit of energy delivered (in grams CO₂e/MJ) estimated in respect of sold energy products★. GHG emissions are estimated on a lifecycle basis covering use, production, and distribution of sold energy products.

Biofuels production

Biofuels production is the 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, refining co-processing and standalone hydrogenated vegetable oil (HVO).

Blue hydrogen

Hydrogen made from natural gas in combination with carbon 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.

CA100+ resolution

The CA100+ resolution means the special resolution requisitioned by Climate Action 100+ and passed at bp's 2019 Annual General Meeting, the text of which is set out below.

Special resolution: Climate Action 100+ shareholder resolution on climate change disclosures.

That in order to promote the long-term success of the company, given the recognized risks and opportunities associated with climate change, we as shareholders direct the company to include in its strategic report and/or other corporate reports, as appropriate, for the year ending 2019 onwards,

a description of its strategy which the board considers, in good faith, to be consistent with the goals of Articles 2.1(a)(1) and 4.1(2) of the Paris Agreement (3) (the 'Paris goals'), as well as:

(1) Capital expenditure: how the company evaluates the consistency of each new material capex investment★, including in the exploration, acquisition or development of oil and gas resources and reserves and other energy sources and technologies, with (a) the Paris goals and separately (b) a range of other outcomes relevant to its strategy.

(2) Metrics and targets: the company's principal metrics and relevant targets or goals over the short, medium and/or long term, consistent with the Paris goals, together with disclosure of:

- a. The anticipated levels of investment in (i) oil and gas resources and reserves; and (ii) other energy sources and technologies.
- b. The company's targets to promote reductions in its operational greenhouse gas emissions, to be reviewed in line with changing protocols and other relevant factors.
- c. The estimated carbon intensity of the company's energy products and progress on carbon intensity over time.
- d. Any linkage between the above targets and executive remuneration.

(3) Progress reporting: an annual review of progress against (1) and (2) above.

Such disclosure and reporting to include the criteria and summaries of the methodology and core assumptions used, and to omit commercially confidential or competitively sensitive information and be prepared at reasonable cost; and provided that nothing in this resolution shall limit the company's powers to set and vary its strategy, or

associated targets or metrics, or to take any action which it believes in good faith, would best promote the long-term success of the company.

Customer touchpoints

Customer touchpoints are the number of retail customer transactions per day on bp forecourts globally. These include transactions involving fuel and/or convenience across all channels of trade.

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 the 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 assumed 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

For the purposes of our 2022 disclosures relating to our aim 3, we consider an energy product to be one that is generally used 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. For further information on products included in bp's 2022 aim 3 reporting see the basis of reporting.

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

EV charge points

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

Fast/Fast charging

Fast charging comprises rapid charging and ultra-fast charging.

Green hydrogen

Hydrogen produced by electrolysis of water using renewable power.

Installed renewables capacity

Installed renewables capacity is bp's share of capacity for operating assets owned by entities where bp has an equity share.

Low carbon activity

An activity relating to low carbon including: renewable electricity; bioenergy; electric vehicles and other future mobility solutions; trading and marketing low carbon products; blue or green hydrogen★ and carbon capture, use and storage (CCUS). Note that, while there is some overlap of activities, these terms do not mean the same as bp's strategic focus area of low carbon energy or our low carbon energy sub-segment, reported within the gas & low carbon energy segment.

Low carbon investment

Capital investment in relation to low carbon activity★.

Glossary

Methane intensity

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).

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.

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 our 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 sold energy products★, 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.

New material capex investment

A decision taken by the resource commitment meeting 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.

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, with the exception of, for example, financial trades and certain other transactions where the purpose or effect is that the volumes traded or supplied net off against each other.

Rapid charging

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

Renewables pipeline

Renewable projects satisfying the criteria below until the point they can be considered developed to FID: Site based projects that have obtained land exclusivity rights, or for PPA based projects an offer has been made to the counterparty, or for auction projects pre-qualification criteria has been met, or for acquisition projects post a binding offer has been accepted.

Sold energy products

For the purposes of aim 3, these represent the energy products★ we sell to third parties including both marketed sales and physically traded energy products★. For these purposes, bp group subsidiaries and equity accounted entities are not considered third parties, other than in our trading & shipping and customer & products businesses, where sales to equity accounted entities are considered third-party sales.

Sustainable emissions reductions (SER)

SERs result from actions or interventions that have led to ongoing reductions in Scope 1 (direct), Scope 2 (indirect) greenhouse gas (GHG) emissions (carbon dioxide and methane), or both, 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.

Transition growth

Activities, represented by a set of transition growth engines, that transition bp toward its objective to be an integrated energy company, and that comprise our low carbon activity★ alongside other businesses that support transition, such as our power trading and marketing business and convenience.

Transition growth investment

Capital investment in relation to transition growth★, that is aligned to our aim 5 (to increase the proportion of investment we make into our non-oil and gas businesses. For this purpose, we define 'oil and gas' activities as those primarily encompassing the production, refining and sale of fossil hydrocarbons and their products and those associated with the dedicated gas and oil trading businesses).

Ultra-fast charging

Vehicle charging greater than or equal to 150kW.

Underlying replacement cost (RC) profit or loss

Non-GAAP measure. RC profit or loss (as defined on page 396 of the bp Annual Report 2022) after excluding net adjusting items and related taxation. See bp Annual Report 2022 page 351 for additional information on the adjusting items that are used to arrive at underlying RC profit or loss in order to enable a full understanding of the items and their financial impact.

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 carbon intensity of bp's sold 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 engines over time; and bp's 2030 EBITDA aims and expectations for its oil and gas businesses and transition growth engines. 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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