centrica

Our Climate Transition Plan 2024

Supporting every customer
and our business to be net zero

Enter →

Contents

Group Chief Executive introduction

Energy has driven progress for the past 200+ years — from the energy used to create the steam which drove the industrial revolution, to the energy required today to drive the technology revolution which is in full swing.

As governments across the countries we call home seek to embrace this new era, we will do our utmost to help them achieve their ambitious targets for growth and net zero. We're ready for the transition, and we welcome the ambition to go further, faster.

This is because tackling climate change and social inequality in society is hugely important and presents some of the biggest challenges for society, if not the biggest. It motivates me to think of how we can navigate the energy transition in a way that delivers a better energy system for our customers — a future where energy is affordable, secure and clean. To me this means that we've got to be careful that we don't go down the path of the ideologue and create clean but unaffordable energy, or energy that's not available when we need it.

To seize this opportunity, we outlined our Green Focused Investment Strategy in 2023. This will see us ramp up our total investment into green activities to more than 50% between 2023-28 in energy security of supply and flexibility, renewable and low carbon generation, as well as customer offerings that advance the transition to net zero. We're making good progress having reached over 30% green investment already — a big step up from less than 5% back in 2019. This reflects our commitment to move at pace in aligning our business model to net zero. Our in-house green classification system is built on the foundations of the EU's Sustainable Taxonomy; however, it's evolving, and its 'by-inclusion' format can today be restrictive. So we occasionally need to make our own independent classifications where appropriate. We want to be active in shaping the quality and utility of official taxonomies and plan to engage with both EU and UK policymakers, to ensure they represent a sufficiently comprehensive range of activities. We'll publish any deviations from official taxonomy reporting.

As we pivot our business to ensure the decisions we make today can chart a better tomorrow, my priority is to create a fairer future as we generate a greener one. This is what lies behind our new Purpose, 'energising a greener, fairer future', which we introduced last year. Everything we do is a step towards this to ensure we create long term sustainable value in the truest sense of the word for people and planet in the countries in which we operate, and beyond.

Our People & Planet Plan is a key part of how we do this. Launched in 2021, it comprises five Group-wide goals that accelerate action on achieving net zero and creating the diverse and inclusive team we need to get there, whilst making a big difference in our local communities. In that same year, we became one of the first UK companies to publish a Climate Transition Plan, detailing how we intended to deliver our Planet targets in a way that's fair and doesn't leave anyone behind. I'm immensely proud of this.

Three years on, I'm equally proud to now publish our second Climate Transition Plan. It demonstrates just how far we've come with the progress we've made and the insights and experience we've gained along the way. Not only do we now have a better understanding of the risks and opportunities climate change presents, but we also have a stronger grasp of the key dependencies we rely on to achieve net zero for our business and our stakeholders. The Board have been intimately involved in the development and endorsement of this Plan, and they're just as committed as I am in delivering it because the Plan isn't just something we have to do; it's good for Centrica and we can create value from it.

You'll see that in our new Climate Transition Plan, we've strengthened our net zero commitments and provided greater transparency around the steps we plan to take to advance delivery through our new suite of enhanced Climate Ambitions. Although the energy transition is in full flow, we've had to take stock of the fact that the UK hasn't progressed towards net zero as much as we would have hoped in recent years — particularly when we look at electric vehicle (EV) and heat pump adoption. Realistically, we had no option but to push back our ambition for a zero emission van fleet from 2025 to 2030 due to infrastructure challenges. And although we've updated our heat pump ambition to sell 20,000 a year by 2030, I can see this is going to be challenging to achieve until the UK is truly ready to adopt this technology at scale. Despite these headwinds we've remained ambitious to ensure we drive the change we all want and need. Now is the time to lean in rather than roll-back on our net zero targets.

> **"Now is the time to lean in rather than roll-back on our net zero targets."**

Today, we're doing a lot to push the energy transition forward. For example, we're forming a joint venture to build Europe's first ammonia-fired power station in Ireland and are set to become the first to blend hydrogen at our Brigg power station in the UK. We're furthermore developing plans in the UK to turn our Rough gas storage facility into the world's largest hydrogen storage facility whilst obtaining a carbon storage licence for the Morecambe Bay gas field to provide 25% of the UK's industrial carbon storage capacity by the 2030s. And we've invested in pursuing the opportunity to build a new nuclear power station in Suffolk. At the same time, we're building new peaking power stations and signed new LNG deals because it's clear that we'll need a mix of technologies to deliver net zero including natural gas, which is going to remain a key part of the energy mix for decades to come.

What the energy transition will ultimately look like, nobody can say. We know the destination (a net zero energy system that has minimal or no carbon emissions), but we don't know the precise route or time of arrival. Go too fast, and countries could lose economic competitiveness and see a severe reduction in living standards. Go too slow, and the planet could suffer a catastrophic outcome which could ultimately render it uninhabitable. Leading the pack without being too far in front, seems to me to be the optimal solution.

Centrica has always been, and will always be, at the forefront of change. Just as we've done for the last 213 years, we'll continue to evolve our business towards net zero. However, we'll need everyone to play their part as we play ours for the transition to be success. We'll need decisive and rapid action from government to establish key policies and support mechanisms; for customers to actively be part of the energy transition; and for business to innovate technologies and drive services and solutions that help customers do just that.

We know our pathway won't be quick or easy, nor will our journey be linear. But we know that as a uniquely integrated energy company, we're well-placed to both drive forward and benefit from the energy transition at every stage of the value chain — whether we're making, storing, moving and selling energy, or installing and mending related services and solutions. The Company I'm so privileged to lead, will undoubtedly play a leading role in the energy transition and just as we've done during the energy crisis, we'll rise to the challenge.

Thank you.

Chris O'Shea,
Group Chief Executive

Our plan at a glance

Our Climate Ambitions set out the tangible steps we intend to take over the next ten years to progress towards our net zero plan for our business and customers.

Key:
○ Climate Ambition
▷ Target

Key milestones	2030	2040	2050
Our business	● Zero emissions vehicle fleet ●——● Baseload power generation net zero ● Gas production net zero ● Gas storage net zero ● LNG shipping net zero **▶ 50% reduction in GHG (from 2019)**		**▶ Net zero**
Our customers	● 5m Hive connected devices ● 20k heat pump sales per annum ● 80% of electricity customers with access to smart services in the UK ● 33% of customers engaged in green or flexible energy in the UK ● 100% renewable or zero carbon power supplied in the UK and Ireland **▶ 28% reduction in GHG intensity (from 2019)**		**▶ Net zero**
Enablers	● Over 50% green investment ● 3k engineers with green skills in the UK and Ireland		

Driven by our Purpose to energise a greener, fairer future

Dependent on customer attitudes and appetite for change, the embrace of technological advancements, and a policy environment that facilitates the transition.

Supported by our engagement, research and policy advocacy.

Business model and strategic ambition

Our business model

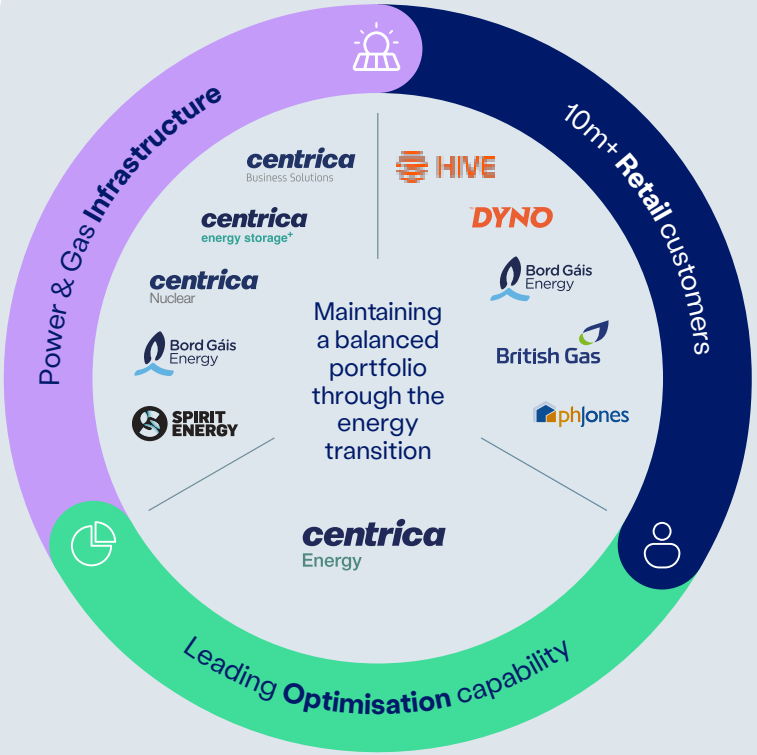
Energy isn't just what we do, it's in our DNA.

We've been at the centre of the UK energy industry for over two centuries. From supplying the gas and coal that powered the industrial revolution, to becoming the market-leading energy services and solutions company we are today.

We're unique among energy companies in the UK and Ireland, operating across the entire energy value chain through a variety of distinct but complimentary businesses. We therefore play a key role in energy; **we make it, store it, move it, sell it and mend it**. This integrated, whole system approach gives us the key levers and capabilities we need to drive our strategy and deliver our Purpose of energising a greener, fairer future.

Over the next few decades, we'll continue to evolve our business model to deliver our Purpose and strategic ambitions, as well as respond to the risks and opportunities presented by the energy transition. This is because we believe in energy that works for everyone, today and into the future. With this focus, we'll maintain and grow a profitable, diversified business that's increasingly aligned with net zero.

Our complimentary businesses span the entire energy value chain



Infrastructure

We're investing to build a low carbon, reliable energy system including renewable and low carbon power generation, flexible peaking generation and energy storage.

Retail

We're relentlessly focused on providing a leading customer service and experience, helping customers save money and decarbonise through innovative offerings.

Optimisation

We support the responsible buying and selling of energy, managing risk across our business and accessing value from green generation in our trading business — all whilst continuing to build out the flexibility required for the future low carbon energy system.

Our strategic ambition

The energy transition needed to deliver net zero, provides one of the greatest opportunities for our business.

Our Climate Transition Plan sets out how we'll harness these opportunities and deliver our People & Planet Plan. Our People & Planet Plan consists of five Group-wide goals that accelerate action on issues that matter deeply to our business and society, and where we're well-placed to make a world of difference — from achieving net zero for our business and customers to creating the diverse and inclusive team we need to get there, whilst making a big difference in our local communities.

We've long recognised climate change as one of the greatest challenges society faces. Our Planet targets are therefore informed by the latest scientific findings. They reflect the urgency to act and take into account the relevant global, national and sectoral targets and pathways. We constantly strive to strengthen our targets to accelerate decarbonisation, which is why we've brought forward our target to be a net zero business by five years to 2040 — a whole decade ahead of the widely accepted point at which global society needs to reach net zero. Towards this, we've also set an earlier, more ambitious interim target to hold ourselves to account in the near-to-mid-term (see page 18). In recognition that we've less control over our customer energy consumption and emissions, we've maintained our target to help customers be net zero by 2050 although we're seeking opportunities to bring this forward if we can in the future (see page 18).

Net zero by 2040

We've bought forward our target to be a net zero business to 2040 from 2045

Our Planet targets are underpinned by a new and comprehensive set of extended and upgraded Climate Ambitions (see page 49). They provide clarity on the actions we intend to take and the scale of impact needed in the short term, in order to meet our longer term net zero targets. We're committed to being transparent on the key levers we intend to pull to achieve our Climate Ambitions, the dependencies they are subject to and our efforts to positively influence them, as well as our overall performance as we make progress towards them.

As an active participant in the creation of the Transition Plan Taskforce's Disclosure Framework (see pages 86 and 93), we fully support and embody the 'strategic and rounded approach' recommended for all Climate Transition Plans. We're acutely aware that we operate within a complex and interdependent energy system, with many dependencies and trade-offs. So as we respond to the climate related risks and opportunities we've identified for our own business, we must also contribute to decarbonising the wider economy at the same time. A good example of this is our investment in rapid response power generation assets. Although these assets are crucial in enabling the scaling up of renewable generation to help decarbonise the wider energy system, they are today fuelled by natural gas and add to our own emissions.

As part of this 'strategic and rounded' approach, we're also focused on tackling any potential unintended consequences caused by getting to net zero. We're therefore fully committed to understand and manage the potential impacts and dependencies the transition may have on our customers, colleagues, communities and supply chain, because net zero won't be a success if it's not a 'just transition' (see page 68).

Delivering net zero

To get to net zero and realise our strategic ambitions, we're working across the energy value chain to make it, store it, move it, sell it and mend it in the following ways.

Making energy greener

Our lives revolve around energy — from heating and lighting, to cooking and driving. With no single silver bullet to decarbonise energy production, a combination of assets will be needed to make it greener and ensure a smooth transition. As we decarbonise energy, we must also seek to strengthen security of supply. Companies like Centrica have a key role to play in continuing to invest in energy production across the UK, Ireland and beyond, to support a more sustainable and secure energy future. Consequently, we're investing in:

- ramping up renewable generation with an ambition to grow our assets at scale over the next five years having already completed our first Centrica-owned solar farm in the UK last year;
- exploring zero carbon baseload options for power in new nuclear alongside our existing 20% stake in the UK's nuclear fleet;
- increasing dispatchable generation via our Whitegate Combined Cycle Gas Turbine (CCGT) power station in Ireland, with the aim of becoming the first in Europe to utilise clean hydrogen or ammonia to produce reliable zero carbon electricity; and
- developing small rapid response gas-fired engines across the UK and Ireland that can respond in minutes to balance generation with demand in periods when the wind doesn't blow, and the sun doesn't shine. We're also exploring options to decarbonise these plants with clean gas such as biomethane in the short term or hydrogen longer term.

Alongside what we're going to invest in, we've decided what we're not going to invest in. We've made the commitment to no longer invest in the exploration of new oil and gas fields. Our strategy is to deplete our existing oil and gas reserves in the UK and Netherlands, with most fields depleted by the early 2030's. We'll instead invest in the Morecambe Net Zero Cluster, which has the potential to be one of the UK's biggest carbon storage hubs and could see the creation of thousands of green jobs (see page 75).

Storing energy

The energy transition is driving the growth of renewables and a future that's largely free of fossil fuels. With the creation of this increasingly intermittent energy system, additional dispatchable power and flexible demand is urgently needed to support renewables. Greater flexibility alongside energy security can be enabled through batteries, pumped storage, electrolysis or geological hydrogen storage.

We're heavily investing in various battery energy storage systems (BESS). At Roosecote, we have a 49MW half-hour duration battery whilst at Brigg, we operate a 50MW two-hour duration battery. We've plans to grow our BESS portfolio to provide much needed flexibility to the grid. We'll additionally continue to work with the National Energy System Operator (NESO) to further unlock the investment potential of batteries.

Beyond batteries, we're collaborating to provide long-duration storage solutions. This includes developing a commercial-scale liquid air energy storage plant and investment in hydrogen storage solutions. In particular, we see hydrogen playing an effective role in storing significant amounts of energy over extended periods. It can therefore serve as a reliable back-up for electricity generation, support renewables deployment and utilise renewable energy that might otherwise be curtailed due to grid constraints.

For example:

- at Whitegate power station, excess renewable energy could be used to produce hydrogen which can be stored locally in offshore fields and brought onshore, before being used to generate electricity during low wind periods or when the energy system is strained;
- at Rough we've re-opened the UK's largest natural gas storage facility to improve energy security and are actively pursuing our long-term plan for it to be transformed into a hydrogen storage facility. This would make Rough the largest long-duration low carbon energy storage facility in the world. Not only could this transformation help us decarbonise Rough's gas processing terminal, but it could also support industrial customers in the region to decarbonise. We're working with government on our plans and stand ready to invest up to £2 billion to convert the asset; and
- at Easington gas terminal, we've partnered with other leading energy companies, SSE and Equinor, to develop a fully integrated hydrogen hub with green hydrogen production, linked to salt cavern storage at Aldborough alongside multiple hydrogen offtakers.

If the scaling of renewables takes longer than expected or if hydrogen doesn't expand as rapidly as anticipated, natural gas will still be needed. Capturing and storing the carbon dioxide from burning that gas remains essential. Our Morecambe Net Zero project aims to repurpose the depleted gas fields at Morecambe with the capacity to store up to a billion tons of carbon dioxide — that's equivalent to 25% of the UK's industrial carbon dioxide, stored safely for geological timescales out in the bay.

Moving energy

To create a secure and sustainable energy system, we need to do more than generate renewable power and store it; we need to be able to efficiently move it to where it's needed. Towards this, we:

- completed over 10 million energy trading transactions last year and we'll continue to play a pivotal role in balancing consumption and production through our focus on energy trading;
- physically traded 260 Liquefied Natural Gas (LNG) cargoes in 2023 and we plan to carry on enabling natural gas to support energy security and decarbonisation in a global market, as we progress our ambition for shipping to be net zero;
- manage over 15GW of renewable and flexible assets to maintain balance between supply and demand with ambitions to grow this significantly in the coming years;
- are advancing our use of digital technology to provide more accurate weather forecasting for wind and solar farms, reducing the need for back-up reserves like gas-fired power stations; and
- deliver greater flexibility via our demand side response platform which is expected to help even more customers shift their energy use from peak times to cheaper periods without the need for manual adjustment, enabling renewable integration by better balancing demand on the energy system.

Selling energy

To get to net zero, we need to bring green technologies alongside sustainable services and solutions to market that'll also make energy simpler and more affordable. This is a big focus for us, as is encouraging individuals, families, businesses and other large-scale energy users, to embrace change and adopt low carbon offerings that make net zero possible. To deliver this, we're:

- introducing market-leading incentives that encourage the adoption of low carbon technologies — from providing heat pump price and performance guarantees to achieve our ambition to ramp up heat pump sales and maintain our leading position in their roll-out across the UK, to delivering the cheapest EV charging rate alongside a year's worth of free driving with the purchase of a charging point to make owning an EV easier;
- investing in our in-house Smart Meter Asset Provider (MAP) business to accelerate our plans to help every household have a smart meter, so that they can identify ways to reduce consumption and lower energy bills;
- harnessing our position as a UK leader in smart heating controls to expand our Hive ecosystem by adding solar panels, batteries and low carbon heating options like heat pumps alongside our smart thermostat – all of which can be easily controlled and optimised through the Hive app; and
- launching greener tariffs including renewable and zero carbon tariffs as well as our time-of-use PeakSave tariff, which has so far encouraged almost 800,000 customers to shift their energy usage away from peak demand to reduce carbon and cost.

6,000

Heat pumps delivered for the able to pay market and via the Energy Company Obligation

>47,000

EV charging points delivered to date

Mending energy

Homes are responsible for almost 30% of the UK's carbon emissions. With the energy transition occurring one home at a time, our engineers play an essential role in decarbonising homes and building a better energy system that serves millions of households across the UK.

To drive the energy transition forward, we need to take our impressive 7,000-strong engineering team and evolve their skills to install and maintain greener energy systems that support customers to get to net zero. We're investing in their development and using our award-winning Training Academies to provide the green skills required for the engineer of the future (see page 45).

To reduce their impact travelling to and from customer's homes, more and more of our engineers are using EVs as we progress towards our ambition for a zero emission road fleet.

Our engineers in our customers' homes, represent the final step of the energy journey which began with generating clean energy, storing it, transporting it and selling it, to ensure a greener, fairer future. We must excel in all of these areas to deliver net zero; that's what we're here to do.

External factors

We've identified six key trends in our analysis of long-term climate scenarios, which shape our strategy and our actions to positively influence them.

Transition away from fossil fuels

(Risk: Long-term downward trend)

- Customer demand for natural gas for heating will decrease, driven by policy and availability of low carbon alternatives.
- Use of fossil-fuelled power will decrease as governments prioritise 'clean' grids and promote renewable and low carbon power.

Growth in low carbon and renewable electricity

(Opportunity: Short-medium term upward trend)

- Demand for electricity will rise as electrification of heat and transport accelerates.
- Renewable generation will become increasingly cost-competitive.
- Low carbon power, including nuclear, will be increasingly important in providing baseload.

Growth in the low carbon heating market

(Opportunity: Medium-term upward trend)

- Customer demand for low carbon heating technologies, such as heat pumps and district heating will increase, driven initially by subsidies and cost reductions.

Expansion of the EV transport market

(Opportunity: Short-medium term upward trend)

- The electrification of transport will continue to rise driven by incentives and a wide range of available vehicle options.
- Innovations to optimise charging will strengthen the benefit case.
- Public charging infrastructure will improve over time, facilitating more drivers without off-street parking to switch.
- Demand for petrol and diesel will decline as demand for low carbon vehicles increases — focused on electric at first and potentially hydrogen in the future.

Rise in energy efficiency and energy management

(Risk & Opportunity: Short-term upward trend)

- An acceleration of the deployment of energy efficiency measures, such as insulation, will be driven by subsidies and desire to control costs.
- Digital solutions and AI development will continue to facilitate home management energy solutions.

Key:

Risk | Opportunity

Upward trend | Downward trend

Need for supply and demand optimisation alongside decentralisation

(Opportunity: Short-medium term upward trend)

- Volatility in energy production will require balancing and storage solutions.
- Demand side management, battery storage and other flexibility services will become more widely adopted.
- The requirement for decentralised energy generation will continue.
- Flexible generation and storage assets will support the transition to renewable energy.

Metrics and targets

Our approach to transparent reporting

In line with best practice, we report our greenhouse gas (GHG) emissions in accordance with the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (2015).

We report our gross Scope 1, 2 and 3 emissions as well as progress against our net zero targets on an annual basis. Supplementary metrics are also reported annually to provide a more holistic view of our progress, including our gross energy consumption (power and fuel consumption) as well as financial carbon intensity of our gross Scope 1 and 2 emissions (tCO_2e/£ revenue). Performance is disclosed in our Annual Report & Accounts in compliance with The Companies (Directors' Report) and Limited Liability Partnerships (Energy and Carbon Report) Regulations 2018, alongside wider climate-related disclosures published throughout the year in our reporting suite.

Our Scope 1 and 2 emissions are a relatively small component of our value chain emissions, totalling less than $2mtCO_2e$. Our direct emissions are today dominated by our power generation activities alongside those relating to gas production and storage. Only a small component of our emissions are associated with our corporate and downstream fleet and property. We've most control over these emissions because they relate to activities we directly manage.

Scope 3 emissions make up the majority of our emissions and represent over 90% of our upstream and downstream value chain GHG emissions (Scope 1, 2 and 3). Of this, over 95% of our Scope 3 GHG emissions relate to the energy we supply our customers in the form of electricity and gas. This means helping our customers to use energy more sustainably is one of the biggest things we can do to tackle climate change.

As we don't fully control these emissions, our focus is on influencing customers to take up lower carbon energy services and solutions whilst helping them reduce their consumption. Meanwhile, our supply chain emissions associated with the services and solutions supplied to us, are relatively immaterial at only 3% of the total. Although our supply chain emissions are the hardest to measure and can be challenging to reduce, they're nonetheless an area of growing focus for us.

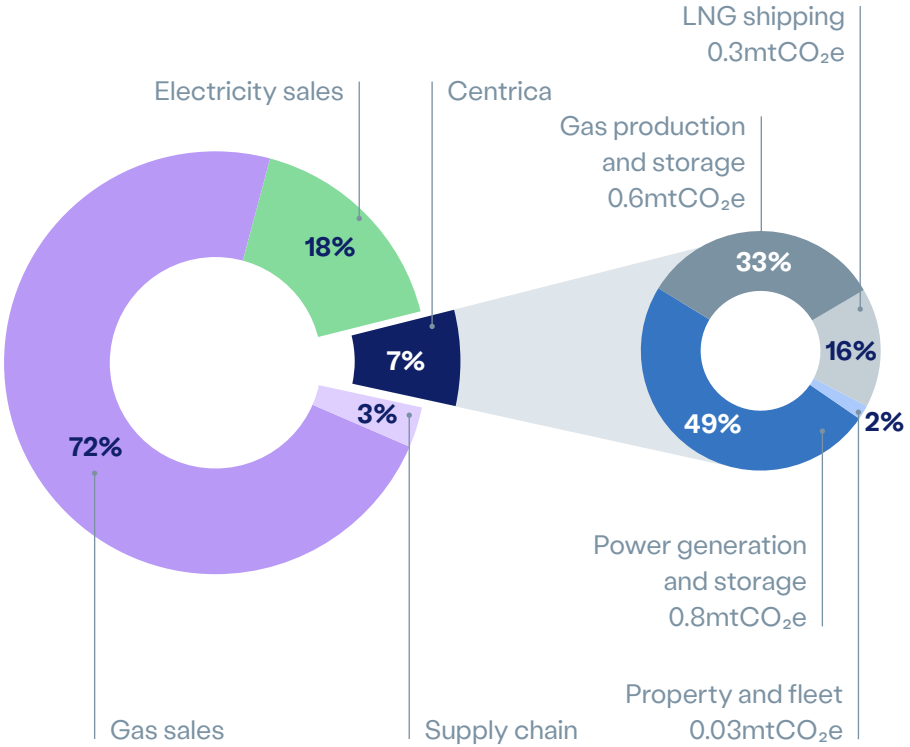
Around 95% of emissions arising from our business and customer activity, are emitted in the UK and Ireland where the majority of our customers and assets are based. The remainder of our emissions are largely from continental Europe, with LNG shipping emissions being a notable exception given they are global in nature.

See Appendix for details on our emissions scopes and how we report them.

A breakdown of our emissions

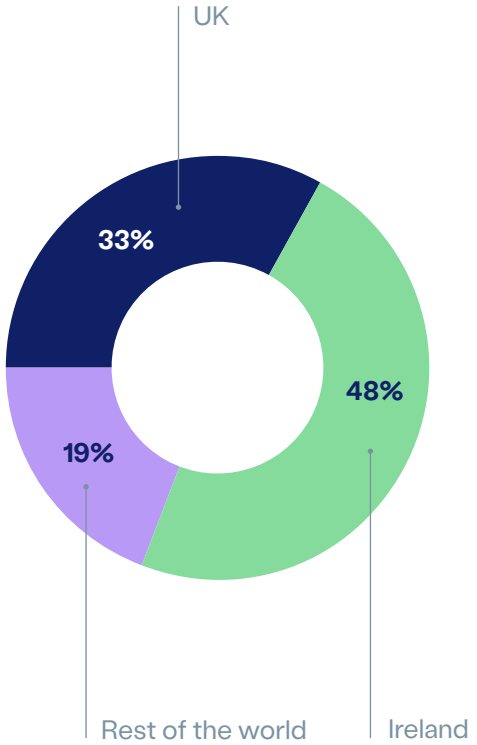
Our global GHG footprint (Scope 1, 2 & 3)

Our Scope 1 & 2 GHG footprint

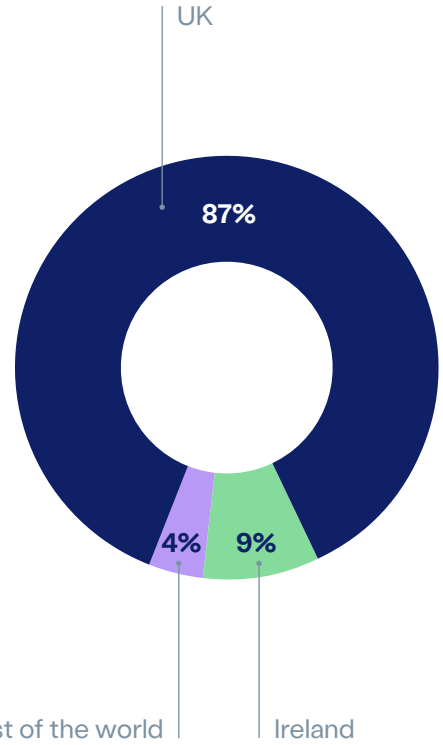


A breakdown of our emissions by geography

Centrica (Scope 1 & 2) emissions by geography



Centrica (Scope 3) emissions by geography



Our progress to date

Our GHG emissions have reduced significantly as we continue to evolve our business to energise a greener, fairer future.

In the last decade, we've delivered:

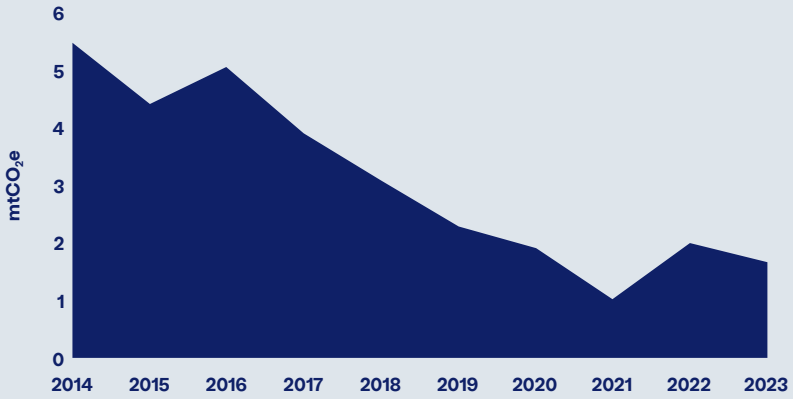
70%

Reduction in gross GHG emissions across Centrica's operations[1]

90%

Reduction in customers' gross GHG emissions[1]

Centrica's historical GHG emissions (gross)



We've successfully cut Centrica's Scope 1 and 2 emissions over the last ten years. Gains have been made by pivoting away from a carbon intensive asset portfolio, to become an integrated energy company that's concentrated on investing in low carbon and transition infrastructure, whilst providing customer-focused services and solutions.

Our customers' historical emissions (gross)

We've pursued reductions in customer emissions through measures such as decarbonising energy supply and providing low carbon energy services and solutions. This has contributed to emissions reductions, although around 90% of those achieved since 2014 arose from the sale of our Direct Energy business in 2021.

Alongside aligning our strategy and business model with net zero, we drive progress in decarbonising our business through setting ambitious carbon reduction targets that are normalised for acquisitions and divestments (see page 17). Since setting these net zero targets in 2021, we're on track with our performance having so far delivered around a 20% reduction in our business emissions alongside a 10% reduction in our customers' energy GHG intensity since 2019.

(1) Gross emissions differ from our net zero targets which are normalised for acquisitions and divestments against the 2019 base year.

Our targets and how we set them

We've been setting and delivering carbon reduction targets for over a decade using robust processes and practices to ensure they drive progress.

In line with best practice, we scope our targets to include acquisitions and exclude divestments from the base year (see page 90). As such, divestments including our Direct Energy business in 2021, are removed from our targets back to the base year. We also create and maintain comprehensive models to forecast our future emissions and shape our climate targets and associated implementation strategies. For instance with our own direct emissions (Scope 1 and 2), we consider the assets we expect to own and operate, their likely operational profiles over time, along with other emitting activities planned across the Group. As part of this we simulate different scenarios to evaluate potential investments and divestments we might undertake, leading to a central case with alternative scenarios. We also forecast our future customer emissions. This, however, is a much more complex task as external factors affecting consumer behaviour are numerous and varied, resulting in multiple feasible scenarios.

As we evolve our business to achieve our Purpose and strategic ambitions, it's crucial that we effectively balance decarbonisation with affordability and energy security. We sometimes find these priorities are in conflict and require trade-offs. This can be demonstrated with the accepted role of rapid response gas-fired engines in providing system balancing services to enable the scaling up of intermittent renewable power generation alongside storage solutions. Moreover, recent geopolitical events and the natural decline of the UK's gas reserves, has only underlined the need for energy security and a stable supply chain, including in the form of LNG supplies to the UK and elsewhere. These are just two examples where we're investing in ways that help the energy system to deliver a secure and just transition for customers but in doing so, add to our own emissions. For reasons like this, the energy transition is complex, interdependent and progress won't always be linear.

All of these factors influence our net zero targets, which were introduced in 2021 when we launched our People & Planet Plan (see page 7). These targets built upon a decade of carbon reduction efforts but marked our most ambitious step to date. We announced that we'd be a net zero business by 2045 with a 40% reduction in GHG emissions by 2034 (base year: 2019). We also committed to help our customers be net zero by 2050 with a 28% reduction in GHG intensity by 2030 (base year: 2019). In the near term, our interim targets aligned with a well-below 2°C pathway. And in the longer term, our timing to achieve net zero was consistent with the global pathway required to limit global warming to 1.5°C.

Since establishing these targets, the urgency for global decarbonisation has intensified. In 2022, the Intergovernmental Panel on Climate Change (IPCC) released their latest report (AR6), which revealed that global emissions remained on the rise and that 'mitigation pathways to limit warming to 1.5°C and 2°C, would require deep, rapid, and sustained reductions in emissions'. The impacts of climate change have since become more evident, with 2023 recorded as the warmest year in history. It was a trend that persisted into 2024, marking the summer as the hottest on record. Urgent action is needed and consequently, we fully support the ambitious national climate targets across our key markets, in pursuit of the Paris Agreement's goal of limiting global warming to 1.5°C above pre-industrial levels.

With this context and our ongoing discussions with key stakeholders, we continuously review our targets to determine if more ambitious and rapid changes are feasible. During this period, our transition plans for major assets have progressed significantly as we work on strategies to decarbonise or repurpose them for a low carbon economy. We now believe that committing to faster decarbonisation is both achievable and necessary. As a result, we're bringing our net zero target for our business forward by five years to 2040 — a full decade ahead of the global 1.5°C goal. Additionally, we're advancing our interim target from 2034 to 2032 whilst increasing the reduction goal from 40% to 50%.

At the same time, we've re-evaluated our customer emissions target. Our assessment found that due to the ongoing slow progress in critical external factors like policy framework development and technology cost reductions that affect demand for low carbon services and solutions, our current target remained sufficiently stretching in its ambition. We're making strong progress in developing market-leading customer propositions that are helping customers become more sustainable and are targeting our advocacy to bring forward the necessary policy conditions needed for net zero, so we hope to be able to accelerate our target in the future (see page 65).

Delivery of our targets are driven by our Climate Ambitions which we've updated and now span every part of the value chain in which we operate — from increasing the number of customers using our Hive platform, to rolling out our zero emission fleet (see pages 35 and 40). Our ambitions are subject to significant dependencies that are beyond our immediate control, although we take proactive action to influence them and drive progress.

In line with best practice, achieving our targets will primarily be delivered through carbon abatement rather than offsetting (see page 24).

Our updated Planet targets:

- **Be a net zero business by 2040** (50% GHG reduction by 2032)
- **Help our customers be net zero by 2050** (28% GHG intensity reduction by 2030)

Target alignment with science

Our targets are aligned to the Paris Agreement and based on science. They therefore play an important role in actively contributing to UK and European targets to achieve net zero by 2050.

Our business activities span multiple sectors. This includes the oil and gas sector, which at the time of writing, doesn't have a sectorial decarbonisation approach defined by bodies such as the Science Based Targets initiative (SBTi), which quantifies the emissions reductions needed to meet the Paris Agreement's 1.5°C goal.

Whilst this means the SBTi are currently unable to validate our targets as 1.5°C aligned, we're still able to employ their cross-sector absolute reduction method alongside other credible methodologies and pathways, to assess our target alignment and ensure they are based on science.

Centrica net zero target

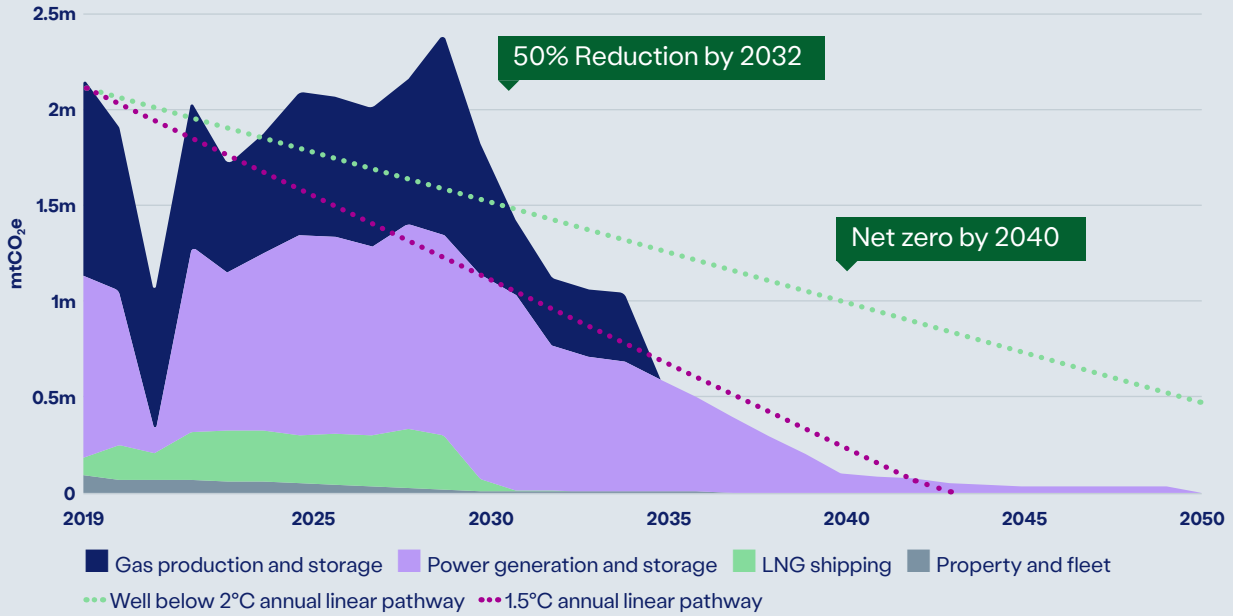
We've greater control over our own Scope 1 and 2 emissions and hold ourselves to high ambition when managing them. Using the SBTi annual linear reduction method, our new net zero target date of 2040 is ahead of the 1.5°C net zero target year of 2043. Our interim target that underpins this and sets out a 50% reduction from 2019 levels by 2032, far exceeds the well-below 2°C glidepath position of 33% reduction and substantively aligns with the 54% reduction required of a 1.5°C pathway. We're committed to drive deeper emissions reductions where technically and commercially feasible in the future.

We recognise that in the near term our forecast emissions may exceed a well below 2°C pathway before rapidly reducing in the 2030s in line with 1.5°C. As we play our role in enabling our customers and communities to decarbonise in a secure and affordable way, we need to manage trade-offs which at times will mean our own footprint increases. This is particularly true in the near-term as low carbon solutions are supported by more traditional technology to ensure an orderly transition. The following sections provide more detail on the trade-offs that we're managing, and the efforts we'll make to bring down emissions sooner.

Whilst it's important to understand how our enterprise-wide targets align with credible science-based pathways, we're a diverse organisation involved in multiple business sectors across multiple countries, each of which will have its own optimal decarbonisation pathway. It's widely accepted that enterprise-level assessments are credible, with the potential for certain parts of the organisation to decarbonise sooner to compensate for other harder to treat emissions.

However, to deepen our understanding and improve transparency for our stakeholders, we disaggregate our core emissions by sector and compare them against relevant third-party pathways, including the UK Climate Change Committee's (CCC) Balanced Net Zero (BNZ) Pathway aligned with 1.5°C.

Centrica (Scope 1 & 2) emissions projections and targets



Power generation emissions

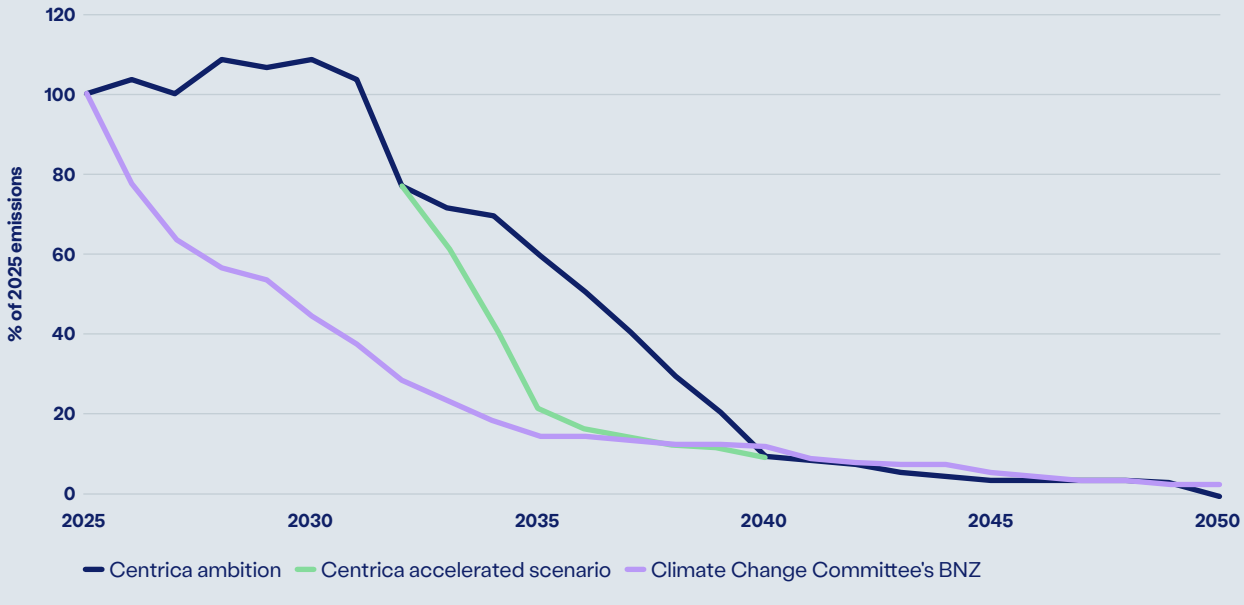
Around 50% of our current Scope 1 and 2 emissions are from baseload power generation. These emissions relate to a single asset, Whitegate power station, which is essential in ensuring security of supply in Ireland — without it, there is a risk of supply interruption or the need to use higher carbon fuels for power generation.

We're also investing in rapid response gas engines. Although they only represent 1% of our Scope 1 and 2 emissions, they could represent more than 50% in the late 2030's once we've decarbonised Whitegate. This is because as an increasing proportion of power supply is provided by intermittent renewable assets, there's a growing need to provide system balancing services. It's widely accepted that storage and demand side management will not fully meet this challenge, with rapid response thermal generation expected to plug the gap. The rapid response assets are today provided by unabated natural gas engines but could run on biomethane or hydrogen in the future. The UK's NESO reaffirms this view, recognising that the current goal for a clean power grid by 2030 will still require around 5% of unabated gas generation from around 35GW of gas-powered plants. The power plants will be held in reserve to maintain security of supply and meet consumer demand in periods with low wind and sunshine when renewable output is low[(2)].

We currently plan to develop a small portfolio of gas power plants, representing less than 5% of the required capacity in the UK and Ireland. Whilst these assets enable decarbonisation of the grid and security of supply by running for limited periods only when they're needed, they increase our direct emissions when we're the operator. Despite investing in options to decarbonise them (see pages 30, 44 and 61), these assets will have an adverse impact on our Scope 1 and 2 emissions in the short term.

Comparing our power generation emissions with the CCC BNZ Pathway, illustrates how we anticipate our emissions will evolve. We believe our emissions will remain stable into the early 2030s as we deliver security of supply, before declining at a faster rate than that required for 1.5°C and aligning fully with 1.5°C by around 2040. We have also modelled a scenario in which accelerated decarbonisation occurs which would bring us into alignment with 1.5°C by around 2035. We'll continue to investigate options to align our power generation emissions with 1.5°C at the earlier date through technological solutions, whilst ensuring continued security of supply in the UK and Ireland.

Our power generation emissions ambition



(2) NESO, Clean Power 2030 – Advice on achieving clean power for Great Britain by 2030, 2024.

Gas production and storage

These emissions today make up one third of our Scope 1 and 2 emissions.

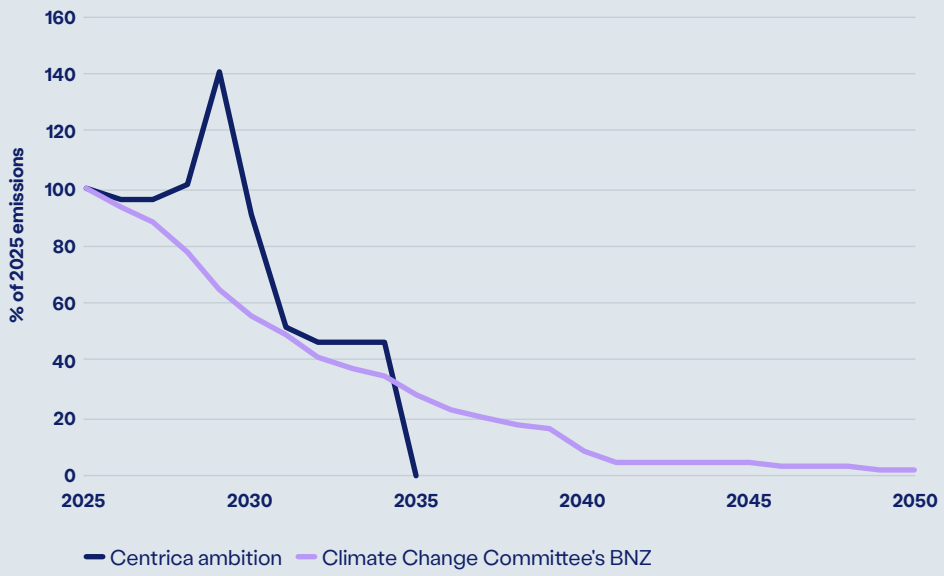
We've committed to make no further CAPEX investment in exploring new oil and gas fields. Our strategy is to deplete the existing reserves for value, with most fields reaching cessation of production by the early 2030's.

We've additionally re-opened the Rough gas storage facility. Although Rough currently stores natural gas to improve UK energy security, we're pursuing plans to transform it into a hydrogen production and storage facility. This means we'll initially exceed the CCC's BNZ pathway. As we commission new hydrogen-ready compressors to support the switch from injecting natural gas to hydrogen in the future, we'll broadly be aligned with or decarbonise at a faster rate than the CCC's BNZ pathway from 2030.

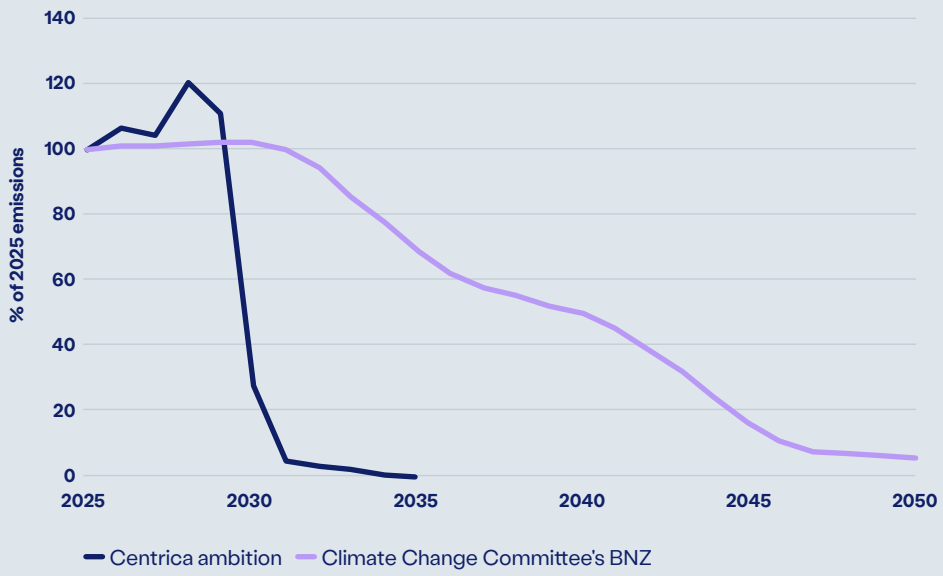
LNG shipping

Fuel emissions from the LNG ships that we operate equate to approximately 15% of our Scope 1 and 2 emissions. Recent geopolitical events and the natural decline of the UK's gas reserves, has underlined the need for energy security and a stable supply chain, including in the form of LNG. The CCC predicts a slow transition to net zero in the shipping sector, with a steady rise year-on-year out to 2030 before any significant reductions occur. Although we plan to grow our LNG business, our current target pathway will see shipping emissions reduce faster than the CCC's BNZ Pathway scenario in most years, reaching net zero in the mid 2030's through efficiency gains and fuel-switching.

Our gas production and storage emissions ambition



Our LNG shipping emissions ambition



Property and fleet

Our other Scope 1 and 2 emissions include those from our property portfolio and fleet of vehicles, comprising of less than 2% of our emissions. Our ambition to convert our road fleet to 100% zero tailpipe emissions by 2030, aligns with a 1.5°C pathway, as does our current projection of property emissions.

Customer gas and electricity

Scope 3 emissions are typically far more challenging for organisations to rapidly decarbonise, due to only having influence rather than full control over these emissions.

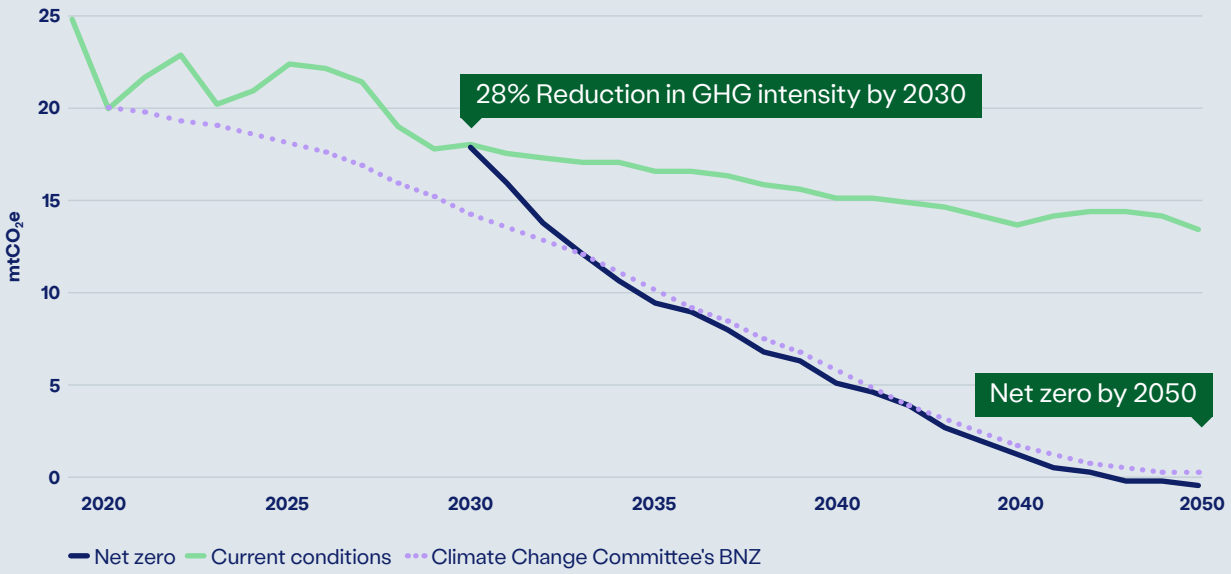
We play a key role in the development and marketing of low carbon energy services and solutions whilst taking steps to engage and positively influence key stakeholders such as consumers and policymakers. Key challenges, however, exist. For example, we only produce a small proportion of the electricity we sell, procuring the majority from others. Moreover, the decarbonisation of energy and in particular space heating in the home, remains a challenge for the whole sector. So whilst we're playing a key role to drive change, it's not viable for us to decarbonise significantly quicker than the national energy systems in our key markets.

In the long term our target to help customers achieve net zero by 2050, is consistent with UK and European commitments to achieve net zero and limit global warming to 1.5°C. In the short-term, our 2030 target to deliver a 28% reduction in GHG intensity of customer energy use from 2019 levels, equates to a 27% absolute GHG reduction and is broadly consistent with a well-below 2°C glidepath. We recognise this falls short of a 1.5°C pathway which would require nearer 40% reduction by 2030 based on the CCC BNZ Pathway. Our current view is that the UK is not on track to deliver this level of decarbonisation in the near term because of the challenge faced in decarbonising heating.

The 'current conditions' line in the graph below highlights our view of the likely pathway that will unfold based on existing and likely future policies together with the current actions of key actors, which serves to illustrate the potential gap between what we see today and what's required for net zero(3).

We're taking action to address these headwinds and help accelerate further reductions. Towards this, we see the 40% reduction by 2030 as a stretch goal which drives our investments and advocacy in this area (see pages 54 and 59).

Customer (Scope 3) emissions pathways and targets



(3) Net zero and current conditions forecasts based on Aurora data as of October 2023 for UK sales, and January 2024 for Ireland and Denmark sales.

Our approach to carbon offsetting

Our current plans are set to deliver reductions of more than 95% across our Scope 1 and 2 emissions through carbon abatement activities. In line with best practice the residual hard-to-remove emissions are expected to be significantly less than 10% of our overall base year emissions. Similarly, we'll aim to reduce our customer emissions to 10% or less, before using offsets to manage the residual emissions.

We don't use carbon credits in the delivery of our targets today but when appropriate, we'll develop a carbon-removals strategy to achieve high quality nature-based or engineered carbon removal projects. This will ensure we develop a robust, cost-effective approach in advance and in a credible way for delivery in the late 2030s onwards. This is particularly important when planning for nature-based removals, where there can be a long interval between action being taken and removals achieved. The sooner the process is instigated, the better value the offset solution can have, and the more additionality the cost can add to the offset solution by providing finance to nature-based projects that might not otherwise be possible.

Our in-house carbon trading team will engage in the carbon removal projects in line with our strategy and internal Carbon Offset Quality Framework. The Framework sets minimum criteria and best practice for the purchasing and use of offsets or credits to meet stakeholder expectations, manage reputational risks and maximise benefit for the environment. It also stipulates criteria requirements including the offset Standard, project start date, vintage, project type and co-benefits.

When appropriate, we'll report on our use of carbon credits annually including details relating to type, volumes and certification schemes.

Our current plans are set to deliver reductions of more than 95% across our Scope 1 and 2 emissions through carbon abatement activities.

Delivery of targets

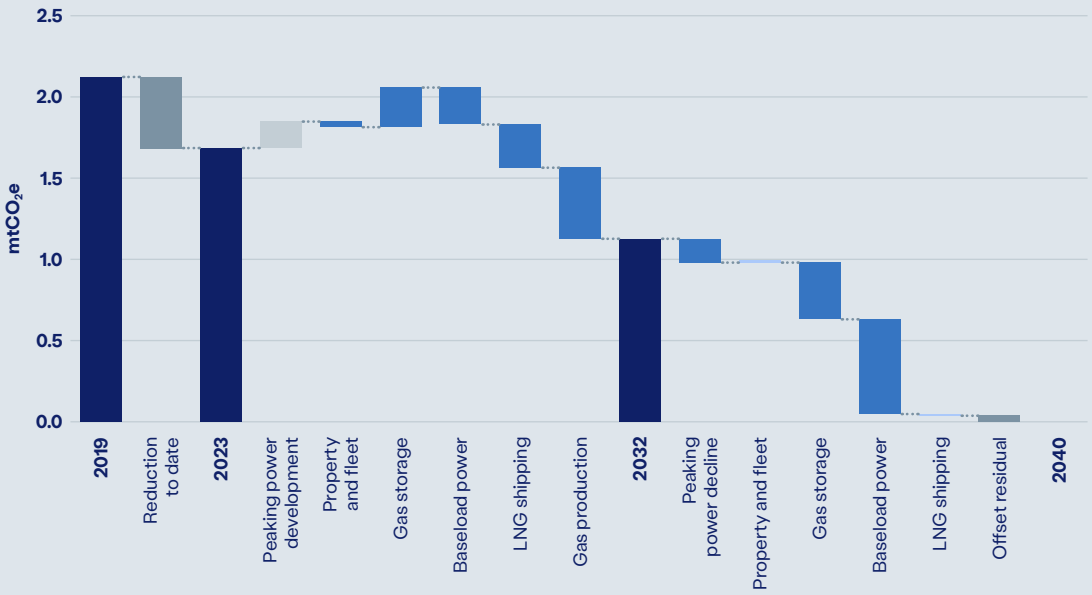
Net zero Centrica

We want to lead by example and demonstrate to customers and wider stakeholders, that we're committed to energising a greener, fairer future by taking decisive action to reduce our own emissions.

Whilst our direct Scope 1 and 2 emissions are a relatively small component of our value chain emissions, we can be more definitive in the actions we intend to take to reduce emissions because we've more control over them. We've already cut these emissions by over 70% in the last decade and we remain committed to rapid and sustained decarbonisation. That's why in 2024, we took the decision to strengthen our climate targets. We're now focused on achieving a 50% reduction in GHG emissions by 2032 (our interim target against a 2019 base year), as we work towards being net zero by 2040 (our long-term target). This compares to our previous target of a 40% reduction in GHG emissions by 2034, with net zero by 2045.

Every part of our business has a part to play in our Climate Transition Plan because we can't achieve net zero without an enterprise-wide transformation. Some parts will, however, have a greater role than others to play and progress will be delivered at different paces. The chart to the right shows our main activities together with our analysis of the key decarbonisation levers and their relative contribution to deliver our targets.

Centrica (Scope 1 & 2) decarbonisation by activity



The table overleaf summarises our initiatives across each key activity. Their success depends on the actions of others together with the rapid evolution of appropriate policies and technologies. We don't, however, passively wait for these conditions to materialise. We actively engage with external stakeholders to maximise the chances of these dependencies being met.

Actions to achieve our strategic ambitions

Activities	Actions we're taking	Dependencies and risks	What we're asking government(s) to do
Power generation (baseload and peaking)	• Partnering with manufacturers on the conversion of Whitegate power station to ammonia or hydrogen for powered generation • Exploring CCUS for Whitegate • Planning the first UK blending trial for hydrogen to power the gas peaker at Brigg Energy Park • Active partner in the Kestrel Hydrogen Cluster in Ireland • Exploring renewables and building small-scale solar farms	• Availability of commercially viable 100% hydrogen/ammonia turbines • Availability of green or blue hydrogen for use, dependent on an established business model for hydrogen production • Effective and orderly decarbonisation of the grid in the UK and Ireland • Regulatory changes to enable biomethane to be used for gas peakers • Favourable market conditions to signal long-term investment in offshore wind and the necessary supporting infrastructure • Gas Networks Ireland's implementation of the 2040 vision for a low carbon blend in the gas grid	• Promptly make decisions and announcements regarding support for hydrogen business models in the UK and Ireland • Establish a UK hydrogen production capacity target matched with a hydrogen storage target and hydrogen to power target, thereby supporting a whole-system approach for the decarbonisation of the power grid • Allow biomethane currently injected into the gas grid, to be recognised as a decarbonising measure under the UK Emissions Trading Scheme • Expand support for hydrogen-powered plants to also include ammonia-based power technologies • Introduce demand side mechanisms to drive a market for low carbon gas in the UK • Prioritise policies to support hydrogen production for power in Ireland
Gas production and storage	• Depleting existing gas reserves by mid-2030s • Assessing the viability of CCUS at the Morecambe Net Zero Hub • Planning the phased conversion to hydrogen operations at our Rough storage facility • Active partner in H2H Easington and the Humber Hydrogen Hub • Actively developing green and blue hydrogen production projects across the UK	• Investment and upkeep of energy storage infrastructure • Technical and economic feasibility of CCUS and low carbon conversion of assets • UK Government delivering against its commitment to support the production of low carbon hydrogen	• Establish a long-term policy for energy storage to ensure infrastructure for a net zero hydrogen economy and set clear hydrogen storage targets • Deliver against the Hydrogen Allocation Rounds for production • Expand Track 1 Cluster and maintain momentum on delivering Track 1 and 2

Actions to achieve our strategic ambitions continued

Activities	Actions we're taking	Dependencies and risks	What we're asking government(s) to do
LNG shipping	• Leasing less carbon intensive ships • Pursuing low carbon/efficiency technologies to retrofit and operate leased fleet • Establishing ammonia/low carbon gas trading business • Engaging ship owners on technology roadmaps for more efficient ships and low carbon propulsion vessels	• Commercially available fuel-efficient ships • A market for ships powered by low carbon fuels • Availability of commercially viable ammonia and other green alternatives for ship fuel	• Support mechanism to drive the uptake of low carbon ammonia within the LNG sector • Establish clear standards to define green and blue hydrogen and ammonia
Property and fleet	• Deploying 100% EV company car and van policy, alongside employee lease scheme • Installing around 150 EV charging points across our property portfolio • Collaborating with engineers to facilitate the transition to EV adoption • Installing low carbon energy technology at our properties including solar, heat pumps, smart controls and batteries	• Opportunity to invest in low carbon technology in the properties we occupy • Continued deployment of public charging infrastructure across the UK and Ireland	• Deliver the policies needed to achieve a phase out of the internal combustion engine car ahead of the UK's 2035 ban via EV100 climate action group • Enable the roll-out of public EV charging infrastructure, eliminating barriers to EV accessibility, addressing off-street parking limitations and supporting the implementation of innovative solutions such as 'gully' installations across pavements

We conducted an enterprise-wide review that involved the leadership across all of our business units, to identify opportunities that help achieve Centrica's net zero targets and establish aspirational 'stretch' ambitions for each business area to drive progress. Whilst some technologies and government policies have progressed slower than anticipated since our first Climate Transition Plan such as heating decarbonisation, we've gained confidence in feasibility and timing of other low carbon pathways which has prompted us to set newer, bolder Climate Ambitions. In particular, our asset strategy has evolved significantly and we're now more confident in setting clear ambitions to achieve net zero for the majority of our assets by 2035–39, underpinned by our green investment ambition. It is through these ambitions that we effectively manage the risk of locked-in GHG emissions or stranded assets.

Introducing our new Climate Ambitions

Centrica net zero targets supported by our Climate Ambitions

Targets and Ambitions	Lever
Centrica GHG emissions — 50% reduction by 2032 and net zero by 2040	
Baseload power generation — Net zero by 2034–39	
Gas production — Net zero by 2035	
Gas storage — Net zero by 2035	
LNG shipping — Net zero by 2035	
Zero emissions **vehicle fleet** — Cars: 100% by 2026 / Vans: 100% by 2030	
Green investment — Over 50% from 2023–28	

Key:

- Fuel switching
- Depletion and CCS
- Efficiency
- Green investment

Baseload power generation

Climate Ambition:

Transition baseload power generation to net zero in a phased approach by 2034–39

As part of our transition away from large carbon intensive assets, we've closed or divested the majority of our baseload power stations. We now only operate a 445MW highly efficient CCGT power station in Cork called Whitegate. It's one of the most efficient electricity generation facilities in the world today which provides crucial and stable power to enhance Ireland's security of supply and energy mix. Without it, the grid in Ireland would be reliant on more carbon intensive power generation or be at risk of supply interruptions.

Whitegate power station is the source of around 50% of our direct emissions. So it's a crucial component of our decarbonisation strategy. We've ambitious plans for Whitegate to become the first power plant in Europe to utilise clean hydrogen or ammonia, to produce reliable zero carbon electricity in a phased approach from 2034–39. We're already working with partners to explore converting it and neighbouring assets to produce and store hydrogen locally, using new offshore wind capacity. This would serve as a global demonstration site for hydrogen or ammonia-fired power generation, providing insight into the feasibility and scalability of hydrogen derivatives as clean fuel.

These investments all have a high dependency on government policy (see page 27). If successful, Whitegate will be able to provide enough continuous zero carbon power to supply 450,000 homes across Ireland.

1st in Europe

Plans for Whitegate power station to utilise clean hydrogen or ammonia to provide zero carbon electricity

Gas production

Climate Ambition:
Transition gas production to net zero by 2035

As part of Centrica's strategy to reduce involvement in oil and gas exploration and production, Spirit Energy's Norwegian assets were sold in 2021. We retained our 69% stake in the joint venture's remaining assets in the UK and Netherlands. This enables us to focus on maximising delivery of indigenous gas supplies for the UK and repurposing assets for the energy transition, whilst decommissioning responsibly.

Having largely ceased oil production, we're continuing our depletion strategy for Spirit Energy's remaining gas reserves. There's still a strong demand for natural gas in this transition period, and given recent geopolitical conflict, there is an even greater need for security of supply through the sourcing of UK and European supplies. Even in aggressive decarbonisation scenarios, it's widely accepted that demand for natural gas albeit declining, will remain for decades to come.

Spirit Energy has set an ambition to be net zero by 2035. This will remove over 25% of Centrica's current emissions which will be a vital contributor to our targets. Net zero will be achieved through depleting remaining reserves by the early-to-mid-2030's, and in the interim, through continual targeting of opportunities to increase efficiency and reduce operational emissions. Spirit Energy has a strong track record in this area, with a commitment to reduce Scope 1 and 2 emissions by 10% which it achieved in 2023 — well before the North Sea Transition Deal target date of 2025.

Spirit Energy also has a vision to materially contribute to the wider UK net zero challenge by investing in the conversion of legacy assets which could otherwise become stranded in certain transition scenarios. The Morecambe Hub and its depleted gas reservoirs for example, has the potential to become one of the UK's biggest carbon storage hubs.

1bn tonnes

The Morecambe Hub and its depleted reservoirs' carbon store potential — enough to deliver 50% of the UK's 2035 carbon storage target

Gas storage

Climate Ambition:
Transition gas storage to net zero by 2035

CES+ owns and operates Rough, the UK's largest gas storage facility, with Easington terminal at its heart.

Natural gas remains very important to UK energy security and Easington will continue to be a key strategic asset in the UK energy landscape for decades to come. The asset is situated close to some of the world's largest offshore wind farm developments, offering huge potential for both blue and green hydrogen production. Easington therefore provides a fantastic opportunity to transition its natural gas history, into a future low carbon energy hub.

CES+ has an ambition to convert its facilities to be net zero by 2035, addressing 7% of our current emissions. This will mainly be achieved through the conversion of the facilities to run on clean hydrogen fuel. Whilst the hydrogen infrastructure is being developed, we're focused on increasing the efficiency of the asset in the near-term, with the aim of zero flaring and venting by 2030. This includes using advanced AI techniques to optimise operations and pinpoint excess emissions and sources of energy consumption.

In the longer-term, we aim to convert Rough to store clean hydrogen instead of natural gas, which could make it the world's largest hydrogen store. This ambitious plan is highly dependent on the right government policies and support models that enable the development of markets and infrastructure for the production, transportation and consumption of hydrogen at scale. Effective regulatory support will reduce uncertainty, thereby accelerating capital deployment to foster the growth of the nascent hydrogen storage market.

Should the hydrogen storage market not advance sufficiently, or natural gas storage remain essential for energy security, our strategy remains to adapt our assets to operate on zero carbon energy — including using hydrogen to fuel the compressors. Achieving this objective depends heavily on significant advancements in hydrogen production. To support this, CES+ has applied for government funding to develop green hydrogen electrolysers, with the aim of achieving 3GW of blue and green hydrogen capacity in the 2030's.

Case study:

Advancing understanding of hydrogen

Hydrogen has huge potential to support a sustainable shift in the energy system, but questions remain around how it can be harnessed and optimised.

That's why we've been working with FTI Consulting to develop a first-of-its-kind whole system model of our energy system, to better understand the role hydrogen could play in the UK.

The project brings together key players like the Department for Energy Security and Net Zero (DESNZ), National Gas and NESO, with extensive modelling of the UK's energy system to test various scenarios and analyse impacts. Our findings suggest that a national interconnected hydrogen network with adequate geological hydrogen storage, will be critical to achieve net zero. We see future hydrogen production and storage facilities helping to both address and take advantage of seasonal volatility in electricity and gas prices, resulting in lower consumer costs as well as a greater ability to meet future demand.

The research also re-confirms that Centrica is well-placed to seize these opportunities. We've subsequently reaffirmed our ambition to convert Rough into a hydrogen storage facility and we have wider hydrogen production plans underway that'll support our new 3GW hydrogen production capacity ambition — this includes partnering with Equinor and SSE Thermal in the Humber Hydrogen Hub, to develop the Humber region.

16TWh

Rough's capacity for hydrogen storage is 3,000 times the size of Wembley Stadium

> **"Our research demonstrates the valuable role hydrogen can play in creating a net zero future where it will be instrumental in balancing a renewables dependent power system and help, in turn, reduce energy costs. I'm proud of our partnership with Centrica and the way it's enabled us to lead the UK debate on the future of the whole energy system and the role hydrogen will play in that."**
>
> **Jason Mann**, Senior Managing Director at FTI Consulting

LNG shipping

Climate Ambition:
Transition LNG shipping to net zero by 2035

We're operating in a difficult geopolitical climate where the security of supply poses a significant risk to both countries and consumers. To address this, we continue to expand our LNG activities, leveraging our substantial expertise in this area. Transporting LNG transfers energy from nations with a surplus, to those with high consumer demand. As a transitional fuel, natural gas is essential in aiding countries to move away from higher carbon sources like coal whilst maintaining supply security.

Although shipping is the most efficient method of intercontinental LNG transport, there is an emissions impact from fuelling the ships. Even with increasing ship efficiency and the use of cleaner fuels, LNG shipping emissions comprise approximately 15% of our direct emissions.

Since 2019, we've been successful in lowering our emissions per nautical mile by 23% through technology upgrades, fuel switching and optimal utilisation. And today we only lease A and B rated vessels; the most fuel-efficient categories.

We've now set an ambition for the LNG ships we operate to be net zero emissions by 2035 which is well ahead of the International Maritime Organization's (IMO) strategy to be net zero by 2050. This decade we'll focus on increasing the efficiency of our ship fleet through technology, leasing newer vessels and continually improving how we operate them. In the early 2030's, we expect the ambition to be delivered through the transition of our ships to near zero carbon fuels, such as clean ammonia and hydrogen.

As we're not a ship owner and often lease vessels for short periods, we're able to adopt technology rapidly as it emerges. Success of the ambition will, however, be highly dependent on the availability of technology to produce commercially viable alternative fuels reliably, the technology for the ships to run on these newer fuels, and the policy and regulatory frameworks to make it all possible. We're actively advocating for these conditions to help us achieve our ambition, including collaborating with ship owners, original equipment manufacturers, non-governmental organisations and maritime bodies such as the IMO.

Fleet

Climate Ambition:

Zero emissions vehicle fleet by 2030

We continue to have one of the largest vehicle fleets in the UK, with over 8,000 engineer vans in the UK alongside a growing number of vans in Ireland as we expand our team of service engineers. At less than 2% of our total emissions, the commercial and company car fleet are a relatively small component of our direct emissions. Nonetheless, it's an area that's really important to us, with opportunities to reinforce the commitment to net zero whilst driving to and from serving customers.

In 2021, we committed to have a 100% EV fleet of cars and commercial vehicles by the end of 2025. We've made great progress across company cars — over 80% are now pure electric with the remaining majority being electric hybrids. We expect to achieve 100% electric company cars by the end of 2026, allowing for current hybrid lease terms to expire. Meanwhile, our EV van fleet roll-out has been slowed due to deployment issues which includes not all engineers being able to charge their vehicles easily and efficiently at home if they don't have a private driveway, especially as the wider charging infrastructure is growing more slowly than anticipated.

We've subsequently re-set our ambition for a zero emissions van fleet from 2025 to 2030 — this is still five years ahead of the current UK ban for new petrol and diesel vans. In doing so, this gives us the time to invest in systems, processes and working practices to manage the EV charging challenges and achieve the ambition.

Our zero emissions ambition allows us the flexibility of adopting future developments in alternative low carbon technologies, such as hydrogen powered vehicles. For example, we're currently running a trial of one of the first medium sized hydrogen fuel cell powered electric vans in the UK.

Green investment

Climate Ambition:

Over 50% green investment between 2023-28

We've set an ambition that over 50% of our investments between 2023 and 2028 will be green investments. This includes investment in energy supply and flexibility, renewable and low carbon generation, as well as customer offerings that advance the transition to net zero. Investments like these will be crucial in delivering our decarbonisation targets for both our business and our customers and will ultimately pivot Centrica to thrive in a low carbon future. We detail our investment strategy, including how we govern and monitor progress against this ambition in our financial planning section (see page 51).

The workplace

The pandemic has had a lasting impact on how we all work, with hybrid and flexible working becoming the norm for many.

This resulted in reduced use or closure of many office spaces and call centres. It also meant we surpassed our ambition set in 2021 to cut our property emissions by 50% by 2030, having achieved a 65% reduction during 2023.

Colleagues working from home avoid generating commuting emissions, which outweighs the additional emissions generated at home. Although this creates a positive environmental benefit, working from home needs to be balanced with time in the office to connect and collaborate. Consequently, we're developing a new workplace strategy that will see us optimise the physical, digital and cultural workplace to ensure the best outcomes for colleagues, our business and the environment. In the meantime, we continue to cut energy consumption across our property portfolio by installing EV charging, using IT more efficiently and utilising our low carbon services and solutions such as solar panels and batteries.

Climate change and biodiversity

Climate change and nature are inextricably linked. Whilst biodiversity is more important than ever in helping us adapt to the changing climate, it's rapid decline can have a profound effect on climate change and other human activity. In recognition of this, the 2022 UN Biodiversity Conference (COP15), agreed the Global Biodiversity Framework to address biodiversity loss and restore ecosystems. This included putting 30% of the planet and 30% of degraded ecosystems under protection by 2030.

Centrica's physical footprint is small but growing, as we expand our portfolio of flexible and low carbon assets like solar farms. So whilst our current biodiversity impact is low, we continue to enhance our understanding and management of actual or potential adverse impacts and opportunities.

Our most material impact on nature and biodiversity is our GHG emissions, which we're reducing through our net zero targets. Alongside this, we manage our impact at the local asset level. New developments, such as our 13MW Roundponds solar farm in Wiltshire, have plans developed to ensure a biodiversity net gain. Meanwhile our existing assets look to enhance their biodiversity impact. This can be demonstrated by our Easington gas terminal where over 600 trees and shrubs were planted to improve biodiversity as well as create a green space for the local community. Other activities to boost biodiversity are embedded across our wider business, including environmental volunteering and our employee benefit scheme (see pages 81 to 82).

When we develop our residual emission offsetting strategy (see page 24), improving nature and biodiversity will be an important consideration, with overall nature net positive being our aim.

Net zero customer

With the majority of our carbon emissions coming from customer activities, the biggest difference we can make to climate change is to help customers transition to lower carbon and sustainable energy usage.

We've set an ambitious target to drive action. We're focused on helping customers deliver a 28%[1] GHG intensity reduction of energy use by 2030 (our interim target against a 2019 base year), as we progress towards net zero by 2050 (our long-term target). Although we don't control the energy choices customers make, we've a responsibility to help reduce their emissions and remain unwavering in this commitment.

We've pinpointed four crucial levers that will play a significant role in reducing customer emissions, each with varying degrees of Centrica control. We'll need to take direct action within each of these areas, which includes shifts to our portfolio of services and solutions to deliver our strategic ambition. Alongside this, we know our progress in the four areas set out above, is heavily dependent on the quick evolution of the policy environment, market conditions, technology development and customer behaviour. We therefore target advocacy in these areas.

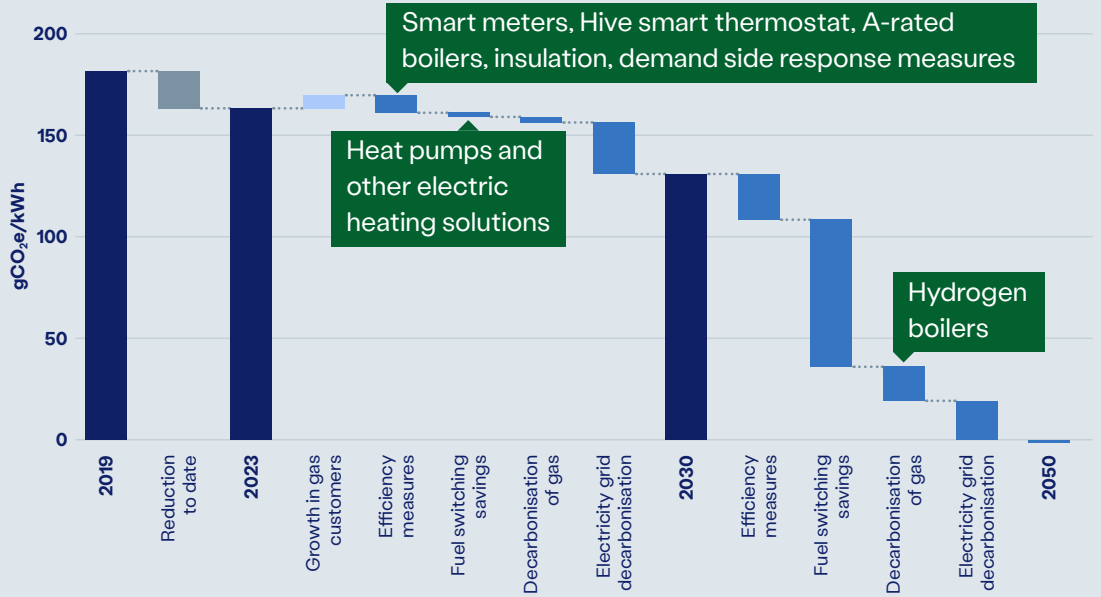
(1) Equates to a 27% reduction in total customer emissions.

Key levers in reducing customer emissions

1. Transitioning to a low carbon electricity grid
2. Advancing the decarbonisation of gas
3. Implementing energy efficiency and demand side response measures
4. Encouraging fuel switching

We've projected the decarbonisation potential of each lever out to 2050 to better understand the scale and pace of impact, together with the timing and actions required. The chart below illustrates the potential emissions savings and relative contribution from each lever.

Customer (Scope 3) decarbonisation levers



Actions to achieve our strategic ambitions

Levers	Actions we're taking	Dependencies	What we're asking government(s) to do
Electricity grid decarbonisation	• Explore growth in nuclear generation • Increase grid scale renewable investment and development with solar and BESS • Accelerate domestic solar and BESS installs	• Electricity grid decarbonising in line with government ambition in the UK and Ireland • Ongoing support and investment in nuclear power generation in the UK	• Implement the UK Transmission Acceleration Action Plan and the Connections Action Plan at pace to overcome existing obstacles that hinder the integration of clean power into the grid • Set a UK target of 10GW of hydrogen to power by 2030, to help drive decarbonisation of the power grid by 2030 • Deliver on the UK roadmap for a more secure and resilient energy system including the utilisation of nuclear
Decarbonisation of gas	• Continue to drive the development of low carbon hydrogen production, through developing fuel switching projects across the UK and partnering with breakthrough technologies such as HiiROC, as well as partnering in hydrogen transport and storage net zero hubs • Progress green hydrogen production funding bids through Hydrogen Allocation Rounds • Partnerships on green hydrogen production like Equinor (see page 61)	• Necessity of state backing to develop feasible hydrogen market strategies	• Design a fair and efficient levy system, invest in hydrogen transport and storage infrastructure, as well as test and establish a competitive and innovative hydrogen production business model • Make decision to allow hydrogen blending in UK grid • Establish regulatory models that support hydrogen storage asset investment

Actions to achieve our strategic ambitions continued

Levers	Actions we're taking	Dependencies	What we're asking government(s) to do
Fuel switching	• Formed New Business and Net Zero business to sell and install heat pumps at leading prices • Installation of heat pumps for social housing customers via PH Jones • Invested in 2G to gain hydrogen Combined Heat and Power (CHP) capability • Expand green skills to address resource gap across our Training Academies	• Reliance on the market appeal for electric heating solutions (cost-effectiveness and performance as key factors) • Readiness of skilled labour to deliver	• Help customers reduce the planning and cost barriers for installing heat pumps (particularly in Wales and Scotland), to reform the Energy Performance Certificate (EPC) system and lower the running costs of electric heating through moving policy costs from electricity to general taxation (see page 66) • Timely decision on the role of hydrogen in domestic heating
Efficiency and demand side response measures	• Installation of energy monitoring devices such as smart meters and Hive smart thermostats • Delivery of efficient heating technology such as heat pumps, insulation and A-rated boilers • Advice on energy efficiency via our businesses and the British Gas Energy Trust • Launch of dynamic pricing tariffs and add-ons such as PeakSave	• National strategies to address the UK's inadequate home insulation	• Streamline and integrate current programmes that provide funding and incentives for energy efficiency initiatives, whilst developing a comprehensive plan aimed at reducing energy consumption • Review the current policy framework and roll-out model for smart meters to encourage consumer adoption and retention

Introducing our new Climate Ambitions

Customer net zero targets supported by our Climate Ambitions

Targets and Ambitions	Lever
Customer GHG emissions — 28% reduction of carbon intensity by 2030 and net zero by 2050	
Devices connected to the **Hive platform** — 5 million by 2030	⚙
Heat pumps sold to customers — 20,000 per annum by 2030	⇄
Electricity customers with access to **smart services** in the UK — 80% by 2030(2)	⚙
Customers engaged in **green or flexible energy** in the UK — 33% by 2030	⚡
Supply of **renewable or zero carbon power** in the UK and Ireland — 100% by 2030	⚡
Engineers with **green skills** in the UK and Ireland — 3,000 by 2030	⇄ ⚙

Key:

- ⚙ Efficiency
- ⇄ Fuel switching
- ⚡ Electricity grid decarbonisation

(2) Working electricity smart meter.

⚙ Hive platform

Climate Ambition:

5 million devices connected to the Hive platform by 2030

Customers can save energy, reduce their carbon footprint and lower energy bills by connecting devices such as their smart thermostat, heat pump, solar PV, battery and EV charger to the Hive platform. This is because our market-leading Hive app provides customers with better visibility over their energy consumption and helps them find the optimal time to use their devices. For example, the app enables customers to easily charge their EV when electricity is greener and cheaper or optimise their heating through setting energy-saving heating schedules. Over the next five years, we want to expand Hive presence in the UK and Ireland, assisting more customers than ever before in managing their energy usage at home.

Our continued success in this area depends on the growth of the low carbon energy solutions market, including across smart thermostats, heat pumps, solar, batteries and EVs. This growth will be partly stimulated by the government upholding national EV targets and providing financial incentives for solar, such as the Smart Export Guarantee (SEG). The ambition is also reliant on customer preference for sharing their energy usage data.

Heat pumps

Climate Ambition:

20,000 heat pump sales per annum by 2030

Transitioning a substantial proportion of our customers to electric heating is crucial for the decarbonisation of heat, which is why it's a central focus for our business. The widespread replacement of gas boilers with heat pumps is a great opportunity for Centrica; opening new value pools where scale is important alongside engineer training to enable growth in line with market demand. We've invested heavily in bringing market-leading offers and price performance guarantees to customers for air source heat pumps, addressing key customer adoption barriers. For example, our Warm Home Promise offers customers reassurance that this low carbon alternative will warm their home to the right temperature, otherwise we'll give them their money back. This helps provide customers with the confidence they need to make the switch. We've multiple routes to market: directly through our brands like Hive for private customers, PH Jones for social customers, and via lead generation as we scale up our in-house installation capabilities. We anticipate that propositions like these, will enable us to grow our share of the addressable heat pump market from 5% today, to over 10% by 2030.

Based on our market analysis, we believe that selling 20,000 heat pumps annually by 2030 is ambitious but achievable with the right conditions. The projected pace of adoption for low carbon heating solutions like heat pumps is, however, currently slower than what's needed to meet the UK government's goal which would require us to increase our sales nearly threefold by 2030. With current and expected dependencies such as supporting policies and consumer behaviours impacting take up, our 2030 ambition and goal to increase market share, reflects our honest view of the market with appropriate stretch built in. As recognised by the CCC[3], this lack of pace endangers the UK's ability to meet its climate targets and is the primary reason why our 28% reduction target for customers by 2030 (see page 23) does not fully align with a 1.5°C pathway.

To help overcome challenges around decarbonising heat, we're working hard to develop our industry-leading customer offers and advocate for the right policy conditions (see pages 39 and 66) to stimulate growth. If the right conditions are established and the market grows more quickly, we stand ready to grow with it and strengthen our ambition accordingly.

As our market share for gas sales is significantly larger than our share of heating sales, and as we don't exclusively sell heat pumps to our supply customers, many of our customers will have a heat pump provided by a competitor. This is reflected within our modelling.

In the meantime, as the heat pump market develops and becomes more accessible to everyone, we recognise the crucial role that efficient A-rated boilers play in reducing emissions. By replacing outdated, inefficient boilers with these new models, we can significantly cut our customers' emissions and estimate a reduction of over 200,000 tonnes of carbon by 2030. Whilst this isn't a long-term solution, action like this is proving effective in current market conditions and is a key contributor towards our short-term climate goals.

>200k tonnes

Our A-rated boilers are estimated to save this amount of carbon by 2030

(3) CCC, Progress Report to Parliament, 2024.

Smart services

Climate Ambition:

80% of electricity customers in the UK to have access to smart services by 2030

Smart meters are a key demand side response technology to help customers start their journey towards smart, digitalised and optimised energy consumption within the home.

This is because smart meters drive carbon savings of around 3% from electricity and gas consumption[4]. They do this by providing consumers with real-time visibility over energy consumption, which can be used to stimulate behavioural change and target reductions. The technology can also enable other reduction initiatives such as dynamic pricing to incentivise shifts in energy consumption, thereby reducing pressure on the grid and saving carbon by managing the energy load more effectively.

We're committed to the continued roll-out of smart meters and believe every household should adopt a smart meter, which builds on the more than ten million we've already installed to date. Our new smart meter ambition aims to progress the pace of adoption with at least 80% of our electricity customers to have access to a working smart meter by 2030. We specify 'working' smart meters because many meters have become non-communicating over time, due to rapid technology advancements at a system level and subsequent decisions made by the regulator. We're ensuring early adopters aren't unfairly disadvantaged and are therefore replacing outdated smart meters with new ones. To achieve our ambition, the provision of smart meters and their maintenance, must be supported by government and regulatory policy to aid and protect progress.

To help facilitate the roll-out of smart meters across the UK, we're investing in our in-house Meter Asset Provider (MAP) business. See more on page 56.

(4) Behavioural Insights for DESNZ, Reviewing Energy Supplier Evidence on Impacts of Smart Metering on Domestic Energy Consumption, 2023.

Green or flexible energy

Climate Ambition:

33% of UK customers engaged in green or flexible energy by 2030

We're adapting to meet the changing needs of our customers by offering tailored energy tariffs. We now provide a range of dedicated tariffs to support and optimise low carbon technologies including heat pumps, solar panels and EVs. Customers using our EV time-of-use tariff for example, are being rewarded by paying less for 100% renewable energy by charging at night when demand is low. We additionally offer flexible time-of-use add-ons like PeakSave, which helps customers save money and reduce carbon emissions by incentivising them to shift their energy consumption to times when the grid is greener, and electricity costs are lower. We've also recently launched PeakSave Green Flex, which invites customers to shift their energy use to times when the electricity grid is particularly green during the week in 1-2 hour bursts.

Over the next five years, we'll continue to offer innovative solutions to meet the energy needs of the future through tariffs and add-on services.

This is, however, dependent on the right market conditions and customer uptake of low carbon technologies. With market volatility expected to increase as the electricity grid decarbonises and more renewables come online, we'll continue to offer these services as long as there is a need to smooth demand. Similarly, we're encouraging take up through competitive installation deals for customers and by advocating for government action to reduce cost barriers and incentivise customer switching. We'd also like government to continue to ensure that new builds are equipped with low carbon technologies from day one.

800,000

Customers taking part in PeakSave with over 950tCO_2e saved through shifting energy usage

Renewable and zero carbon power

Climate Ambition:

100% of our customers in the UK and Ireland supplied by renewable or zero carbon power by 2030

Increasing the supply of zero carbon and renewable electricity within our fuel mix, is fundamental to helping customers decarbonise their electricity consumption and reaching net zero. This is particularly important in the near-term as the decarbonisation of gas takes time to scale up.

We want to work with the UK Government in achieving its mission to deliver clean power by 2030 and in turn, make Britain a clean energy superpower. We've already engaged with government and shared our views on how to overcome barriers such as delays in grid connections, supply chain constraints and shortage of skilled workers. We also support the Government of Ireland's target to have 80% renewable electricity from 2030. Consequently, we've developed an ambition to supply 100% locally produced renewable power to our Bord Gáis customers from 2030 and have a 100% renewable or zero carbon power supplied to customers in the UK by 2030. The success of our ambition in Ireland relies on the timely development of new offshore windfarms to meet the national target.

Similar to many other organisations, we purchase and trade energy certificates like Renewable Energy Guarantees of Origin and Nuclear Declarations, to support our green and standard tariffs according to current fuel mix disclosure regulations. We recognise that the discussion about the effectiveness of these certificates is evolving, with recent studies and expert insights, highlighting the possibility that certificates don't sufficiently encourage the development of renewable or zero carbon power generation required for achieving net zero. We believe that certificates have been crucial in developing and marketing new renewable and low carbon energy sources. But we recognise they can also lead to confusion, especially among residential customers who might not fully understand the complexities of the certificate system.

As a result, we suggest that the current regime needs to be reviewed and improved to enhance transparency and accuracy. Both UK and Ireland regulators have indicated their intention to review the certificate and green tariff systems, although exact timelines have not been set.

After consulting with various stakeholders and evaluating their feedback, we've decided to keep purchasing certificates for now under the current system. We're developing an internal framework to ensure quality and value is delivered for consumers, which might lead to future strategy changes including a reduction in certificate usage. Should this occur, we'll transparently communicate our reasons and outline any impacts on how we report our progress towards our customers' net zero target.

Engineers with green skills

Climate Ambition:

3,000 engineers with green skills in the UK and Ireland by 2030

Upskilling and recruiting engineers with green skills is essential for transitioning our current workforce and fulfilling customer demand for low carbon technologies. At present, we define green skills in this context as the installation, repair and maintenance of heat pumps, EV chargers and smart meters. We'll continuously review and update this definition as our product offerings evolve and to ensure alignment with external expectations.

As the largest single engineer workforce in both the UK and Ireland, we're well-positioned to deliver our ambition by providing opportunities to gain new skills via our award-winning Training Academies and through our existing highly trained team. We believe our workforce is one of our greatest assets and holds the key to unlocking net zero, so we're committed to investing in their training via apprenticeships (see page 73) and growing the green skills of 3,000 engineers over the next five years to deliver net zero together.

As we plan for a greener future, we'll also need to ensure the existing needs of customers are met. We'll look to market signals to ensure our resourcing and training plans evolve accordingly.

Net zero system

We've a strategic and rounded plan that contributes to an economy-wide decarbonisation.

This is because a successful transition requires us to look beyond our own emissions and ensure the steps we're taking, positively contribute to the nation's efforts to get to net zero.

We're making strides in eight key areas that contribute to the system-wider transition to build a secure and affordable future.

A UK first

Partnership with Highview Power to develop the UK's first commercial-scale Liquid Air Energy Storage facility

1. Energy storage systems

Batteries play a crucial role in the energy transition as they maximise the use of renewable energy. They do this by helping balance the frequency of the grid and can store power generated from renewable sources like wind and solar, for use when production is low. This reduces dependency on the grid which ensures a smooth transition to renewable power. Towards this, we've already built almost 100MW of batteries including one of Europe's largest battery storage facilities at Roosecote. Additionally, we have 165MW under construction and a robust pipeline of further opportunities. And we're looking to new solutions having partnered with Highview Power, to develop the UK's first commercial-scale Liquid Air Energy Storage plant in Carrington, Manchester. This project will enhance the UK's energy security and support the transition to net zero by providing a large-scale, long-duration energy storage solution. The Carrington facility is expected to be operational by 2026 and will have a storage capacity of 300MWh and output power of 50MW using Highview Power's proprietary technology.

2. Optimisation

As more intermittent renewable energy comes online, the ability to balance demand and supply via increased flexibility becomes ever more important. Towards this, we've been optimising batteries for more than 15 years and have leading capabilities in creating a stable generation profile to balance market demand whilst maximising the return on investment for customers. For example, we currently have over 300MW of grid-scale batteries under our management. We also aggregate decentralised renewable assets like wind turbines and solar PV, as well as operate one of the most advanced virtual renewable power plants in Europe. Through participation in flexibility markets via activities like these, we can importantly create additional value streams for generators of renewables to support growth and contribute to increased resilience and sustainability of energy systems which is vital for net zero. We'll draw on our extensive experience and seize further opportunities to optimise energy as the transition deepens.

3. Power Purchase Agreements and route-to-market

Power Purchase Agreements (PPAs) help finance new renewable assets by providing developers with long-term fixed prices, ensuring stable revenue forecasting for up to ten years.

Corporate consumers are increasingly interested in procuring green power via corporate PPAs (CPPAs) for their energy strategies. Our trading and optimisation business creates PPAs for owners of renewable assets and CPPAs for corporates seeking to power their business from renewable sources, whilst achieving long-term budget stability. For example, we've just signed a ten-year solar PPA agreement with STMicroelectronics for the delivery of 61GWh renewable power per year.

Going forward, our ambition is to have 26GWs of third party renewable and flexible assets under management by 2030. This includes renewable assets such as wind, solar and hydro generation as well as flexible assets like batteries, electrolysers and CHPs. This is an increase of approximately 70% from today and will provide a material increase in supporting the energy systems in markets across Europe.

4. Offsetting products

Voluntary carbon credits help businesses support carbon reduction projects outside their value chain. They compensate for emissions and neutralise hard-to-remove residual emissions, whilst contributing to climate change mitigation and the Sustainable Development Goals focused on areas like improved biodiversity and clean water access. We're growing our capabilities in supplying high quality voluntary carbon credits to meet the needs of our customers. Key to this is ensuring carbon credits are governed appropriately to maximise impact, traceability and avoid the marketing of poor-quality credits. Our internal Quality Framework is used to effectively manage our approach to carbon credits (see page 24).

5. Gas storage

Gas storage is essential for ensuring energy security and facilitating the transition to intermittent renewable supply. The storage of green hydrogen will also be necessary to manage fluctuations in seasonal production and demand, if it's to play a meaningful role in our low carbon future. Our Rough asset located off the east coast of Yorkshire, is the largest natural gas storage facility in the UK. We're prepared to invest in this facility to enable hydrogen storage, a conversion that is central to hydrogen's viability as a cost-effective low carbon fuel (see more on pages 32 to 33).

6. Gas peaking plants

Gas engines acting as highly flexible peaking plants, can go from a cold standstill to full power in under two minutes. This flexibility is crucial as more intermittent renewable sources like wind and solar come online. We're supporting the national effort to ensure enough back-up power by investing in peaking plants. We already operate a 49MW plant at Brigg and a 20MW plant at Redditch. And in 2025, a 40MW plant in Wales and two 100MW peaking plants in Ireland are expected to go live. Governments are increasingly recognising these solutions as crucial elements of the transition and are seeking the involvement of organisations like ours. These plants will increase our emissions in the near-term as we explore decarbonisation options, but they enable the system-wide transition to renewables.

We're exploring opportunities to proactively decarbonise these assets through the use of low carbon fuels such as bio-methane and hydrogen, or by offsetting the emissions. All of our peaking plants are hydrogen-ready, with costs for conversion built into the business case. As an example, the new gas peakers in Ireland that are due to go live mid-2025, have the capability to run on up to 20% hydrogen but there isn't yet a direct connection to hydrogen production locally, so their decarbonisation path will currently mirror the decarbonisation of gas in the national network. Meanwhile, Brigg Energy Park is set to become the first power station in the UK to be part-fuelled by hydrogen (see case study overleaf).

7. Biomethane

As more renewables enter the grid, biomethane will be essential for baseload power generation as well as serving as an alternative renewable fuel for hard-to-abate industries. Green Gas Purchase Agreements help manage biomethane from biogas plants, supplying it to corporate customers and ensuring stable, long-term returns for investors, thus enabling new renewable energy projects. With over 15 years of experience in the Danish market, we lead in biomethane sourcing across multiple markets. In 2024, we expanded to the UK and Netherlands, handling green gas trading, nomination and transportation, to help businesses meet their green gas strategies, reduce emissions and support supply security.

We've set an ambition to more than double the volume of third-party biomethane generation under our management to 4TWh/year by 2030. This volume will avoid an estimated half-million tonnes of carbon dioxide being emitted each year.

8. Green certificate trading

Renewable Energy Certificates can play an important role in the energy transition by certifying the origin of clean power and gas. For buyers, they can provide transparency and assurance that the energy they're using comes from renewable sources and for generators, it provides additional revenues.

At Centrica Energy, we provide certificates with global standardisations and environmental accreditations. We manage, trade, and retire green certificates, aligning our customers energy needs with their green ambitions. We believe aspects of the current certificate regime need to be reviewed to improve transparency and accuracy, so we'll use our expertise to contribute to this on-going debate (see page 24).

Case study:

Injecting hydrogen at Brigg

In collaboration with HiiROC, we're exploring the role of hydrogen in providing low carbon back-up power to maintain supply security.

In 2021 we acquired a minority stake in HiiROC, a hydrogen technology development company, that uses their technology to convert biomethane and natural gas into clean hydrogen and carbon black.

Since then, we've developed plans to inject hydrogen into our gas peaking plant at Brigg and have initiated a pilot project. This trial, partially funded by a grant from the Net Zero Technology Centre (NZTC), will mix hydrogen with natural gas at the 49MW gas-fired plant which is designed to meet energy demand during peak times or when renewable generation is low. Engineering feasibility work is at an advanced stage and hydrogen injection is expected to commence in 2025. Our plans include increasing the hydrogen blend from 3% to 20%, with a long-term vision of moving towards 100%. We'll look to harness learning and explore deploying similar technology across other peaking plants.

Innovation Project 2024

Recognition by Hydrogen UK, demonstrating the importance of HiiROC technology to the large-scale demonstration stage

> **"This exciting project with Centrica and the NZTC at the Brigg facility will be a first step on the journey to enable the decarbonisation of gas peaking plants. With the continued and crucial roll-out of renewable energy generation, intermittency of power supply is a key issue, and the programme we are developing with Centrica will explore routes to address intermittency without generating CO_2 emissions."**
>
> **Tim Davies**, Chief Executive Officer at HiiROC

Climate Transition Plan dashboard

Our Climate Ambitions underpin and drive the delivery of our climate targets. These ambitions are deliberately stretching and we're proud of them.

Our new set of Climate Ambitions shared in this report, replace those in our old Climate Transition dashboard which was created as part of our first Climate Transition Plan in 2021. Although some of these original ambitions haven't yet reached the final year of their timeframe, we've made strong progress against them and feel that now is an appropriate time for a reset. As part of our new Climate Transition Plan, we've therefore established stronger Climate Ambitions. The ambitions more completely span our entire business and address key decarbonisation levers that reflect and drive progress towards our new net zero targets.

The Climate Ambitions are set internally by strategy teams, leadership teams and subject matter experts. Designed to be stretching yet embedded within financial plans, our ambitions are largely based on forecasted data and business plans. They were modelled to consider their contribution to our net zero targets alongside alignment with business strategy.

Progress will be monitored at a management level and reported to a Board Committee three times a year, enabling them to serve as key non-financial KPIs for decision-making and facilitating course corrections as needed (see page 84). The ambitions will be reviewed in detail when the annual performance judgment is provided, taking into account progress against dependencies beyond our control and appropriateness of ambition. Potential out-of-cycle reviews will occur if progress concerns arise. Performance together with any revisions to the Climate Ambitions will be reported each year in our Annual Report & Accounts.

A summary of our new Climate Ambitions

Net zero targets supported by our Climate Ambitions

Targets and Ambitions	Lever
Centrica GHG emissions — 50% reduction by 2032 and net zero by 2040	
Baseload power generation — Net zero by 2034–39	
Gas production — Net zero by 2035	
Gas storage — Net Zero by 2035	
LNG shipping — Net zero by 2035	
Zero emissions **vehicle fleet** — Cars: 100% by 2026 / Vans: 100% by 2030	
Green investment — Over 50% from 2023–28	
Customer GHG emissions — 28% reduction of carbon intensity by 2030 and net zero by 2050	
Devices connected to the **Hive platform** — 5 million by 2030	
Heat pumps sold to customers — 20,000 per annum by 2030	
Electricity customers with access to **smart services** in the UK — 80% by 2030[5]	
Customers engaged in **green or flexible energy** in the UK — 33% by 2030	
Supply of **renewable or zero carbon power** in the UK and Ireland — 100% by 2030	
Engineers with **green skills** in the UK and Ireland — 3,000 by 2030	

(5) Working electricity smart meter.

Key:

- Fuel switching
- Depletion and CCS
- Efficiency
- Green investment
- Electricity grid decarbonisation

Read more about our Climate Ambitions and their levers on pages 26 to 45.

Read more about performance against our original ambitions in our Annual Report & Accounts 2023 (see page 54).

Financial planning

Impact of implementation

We routinely assess the potential financial impact of implementing our Climate Transition Plan across a range of future climate and energy transition scenarios.

Our most recent scenario analysis undertaken in line with the requirements of the Task force on Climate related Financial Disclosures (TCFD), indicated a net financial advantage for our business under the various climate scenarios tested. This is attributed to our unique position as an integrated energy company, with leading roles at every stage of the energy value chain. With a business model designed for resilience, we can adapt to the evolving demands of the energy transition regardless of the pace of change by mitigating risks and capitalising on emerging opportunities as we energise a greener, fairer future.

We looked at the potential transition and physical climate risks and opportunities analysed out to 2050 which is the most widely agreed date in which the world must reach net zero, and anticipate a positive financial outcome for our business[6]. For example, if global temperature increase is limited to 1.5°C, we project a net positive financial impact ranging from 5% to over 10% compared to our gross margin. And should temperature rise be limited to 2°C, our analysis reveals a gain of more than 10% against our gross margin.

We also quantify the risk of asset impairment in a 1.5°C scenario. Our modelling shows that our most exposed assets are our gas production fields alongside our investment in nuclear. We found that the impact on the value of our gas assets is relatively low due to both existing impairment headroom and because the majority of fields are expected to have produced most of their reserves within the next five years. For nuclear, the net zero scenarios are broadly consistent with our base case prices, so the impact is also small. In the net zero scenario, our investment in nuclear energy would face an additional impairment of approximately £15 million, driven by higher base case prices compared to the net zero price scenarios (see more in the Annual Report & Accounts, Note 7 of the financial statements)[7].

Net financial benefit

Our analysis revealed a net financial benefit for our business across all climate scenarios

(6) Based on 2022 net zero scenario analysis. See more on table overleaf.
(7) Based on 2023 net zero scenario analysis.

A summary of our most material risks and opportunities

Climate related trend	Potential impact	Temperature	Potential gross margin impact in the year (GM)			Strategic response and resilience
			+5 years	+10 years	2050	
Transition away from fossil fuelled heating	**Risk:** Reduced GM from the sale and servicing of natural gas residential boilers and commercial CHP	>2°C	●	●	●	• Strategic aim to grow market share in heating installs and remain the market leader in heating solutions in the UK and Ireland • Installation of hydrogen-ready boilers and CHP
		1.5°C	●	●	●	
Growth in low carbon heating market	**Opportunity:** Increased sales and servicing of electric and hydrogen fuelled heating systems Associated opportunities in fabric upgrade including insulation	>2°C	●	●	●	• The heat pump business is ring-fenced within the New Business and Net Zero division, targeting 20,000 sales per year by 2030 with plans for further expansion • Insulation and retrofit opportunities pursued including via the Energy Company Obligation
		1.5°C	●	●	●	
Transition away from natural gas and energy efficiency	**Risk:** Reduced GM from the sale of natural gas and energy efficiency	>2°C	●	●	●	• Strategic aim to grow customer numbers in the UK and Ireland energy supply • Launch of innovate tariffs and add-ons to facilitate the transition
		1.5°C	●	●	●	
Growth in low carbon heating market	**Opportunity:** Increased sales of electricity and green/low carbon hydrogen	>2°C	●	●	●	• Systems and capabilities in place to pivot towards trading and selling hydrogen • Partnering in hydrogen production and use trials to grow capability and adoption
		1.5°C	●	●	●	
Growth of EV transport market	**Opportunity:** Access to new and growing value pools related to EV charging installations, operation and maintenance (O&M) alongside energy supply	>2°C	●	●	●	• EV charger sales and installations are a key component of the Hive business • Ambition to serve 5 million Hive customers, with solutions including EV charging by 2030
		1.5°C	●	●	●	

Key: Impact on gross margin (GM) ● 0–5% (low) ● 5–10% (medium) ● >10% (high)

A summary of our most material risks and opportunities continued

Climate related trend	Potential impact	Temperature	Potential gross margin impact in the year (GM)			Strategic response and resilience
			+5 years	+10 years	2050	
Growth in demand for renewable energy	**Opportunity:** Strong growth in solar and battery markets driven by decarbonisation	>2°C	●	●	●	• Strategy to invest between £600–800 million per annum out to 2028, with a pipeline of renewable and flexible assets • Introducing services for 'behind the meter' solutions, including solar and battery systems • Power division created to focus on growing the generation business • Value derived from install, O&M and asset ownership
		1.5°C	●	●	●	
Rising mean temperatures	**Risk:** Reduced sales of natural gas and electricity for heat	>2°C	●	●	●	• Strategic aim to grow customer numbers in the UK and Ireland energy supply • Heat pump business launched with material growth plans — can also provide cooling
		1.5°C	●	●	●	
Net impact for the Group	**Opportunity**	>2°C	●	●	●	• Analysis suggests an overall net financial benefit for the Group across all scenarios based on our strategic plans, portfolio and capabilities
		1.5°C	●	●	●	

Key: Impact on gross margin (GM) ● 0–5% (low) ● 5–10% (medium) ● >10% (high)

Our financial scenario analysis is conducted every three years unless there is a material change to the business or external scenarios. Materiality above is therefore based on 2021 Group GM due to our last full scenario analysis taking place in 2022 and is considered accurate and representative. All listed 'opportunities' result in a positive impact on GM whilst all listed 'risks' correlate to a negative impact on GM. The table concludes by showing an overall positive net financial benefit for the Group across all climate scenarios and time periods assessed.

Read more detail about our scenario analysis in our Annual Report & Accounts (see page 49).

Resourcing our Plan

Investment strategy

Our Climate Transition Plan is fully integrated within our strategy. Resourcing plans to implement it are therefore embedded within our current financial plans and balance sheet, which is strong and well-capitalised to support the investment needed.

Our Green Focused Investment Strategy introduced in 2023 has a laser focus on value generation, with CAPEX building to £600 million to £800 million per annum out to 2028. This aims to see us spend over 50% of total investment into green activities between 2023-28 across security of supply and flexibility, renewable generation, and our customers. A large-scale investment programme like this will materially shift our business and build resilience by mitigating risks and advancing opportunities, in order to help deliver our Climate Ambitions as we progress towards our net zero targets (see page 50).

We're already progressing the alignment of our investments with green initiatives (see chart to the right). We maintain non-negotiable return thresholds across different asset classes, which reflects our commitment to drive investment towards renewable energy sources and flexible assets. All investments are subject to our Group's Weighted Average Cost Capital (WACC) threshold. This ensures that each investment meets the expected rate of return, which importantly maintains and enhances shareholder value. Our investment pipeline is robust, featuring over 2GW of renewables and flexible assets.

Our annual investment towards green activities

Annual investment towards green (CAPEX and acquisition costs)

Expected return

Customer technology	8%+
Renewables	6–9%
Flexible assets; benefits and gas peaking	7–10%
Regulated infrastructure	Dependent on model

To deliver on our green finance ambition and ensure our investments are aligned with our long-term emissions reduction targets, we've developed and implemented a net zero guardrail.

The Group Head of Environment is a member of the Centrica Investment Committee, and ahead of any financial investment decision (FID), the Group Environment team reviews each proposal for potential impact. In some cases, where needed, investment propositions are escalated for a further net zero assessment which includes:

- evaluating GHG emissions to assess alignment with our net zero targets and ambitions;
- determining their contribution to achieving system-wide decarbonisation; and
- categorising them as 'green' investments.

To ensure the integrity of our 'green' investments, we employ a company assessment framework based on the EU Taxonomy for sustainable activities, to guide eligibility and potential alignment of activities with our green objectives. With sustainable Taxonomies maturing and adoption expected to scale up over time, our judgements are based on the most reliable information available. At present, not all alignment criteria are fully evidenced to meet EU Taxonomy requirements[8].

The outcome of assessment informs the Committee's final investment decision. This process importantly helps shape our decisions on investing in existing and emerging parts of the energy value chain, which underpins how we're pivoting our business towards a lower carbon future.

Our green focused investments are complemented by significant research and development funding that's dedicated to advancing the transition. Historically, our investments have included pioneering research.

(8) In the fiscal year 2025 (reported in 2026), we will publicly disclose the alignment of our economic activities, including capital expenditures (CAPEX), operating expenses (OPEX) and revenues, with the Taxonomy Regulation.

Case study:

Launching a new research and innovation venture

'Energised Futures' was launched during 2024 to demystify and reduce the cost of energy for customers.

This new start-up combines expertise from across the Centrica brands with a multi-disciplined team of researchers, electrical engineers, AI and machine-learning experts alongside social scientists and economists, to redefine the future of retail energy in order to better support customers. Energy Futures will do this by focusing on bringing new innovations to market that boosts customers' control over their energy, bolsters grid resilience and expediates the decarbonisation of UK homes – delivering projects from technical proof of concepts to longer-term executions that create a greener, fairer future.

Energised Futures has hit the ground running. They're the lead organisation working with the DESNZ on the Interoperable Residential Energy Flexibility project, where they're focused on testing and providing feedback on a proposed standard for demand side response. The team are also participating in the Big Data for Next Generation Energy (BD4NRG) consortium, which brings together 35 sector leaders to tackle data management challenges for the energy sector. The project was selected for the European Commission's Innovation Radar, an initiative to identify high potential innovations in EU-funded research and innovation.

> **"The race to net zero is not something any one person or organisation can achieve alone. Dedicated companies like Energised Futures will bring together the right people to help the UK decarbonise."**
>
> **Pat Symonds**, Advisory board member at Energised Futures and Chief Technical Officer at Formula 1

Case study:

Our multi-year investment in smart meters

We've created an in-house team of experts to deliver our own smart meters, securing stronger value for people, planet and our business.

Behind this decision is our desire for every household to have a smart meter, because we believe they're key to a fair and affordable energy transition. This is because smart meters enable customers to gain real-time data on their energy consumption, allowing them to better understand and manage their energy which can lead to more efficient use of electricity, reducing waste and lowering energy bills. Smart meters also enable accurate billing with exact rather than estimated meter readings as well as dynamic pricing — this can be used to incentivise customers to shift electricity usage to reduce demand on the grid, or to times when renewable energy sources are more abundant.

To help facilitate the roll-out of smart meters across the UK, we're investing in our in-house Meter Asset Provider (MAP) business. MAP enables us to capitalise the costs of the smart meter programme to reduce operating expenditure and enable us to accelerate our roll-out plans, or potentially those of others. Since inception, MAP has funded over 200,000 smart meters and has plans in place to bring over four million meters under management by 2033.

MAP is a multi-million pound investment spanning multiple years. We'll have the ability to flex our investment to respond to the changing world of energy.

£100–150m

MAP's first phase expected annual investment out to 2030

Key costs

As explained earlier, costs associated with our Climate Transition Plan are integrated into our business plans as part of our routine strategic and financial planning. Nevertheless, we acknowledge there are certain expenditures of particular interest to our shareholders, and we transparently share our approach to managing these costs.

Cost	Approach
Decommissioning costs	• Spirit Energy's decommissioning activities are expected to continue into the late 2030s. The revenues generated from remaining gas production are being strategically reinvested to fund the future costs of decommissioning these fields. We also utilise our operational cash flow to build a financial reserve to meet the forecast costs of decommissioning the assets safely and responsibly. This includes well plugging, the dismantling and removal of infrastructure, recycling, repurposing and final site restoration. • This approach ensures the continued safe supply of energy whilst securing a responsible environmental legacy. By managing our late-life gas production in this way, Spirit Energy is setting the benchmark for sustainable asset retirement within the sector.
Conversion costs	• Costs to curtail or convert gas-based assets, such as peaking power plants, to run on low carbon alternative fuels are included within the original investment case for approval of the project. This integration within the initial investment framework assesses the projects financial viability, even in a rapid decarbonisation scenario. With advancements in technology and a deeper comprehension of the associated costs, we'll refine and enhance our financial projections and assumptions accordingly. • We stand ready to invest up to £2 billion in jobs and infrastructure to repurpose Rough gas storage facility to store clean hydrogen. • We're also ready to invest over £1 billion in the project to convert Morecambe Bay into a world leading carbon storage facility, pending the outcome of government processes to progress CCS in the UK.
Transitioning the workforce	• We've comprehensive and ring-fenced OPEX plans that are refreshed annually as part of our broader financial planning process. These plans include the costs associated with workforce training for the energy transition. They are detailed and must account for the varying training times based on skills and the type of training required (e.g. upskilling, cross-skilling etc), the duration of each course, and the impact on productivity. • We plan ahead whilst maintaining flexibility to respond to demand.

Securing investment

We represent a compelling investment case to create value through the energy transition. Our strategic focus is on delivering consistent, long-term returns to shareholders whilst centralising the shift towards a sustainable, low carbon future within our financial planning.

We therefore acknowledge the importance of securing responsible investments. Maintaining proactive communication with Environment, Social and Governance (ESG) raters and investment communities supports this. We actively engage this group and prioritise high performance in line with ESG benchmarks, ratings and indices.

This commitment to excellence has earned us a place in the FTSE4Good Index and an AA rating from MSCI amongst others. Whilst we're aware that our sector's exposure to climate-related risks impacts our score, our governance strength and transparent climate commitments as reflected in our decarbonisation strategy, underpin our positive ratings.

Engagement and collaboration

Engagement and collaboration

The energy transition is a journey we can't embark on alone. It necessitates a collective effort across a wide range of stakeholders, to work together and deliver net zero.

Collaborating with partners who bring expertise in areas we lack is essential for progress, as is exchanging insights across our industry. We must also engage policymakers to advocate for a regulatory framework and incentives that have the power to transform markets. Investor engagement additionally helps us understand and align with climate stewardship objectives wherever possible, to ensure we're a responsible investment choice.

Our engagement activities with key stakeholders such as partners, industry peers, government and investors, are outlined in this section together with a snapshot of what we're currently doing or planning to achieve as part of our Climate Transition Plan. Wider engagement across the breadth of our value chain is shared in the 'just transition' (see page 68).

Partners

Collaboration with a broad range of partners enables us to develop and implement innovative infrastructure and energy services and solutions fit for a low carbon world.

These collaborative efforts are key to advancing the decarbonisation of essential sectors such as electricity, heating, transportation and the gas network. By combining our deep expertise with that of start-ups, other sector actors like automotive manufacturers and competitors, we can forge energy solutions that not only meet the needs of our customers but benefit society at large.

Our strategic engagement is concentrated on areas where a diverse range of capabilities is required to solve complex challenges or share risk, as we embark towards net zero.

How partners are helping deliver our Centrica net zero target

Hydrogen in the Humber

Together with key energy players, Equinor and SSE Thermal, we're collaborating on multiple low carbon hydrogen projects to open up new opportunities for a clean and secure energy supply. Our plans include transforming the Easington gas terminal into a green and blue hydrogen production facility. Green hydrogen will be the initial focus with the electrolyser earmarked to be fully operational by 2029. We're additionally exploring the option of a dedicated hydrogen pipeline to link key sites, forming the Humber Hydrogen Hub, which will enhance energy security and stimulate economic growth in the region.

Europe's first ammonia-fuelled power generation plant

We've entered into a Memorandum of Understanding with Mitsubishi Power Europe, to investigate the potential for creating, constructing, and managing the first ammonia-fuelled power generation plant in Europe at our Whitegate power station in Cork. With a higher volumetric energy density than hydrogen, low carbon ammonia facilitates the use of low carbon hydrogen in a more transportable and storable form, allowing for combustion without carbon emissions at the point of use. Its application as a fuel source is therefore clean and sustainable, representing a viable long-term strategy for transitioning to a low carbon energy ecosystem. We're excited to realise the potential of the project to provide dispatchable low carbon power at our Whitegate power station, whilst boosting Ireland's energy security.

A new lease of life for retired gas reservoirs

Joining forces with ESB and dCarbonX, we've embarked on the ambitious Kestrel Project, an initiative to repurpose the retired offshore gas reservoirs at Kinsale Head and turn them into a large-scale and long-duration storage facility for green hydrogen. Initially utilising natural gas, the plan is to subsequently shift the facility towards green hydrogen in the future. The National Hydrogen Strategy underscores the importance of projects like this, highlighting long-duration storage for hydrogen's cost-effectiveness and market stability. Kestrel offers a credible decarbonisation pathway and supports our goal of decarbonising Whitegate power station as well as contributing to our efforts to provide low carbon power to end users.

Harnessing world-leading research

As a founding corporate partner of the new UCL Centre for the Net Zero Market Design, we help bring together a wide range of academic and stakeholder experts to address energy market design for net zero. With a focus on integrating sustainable and renewable technology, the Centre provides expert advice and insights on the best energy policy, regulation and practices for creating and maintaining effective electricity markets to inform how we decarbonise the energy system — from addressing the major changes needed in electricity generation and transmission, through to usage. This is important because although progress has been made in decarbonising UK electricity, there's still lots of unknowns about operating a system powered by renewables. Research undertaken will focus on challenges outlined in the UK Government's Review of Electricity Market Arrangements (REMA), such as managing surplus generation and supporting investment in new low carbon technologies. The Centre will adapt its research focus over time, guided by an Advisory Board of sector stakeholders, the efforts of which will ultimately support our strategy to provide low carbon power to consumers.

"The innovative partnership model of this new Centre underlines the urgency of collaboration across industry, academia, and key stakeholders to tackle the issues of electricity market design for net zero. We are very grateful for Centrica's bold commitment as one of the founding partners, which has enabled the Centre to launch. It is the power of partnership that will unlock the ideas, resources and solutions for the challenges that we face, and enable us to inform the development of a sector which is fit for the future."

Professor Michael Grubb, Centre Director and Professor of Energy and Climate Change at the UCL Institute of Sustainable Resources

How partners are helping deliver our Customer net zero target

Getting to grips with grid congestion

We've formed a collaboration with Mixergy to address grid congestion issues. Mixergy does this by offering an intelligent hot water system that optimises heating based on household patterns, heating only the necessary amount of water and utilising surplus renewable energy from the grid to do it. This not only enhances system flexibility but cuts energy wastage given households typically experience water heating losses of up to 40% annually, which positively impacts related customer emissions and costs. In the first offer of its kind, Mixergy Extra was launched in 2024, giving customers the opportunity to receive extra financial rewards when they enable British Gas to optimise their Mixergy tank to heat when local or national electric demand is lower.

Making social housing more sustainable

In a consortium led by Pineapple Sustainable Partnerships, we're retrofitting up to 1,000 social housing homes in the UK. Alongside key partners like NatWest and Places for People, we'll aim to reduce energy costs for residents and help them overcome financial barriers through innovative financing solutions, such as selling solar power and leveraging government grants. Our role in this new partnership will be providing tailored advice to every home on how to save money and carbon whilst offering low carbon technology retrofit services such as heat pump installations. This will improve the living conditions of social housing residents and contribute to our goal of selling 20,000 heat pumps a year by 2030. Action like this also supports the UK's net zero emissions target and creates a scalable model for retrofitting homes across the country.

Smarter energy use

Our long-term strategic partnership with Samsung facilitates efficient energy management and the promotion of low carbon heating solutions across the UK. As part of the collaboration, British Gas has incorporated Samsung's SmartThings app functionality, enabling customers on PeakSave to better align appliance usage with times when energy demand is lower, thereby reducing carbon and lowering energy costs. The alliance also supports customers to decarbonise their home with a Samsung heat pump. British Gas experts engage customers on whether their home could benefit from a heat pump and manage its installation, whilst Samsung contributes to training programmes that expand the pool of qualified installers ready to meet the rising demand for heat pumps in the years ahead. This partnership plays an important part in the delivery of our ambitions to ramp up flexibility and heat pump adoption.

> **"It is the beginning of an exciting partnership between Samsung and Centrica in the technology and energy sectors. We are able to offer innovative ways for customers to manage and optimise their energy use through our SmartThings app and have also been working to help upskill and educate the workforce around heat pump technology and installation. There are many more exciting possibilities for us to help customers reap the multiple benefits of a connected home, moving forwards."**
>
> **Deborah Honig**, Chief Customer Officer at Samsung UK

Industry

Acknowledging the critical role of collaborative efforts in the industry's path to net zero, we actively engage with numerous industry peers, including through trade associations and event sponsorship.

EV100

We joined EV100 in 2019 — the climate-group brings together forward-looking companies committed to accelerating the transition to electric vehicles

Trade associations

Trade associations are vital to our growth and ability to achieve our strategic ambitions on net zero by leveraging their collective power and shared expertise. We prioritise memberships in a diverse range of associations that enable us to actively engage in key topics like heat decarbonisation that are fundamental to the energy transition, as well as play a key role in shaping the future of our sector and facilitating innovative energy solutions. Our membership includes associations like the Heat Pump Federation, the Renewable Energy Association, Solar Energy UK and Energy UK. We're also founding members of Hydrogen UK, whereby we actively engage in the Electrolytic Working Group amongst others whilst our Head of Hydrogen serves as co-Vice President.

Advocating through trade associations can be highly effective. For instance, our membership with Energy UK, has helped us push for policy reforms to connection arrangements that will ultimately enable more renewables and other low carbon technologies to connect to the grid.

Sponsoring events

Sharing knowledge is essential for immediate advancements that lead to long-term progress. In alignment with this, we support numerous pivotal events that spotlight emerging technologies and markets that require development and recognition. Notably, we've been the proud sponsors of significant gatherings such as the UK's Heat Pump Summit 2024 and BE-ST Fest, the UK's biggest festival for a zero carbon built environment. These events importantly bring together professionals from the industry, government officials, pioneers in clean technology and property developers, to discuss joint efforts that can hasten the countrywide implementation of heat pumps and other low carbon technologies.

We'll continue to promote progress through sponsoring key events and have already announced our role as the lead sponsor of the Heat Pump Summit 2025.

Read more about our paid membership activity in our annual Trade Association Climate Review.

Government and public sector

We operate within highly regulated markets, where activities such as investments, consumer protection and employee relations, are heavily shaped by regulatory frameworks. Consequently, it's essential for us to work closely with governments, regulators and policymakers, to implement the necessary changes to meet climate change objectives.

We connect with this group directly through consultation responses, open letters and roundtables, and indirectly through our industry groups and trade associations. To ensure our engagement is responsible, we interact with policymakers by adhering to guidelines set out in Our Approach to Political Involvement and Our Code.

Climate advocacy

Since the publication of our first Climate Transition Plan in 2021, we've closely monitored evolving best practice in this area. We've also collaborated with the investor coalition, Climate Action 100+ (CA100+), to ensure we understand the expectations of a wide range of investors. Our climate advocacy strategy has evolved n the following ways.

1. We've committed to conduct all direct advocacy with governments, regulators and policymakers in line with our climate goals and those of the Paris Agreement. This is outlined within our Approach to Political Involvement.
2. We've published our high-level climate policy positions which reaffirms our commitment to the Paris goals and summarises our views on key climate issues, such as the decarbonisation of heat and the role of gas. We publish these positions to raise awareness of the specific proposals we're actively pursuing to further our efforts and invite open scrutiny to optimise the way forward. We intend to keep our Policy Positions relevant by reviewing and updating as appropriate.
3. We've built an online depositary to hold examples of our advocacy that outline our position on matters of public importance that relate to climate change and our own climate goals. The depositary is kept up-to-date and accessible for shareholders.
4. We've implemented an annual assessment of our memberships together with their alignment to the Paris Agreement and our Policy Positions. Moreover, a Paris Alignment assessment is undertaken before any new membership can be approved by the Centrica Corporate Affairs Director. In cases of misalignment, we commit to engaging and using our influence to shift advocacy. If efforts are unsuccessful, we'll review our membership and consider ending it.

Specific policy asks

We endorse well-designed public policies that foster a rapid and orderly energy transition in accordance with the Paris Agreement. Our commitment to this cause is unwavering. Recently, our Group Chief Executive along with other prominent business leaders and investors, endorsed a letter advocating for an ambitious yet achievable 2035 Nationally Determined Contribution (NDC) for the UK at COP29, to kick-start the UK economy and ensure we make sufficient progress towards Paris.

At the same time, we emphasise the necessity of a policy environment that balances the energy trilemma of affordability, security and sustainability. Achieving this balance is crucial for a successful transition to a low carbon future that's fair and equitable for all.

Centrica has proposed a clear pathway to achieving this goal in our 2025 policy positions. The publication emphasises key areas we consider to be priorities, such as the crucial role of gas storage and hydrogen infrastructure in bolstering the UK's energy security and mitigating the effects of price volatility. It also outlines a series of modifications to existing schemes aimed at promoting the adoption of low carbon solutions, prioritising energy efficiency and simplifying processes. A series of reforms are additionally proposed to ensure the energy retail market protects customers from energy crises and fosters innovation in customer solutions.

A summary of our key policy asks against our three key aims[1]

Aim	Policy asks	
Energy security	• A longer-term policy ambition on energy storage must be provided, which gives us additional energy security now whilst providing the enduring infrastructure needed for a net zero hydrogen economy. • The UK Government should extend the cap and floor regulatory framework that has successfully enabled private investment in the UK energy interconnectors, to encourage investment in storage.	• Government should set a clear and tangible hydrogen storage target of 10TWh by 2030, which will help capitalise on its production target of 10GW. • Set a target of 10GW of hydrogen to power by 2030, to drive decarbonisation of the power grid by 2030.
Affordability	• Introduce a social tariff with broad enough eligibility to ensure that energy is affordable for those least able to pay. • Abolish standing charges and regional variations in tariffs for domestic customers on the price cap, simplifying the market for energy customers.	• The Government should improve data sharing with suppliers to better identify those who need support.
Sustainability	• Replace and streamline existing low carbon heating support schemes from 2028 into one accessible scheme, with a wider reach. • Move all policy costs into general taxation, which are currently paid for by the electricity bill payer. This will encourage adoption of new technologies and be less regressive than other options. • Simplify the net zero journey by reforming EPCs to ensure low carbon heating measures are recommended. • The Government to deliver on its Connections Action Plan to raise entry requirements, remove stalled projects, and better allocate network capacity by moving away from a first-come-first-served approach in favour of prioritising readier-to-connect projects.	• Working with Smart Energy GB, the Government should revise the overall policy framework and roll-out model to find new ways to encourage consumers to adopt smart meters and ensure the vast majority of homes can take advantage of the technology. • Reform planning rules across the UK to remove barriers for heat pump adoption. • Low carbon heating schemes should be included in the Growth and Skills Levy. Skills England should focus on ensuring this happens.

Read more in our online depositary for latest examples of advocacy.

(1) These policy asks are valid at point of publication.

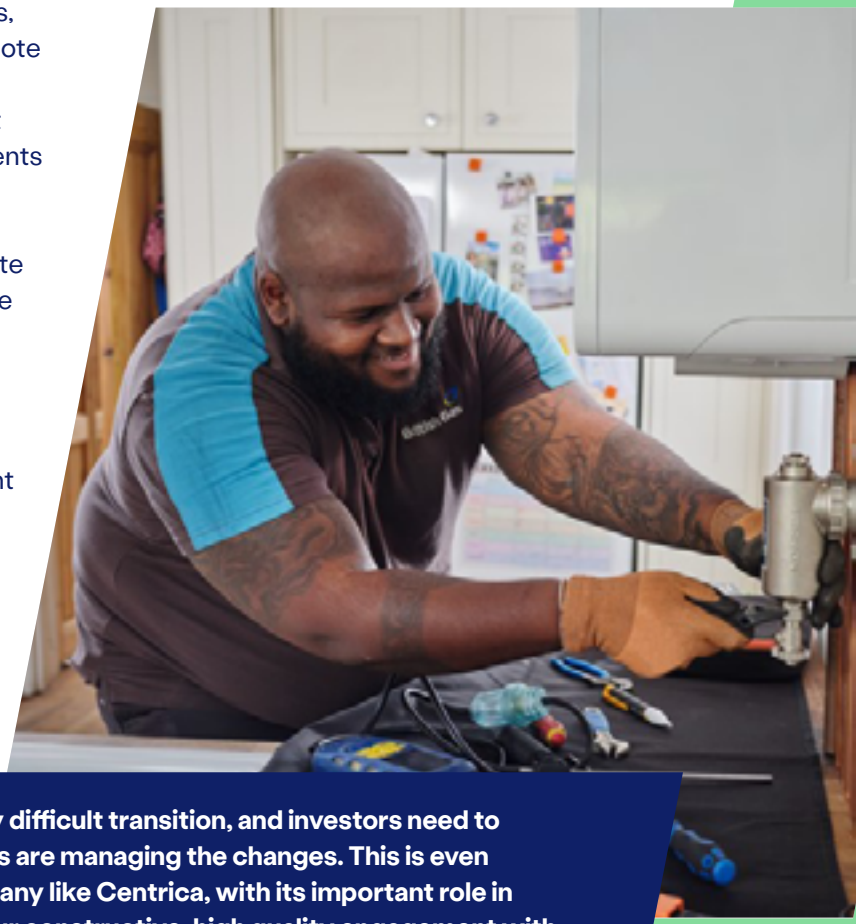
Investors

We welcome and value investor feedback on our transition strategy. Maintaining an ongoing dialogue with investors is crucial for developing a successful plan that aligns with their expectations and secures their support, without which we would be unable to invest in furthering our strategic ambitions for net zero. It is for that reason that we prioritise ESG-focused investor meetings throughout the year, and we'll continue to prioritise these engagements.

In 2024, we've intensified our engagement with CA100+, which represents over 50% of our top 30 investors, to inform the development of our Plan. This included several deep-dive workshops. Led by Centrica's Group Head of Environment, the sessions culminated in providing investors with direct access and dialogue with our Group Chief Executive and Chair of the Company. From engagement, we've gained valuable insight which has helped to shape our Plan, and we look forward to deepening our dialogue in the future.

We understand it's important to obtain the views of all investors, not just those focused on ESG. Our Climate Transition Plan will consequently be presented at our 2025 AGM for a non-binding advisory vote (see page 86). We'll also continue to share an annual update on how we're progressing against the Plan, with performance relating to our targets and Climate Ambitions, provided in our Annual Report & Accounts amongst other reports.

Beyond creating our Plan and monitoring progress, we believe in collaborating with investors to promote regulatory and policy change that expedites the transition. We actively seek opportunities for joint advocacy to heighten cut-through with governments and policymakers, in order to deliver meaningful change. During 2024 for example, we endorsed a collective letter urging the Government to mandate a net zero objective for Ofgem. We highlighted the critical dependency of this action to our investors and sought their assistance to mitigate risk of non-fulfilment. In response CA100+ co-leads, Redwheel and EOS at Federated Hermes, made direct supportive representation. The Government has since amended the Energy Bill, giving the regulator a statutory net zero duty.



> **Society is navigating a very difficult transition, and investors need to understand how companies are managing the changes. This is even more important for a company like Centrica, with its important role in the UK's energy system. Our constructive, high quality engagement with the company has helped us to better understand the company's journey."**
>
> **John Teahan**, Portfolio Manager at Redwheel

Just transition

Just transition

The transition to net zero will fail if there's only a focus on cutting carbon. Equal care and attention is needed to prioritise people alongside planet, to ensure a 'just transition'.

The International Labour Organization (ILO) defines the 'just transition' as, 'Greening the economy in a way that is as fair and inclusive as possible to everyone concerned, creating decent work opportunities and leaving no one behind.'

We whole-heartedly support a just transition and believe that the transition to net zero presents immense opportunities to deliver carbon reductions in a way that can benefit all of society — whether that's customers and colleagues, or communities and supply chain. This is reflected in our new Purpose of energising a greener, fairer future. To ensure we live up to this, we'll continue to maintain an open dialogue with stakeholders and evolve our plans as needed.

Here's some of our key ambitions to deliver a fair and affordable transition for customers, colleagues, communities and suppliers

~6,500

New jobs expected to be created by transforming existing assets into low carbon infrastructure at Rough, Easington and Morecambe sites

~60k

Homes expected to receive free energy efficiency products to help tackle fuel poverty and reduce carbon via current industry schemes(2)

3k

Engineers to have green skills across our UK and Ireland businesses by 2030

£600k

Available each year in grants from Energy for Tomorrow which backs community initiatives that drive the energy transition forward

3.5k

New apprentices recruited by 2030 to energise a greener, fairer future, with the ambition for 50% of engineering roles to be filled by women

100k

Volunteering days to be donated to local communities by 2030 — including opportunities that create a healthier planet

Creating a fairer future by ensuring our team reflects the full diversity of our communities by 2030(1)

Advance the development of new industry-wide standards and frameworks that enable the solar supply chain to reduce modern slavery risk, in particular through our involvement in the work of the Solar Energy UK and Solar Power Europe initiative

(1) All company and senior leaders to reflect 48% women, 18% ethnically diverse, 20% disability, 3% LGBTQ+ and 4% ex-service by the end of 2030, in line with Census data for working populations. (2) Based on current scheme projections: Energy Company Obligation 2022-26 and the Warm Homes scheme 2024-31 in the UK, alongside the Energy Efficiency Obligation scheme 2021-30 in Ireland.

Customers

The next few decades require unprecedented changes in how we all use energy — from how we heat our homes, to how we drive our cars. We're helping customers navigate this changing energy landscape by putting them at the heart of the energy transition. We're using insight, technology and incentives to help customers cut their carbon footprint and improve their relationship with energy by making it simpler and more affordable. At the same time, we'll endeavour to ensure that those who struggle to pay their energy bills are supported.

Improving awareness and engagement

What, when and how people consume energy will change. We'll need to anticipate these changes, overcome challenges and learn from experience to help customers become active and willing participants in net zero. To aid adoption and limit disruption, we must fully understand the needs of our customers as well as the capabilities of new technology to offer the right product, at the right time, for the right customer. Our new research and innovation venture, Energised Futures, will play an important role towards this, developing innovative solutions that shape the future of energy and ensure no customer is left behind (see page 55) — from how best to deploy heat pumps, to how to harness the potential of hydrogen.

To support the transition, we must also be more open about why the transition is essential, together with the level of change that's coming and what everyone can and will need to do. We undertake research with residential and business customers to understand their views and the role we can play to better support them during the transition. In British Gas' third annual Net Zero Action Rankings report for instance, we identified that whilst there's an overwhelming willingness to adopt green technology, more support is needed to turn ambition into action. 80% of homeowners said they were willing to make changes to their homes, but additional support was required to make their transition simpler and more affordable, with concerns around the cost of installation and confusion over available government grants.

We're using insights like this to step up to the plate to serve customers better. We're introducing new dynamic tariffs like PeakSave to save customers money and carbon during off peak times as well as providing market-leading price and performance guarantees for heat pumps and EVs (see pages 41 to 43). We also see value in partnering with like-minded companies such as Toyota on EV charging points and Samsung on heat pumps and smart technology, to give customers more choice and control over their energy (see page 63). Additionally, we continue to advocate for ways we can help simplify green grants and increase uptake of low carbon technology through active engagement with government (see page 65).

Supporting people with their energy bills

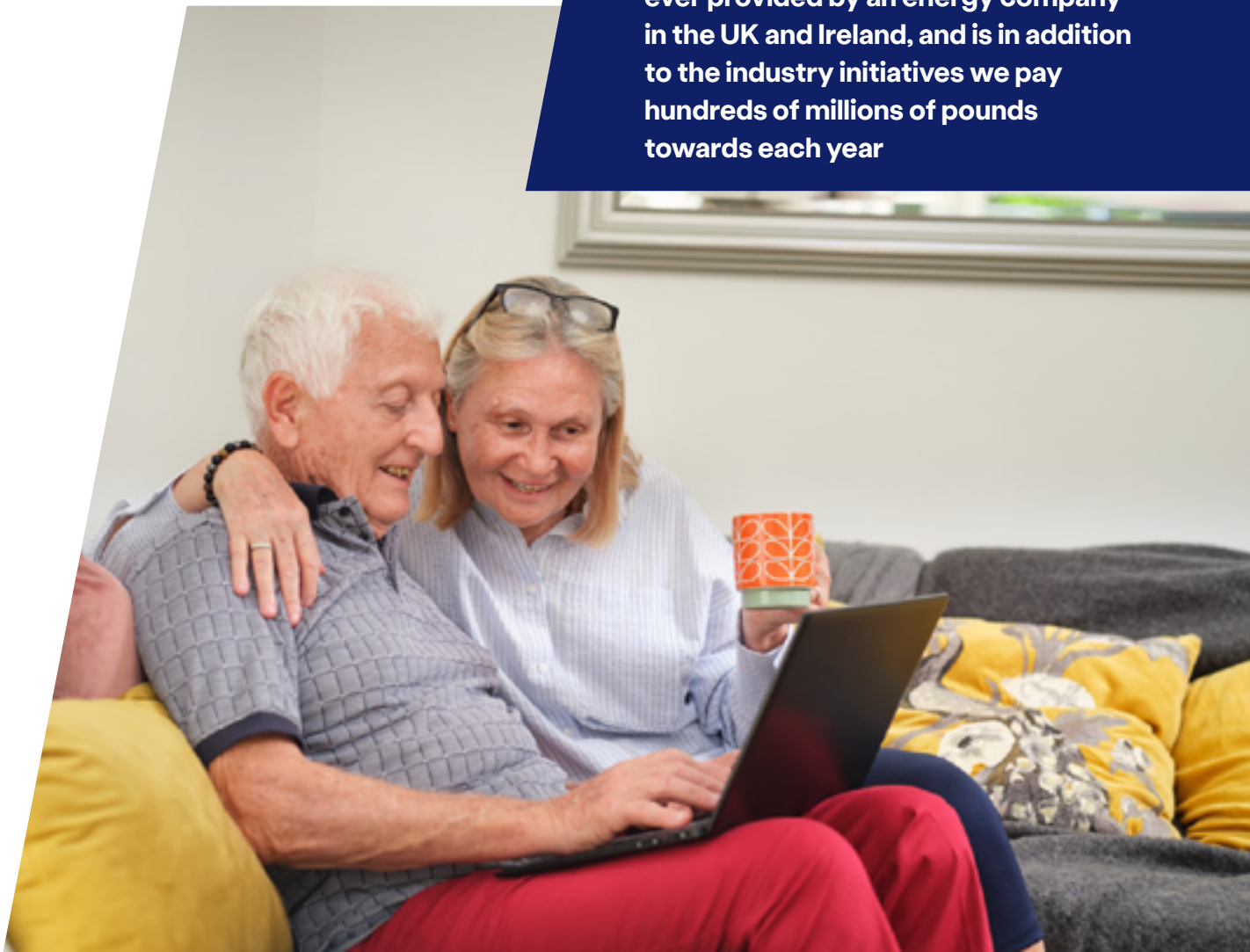
Although numerous scenarios exist on the cost implications of the transition to net zero, it's likely that energy costs will rise in the decades ahead. Goods will need to adjust to new ways of manufacturing and distribution, whilst new low carbon energy technologies and associated infrastructure will require significant investment. The financial and social implication of inaction will, however, be far greater so it's a cost that can't be avoided. With millions of people already in fuel poverty, the potential impact of rising energy bills is a big focus for us. We see it as our duty to support those who need extra help with their energy bills, and we'll continue to do whatever we can to help customers through the transition.

Towards this, we're signatories of Energy UK's Commitment on Vulnerability and work with customers and expert bodies, to identify the best ways to help people. We support customers in many ways including via the Priority Services Register and debt payment plans like our first-of-its-kind 'You Pay We Pay' initiative which commits us to match energy payments from struggling customers, alongside energy bill and energy efficiency support provided through industry initiatives such as the Warm Home Discount, Warm Homes scheme and Energy Company Obligation. We also work with a range of charity partners to proactively reach those who need it most. This includes St Vincent de Paul and the Money Advice and Budgeting Service who manage our energy support fund for customers in Ireland, alongside the British Gas Energy Trust in the UK who deliver specialist debt advice and grants to customers and non-customers alike (see page 76). This approach ensures vital support to thousands of customers each year.

Going forward, we support enhanced protections for vulnerable customers. This includes advocating for the introduction of an industry-wide social tariff to ensure that energy is affordable for those least able to pay (see page 66).

£140m

Donated to help customers through the cost of living crisis – this is the largest voluntary energy support fund ever provided by an energy company in the UK and Ireland, and is in addition to the industry initiatives we pay hundreds of millions of pounds towards each year



Case study:

Tackling fuel poverty

Through the Welsh Government's Warm Homes scheme, we're helping low income households and those living in areas of deprivation, to receive energy efficiency improvements via Nest.

Launched in 2011, Nest has empowered customers and communities to access a greener and more affordable future that otherwise may not have been possible. With British Gas administering the scheme, it's so far reached over 60,300 households with a package of free home energy efficiency measures and improvements including insulation, heat pumps and solar panels. Free, impartial energy saving advice and related activities have also been provided to help further improve lives, including signposting nearly 211,000 households to a range of wider support services.

During 2024, we won the £200 million contract to continue to manage Nest on behalf of the Government in Wales for the next seven years. With plans to provide energy efficiency improvements for up to 1,000 properties each year under the scheme, we'll importantly be able to continue to improve the efficiency of housing stock and support vulnerable households get to net zero. The scheme also provides big opportunities to deliver jobs and growth in the energy efficiency sector across Wales.

~60k

Homes across the UK and Ireland expected to receive free energy efficiency products to tackle fuel poverty and reduce carbon via current industry schemes(3)

650,000tCO_2e

Total estimated reduction through the new scheme 2024–30 — annually equivalent to the emissions of 35,000 homes

(3) Based on current scheme year projections: ECO 2022-26 and the Warm Homes scheme 2024–31 in the UK, alongside the Energy Efficiency Obligation scheme 2021-30 in Ireland.

Colleagues

Net zero requires a fundamental shift in training and skills. It also requires diversity of thought and experience to develop innovative solutions that will help overcome some of the challenges presented by the energy transition. We'll be sure to manage any changes to our workforce responsibly and are excited to play a lead role in creating the next generation of well-paid, green jobs.

A greener and more inclusive team

As our business evolves to meet the opportunities of the energy transition, we're confident we'll be able to create even more opportunities to have a fulfilling and rewarding career at Centrica. We've the biggest single engineering team in both the UK and Ireland, and whilst best known for installing and maintaining boilers today, we're upskilling colleagues to install heat pumps, EV charging points, smart meters and Hive. We'll build on this in the future as new technologies are developed and rolled-out. We also plan to repurpose North Sea infrastructure, such as Rough and Morecambe gas fields, to support the low carbon energy infrastructure that's needed to get to net zero which will protect and generate thousands of jobs (see page 75).

Using our extensive heritage of delivering world-class training and engineers, we'll evolve our programme of training to ensure we've the skills and pace needed to get to net zero. This includes harnessing our dedicated network of British Gas Academies located around the UK in Leicester, Dartford, Hamilton, Thatcham and Rotherham, alongside a training facility for Bord Gáis Energy engineers in Ireland — all whilst continuing investment in our graduate and intern programmes as well as growing green competencies via our on-demand My Learning Campus.

Towards this, it's our ambition for 3,000 of our engineers in the UK and Ireland to have green skills by 2030. We're also currently recruiting 3,500 apprentices across the business by 2030 to help energise a greener, fairer future — equivalent to hiring around one apprentice every day during this decade. The apprenticeships span a variety of roles — from Smart Energy Experts trained to fit smart meters and provide energy efficiency advice, to roles that support hydrogen development and more. As we grow these skills, we're tapping into the talent of under-represented groups to deliver a fairer future as we develop a greener one. This enables us to have different thoughts and ideas around the table, so that we can create innovative solutions that meet the changing needs of our diverse customers and advance the energy transition.

To drive progress, we've set a goal to reflect the full diversity of our communities by 2030 — this means all company and senior leaders to be 48% women, 18% ethnically diverse, 20% disability, 3% LGBTQ+ and 4% ex-service (in line with Census data for working populations). Furthermore, we've set an ambition for 50% of our engineering apprentices to be women by 2030. We're making progress and by the end of 2023, improvements of up to 4% across our goal to reflect the full diversity of our communities had been achieved whilst women made up 14% of our engineering apprentices compared to the national gas engineer average of 0.3%. We'll continue to drive momentum by embedding our Diversity, Equity and Inclusion Positive Action Plans.

>500 people a day

Capacity across our Training Academies

British Gas really supported me through my apprenticeship and I'm so pleased to now be a fully qualified engineer, which gives me a solid trade and security for my family. Day-to-day, I explain to customers how they can save energy by using it more efficiently which feels good and in the future, I'm excited to explore what cross-skilling opportunities there may be. I love that British Gas actively target women to become engineers and I do whatever I can to help more women see it's a career they can do too."

Faye Lackey, Smart Energy Engineer

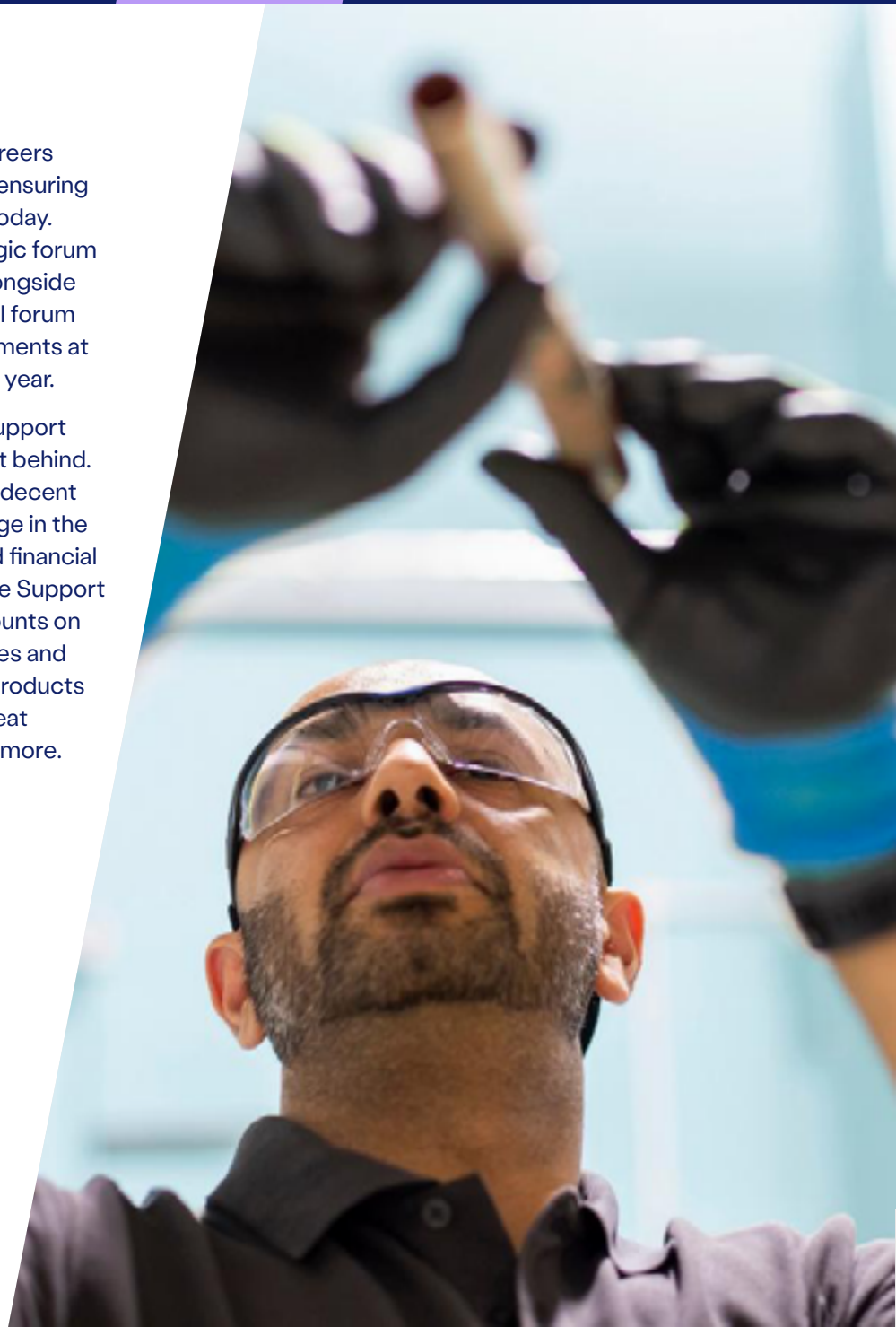
Transitioning jobs responsibly

We want to bring all of our colleagues with us on the journey to net zero but we recognise that like other companies, it's too early to know the full affect the energy transition may have on our workforce. As the transition deepens and we move more fully away from gas production by the mid-to-late 2030s, the effects of the transition will become clearer. Throughout we remain fully committed to addressing skills gaps internally and guarding against job losses by cross-skilling, retraining and redeploying colleagues wherever possible. With highly trained heating engineers, electricians and project engineers amongst others in our team, this makes sense because they possess a myriad of skills that can be utilised in the energy transition to develop and roll-out new and exciting technologies that support net zero.

It's essential that any change is managed responsibly to ensure the energy transition works for everyone. Constructive engagement with colleagues and relevant third-party groups like trade unions and trade bodies, are critical to achieving this. We're proud to have the biggest unionised workforce across energy and services in the UK and we'll continue to maintain an open dialogue with unions and others during the transition. This includes active engagement via the Future Energy Skills Programme. The Programme is co-chaired by our Group Chief Executive and the General Secretary of the GMB Union, with support from other recognised unions including UNISON, Unite the Union, and Prospect.

Together, we explore the skills and careers needed to accelerate net zero whilst ensuring a just transition for the workforce of today. Meanwhile our Joint Council, a strategic forum comprised of our business leaders alongside union leaders, continues to be a useful forum to discuss key concerns and developments at regular meetings held throughout the year.

At the same time, we'll maintain our support of colleagues to ensure they aren't left behind. For example, we're committed to pay decent wages and uphold the Real Living Wage in the UK, provide grants to those who need financial assistance via our generous Colleague Support Foundation, and offer employee discounts on energy and related low carbon services and solutions — from up to 40% off Hive products and 15% off EV chargers, to 10% off heat pumps, solar, batteries, insulation and more.



Communities

To drive the energy transition forward, community involvement and action is essential. We're supporting communities on their path to net zero by bringing new opportunities to host communities and targeting engagement in areas where we're well-placed to make the greatest difference.

>205,000 jobs

The development of hydrogen and CCS in the Humber and surrounding area could support this many jobs and generate almost £15bn in gross value added to the economy(4)

(4) Comprises direct, indirect and induced jobs alongside GVA. Vivid Economics, Capturing Carbon at Drax: Delivering Jobs, Clean growth and Levelling up the Humber, 2020.

Supporting host communities

Although our shift away from carbon intensive activities has meant that we're much less involved in managing the direct impact decommissioning will have on host communities, we're hoping to bring new opportunities to these communities with the development of technologies and infrastructure needed for the new low carbon energy system. Through our existing plans to transform Easington into a hydrogen production site, Rough into a hydrogen store and Morecambe into a CCS facility for example, we expect to safeguard jobs and generate around 5,000 new ones in the Humber alongside 1,500 jobs in Morecambe through direct employment and construction.

Making a difference

Achieving a fair and affordable transition for communities is a top priority. One of the ways we're doing this is through building a more sustainable energy future with Energy for Tomorrow (EfT). EfT is our not-for-profit social impact fund that distributes £600,000 annually in grants of up to £100,000 coupled with expert advice, for community initiatives that accelerate the energy transition. Since 2010, EfT has supported around 40 community projects — ranging from Energy Sparks in Scotland who equip young people with the knowledge and skills to reduce carbon across their school and community, to the Yorkshire North and East District Methodist Church who received solar PV to reduce their emissions and host 'Tea and PV' sessions to raise awareness of the benefits of low carbon technology. All of these projects are funded by the feed-in-tariff generated by solar panels installed across 270 schools — the schools all receive free electricity which has collectively saved 14,300tCO_2e and £8 million, enabling more money to be spent on education.

In the years ahead, we'll continue to roll-out targeted regional campaigns to ensure all of our communities have the opportunity to participate in the journey to net zero. We've also launched a new programme as part of our partnership with Team GB and ParalympicsGB out to 2028, which will help local sports clubs reduce their carbon footprint by installing net zero and energy efficiency measures with the help of colleague volunteers.

Case study:

Backing better futures with Boomerang

As part of Energy for Tomorrow's regional campaign in Wales, Boomerang Cardiff were awarded £99,000 to power the next chapter of the charity and their mission to help people who experience in-work poverty and homelessness.

The grant has provided solar panels to power and heat the charity, which will soon be extended to run a new modular community village at the site made up of ten 40-foot shipping containers. Not only do the solar panels provide cleaner and greener energy to propel Boomerang on their pathway to net zero, but it reduces their running costs and will enable them to provide new services at the container village to help people get back on their feet and secure a better future — from skills workshops and a repair café to charity pop-ups and a 'library of things' where people can borrow items rather than buy them new.

Centrica colleagues also volunteer their energy and skills to support the charity.

102,896kWh

Clean energy generated by the solar panels so far – with carbon savings equivalent to avoiding 379,000 miles driven in a fossil-fuelled car

> **"The support from Energy for Tomorrow means everything to us. It enables us to reach more people and make a real difference to their lives — all whilst creating a healthier planet."**
>
> **Paul Gwilym**, CEO/Founder at Boomerang Cardiff

Meanwhile together with the Irish Farmers' Association, Bord Gáis Energy listened to feedback from farmers who were seeking a solution around renewable energy to reduce rising costs and achieve carbon reduction targets. Following a trial to help identify and overcome barriers to rooftop solar across different types of farms, we're now providing rooftop solar that's resulted in 168tCO_2e being avoided annually — that's similar to grounding 3,500 long haul flights for the lifetime of the installation.

We're also helping individuals and families across communities with their energy bills today, and into the energy transition. As part of this, the British Gas Energy Trust plays a crucial role providing energy advice and grants to anyone in need of assistance. The Trust does this by providing support to people directly as well as by funding over 40 money and energy advice projects at the heart of communities via organisations like Citizens Advice, Money Matters, Mencap and Scope, to ensure support is targeted where it's needed most.

This holistic approach shields struggling households from rising energy costs and enables access to energy efficient products, alongside practical advice to manage money and energy more sustainably. Since 2004, we've invested around £200 million in the Trust which has helped over 700.000 people so far. And in an analysis by Oxford Economics, we found that for every £1 spent by the Trust last year, it yielded £5.50 in social value through improved wellbeing alongside broader economic benefits including additional tax revenue and savings to the NHS. Organisations like this provide an important safety net during the transition to ensure people aren't left behind whilst strengthening the economy to fuel the transition.

We're also making a big difference in our local communities every day through volunteering for the above causes and more, as we strive to give 100,000 days to local communities by 2030 (see page 82).

Read more about the British Gas Energy Trust's social impact in the Oxford Economics' Report.

Supply chain

As energy consumption and technological developments evolve to meet net zero, so too will our product development and supplier base. This will bring new opportunities as well as risks for people and planet. We're working closely with our supply chain to transition to a greener future in a sustainable and ethical way by partnering responsibly and advancing action through collaboration.

Partnering responsibly

New technologies provide the ability to realise net zero, but they may also take us into sectors where the supply chain carries social and environmental risk. The supply chain for batteries, solar and smart technology for example, have been identified as higher risk but remain key technologies for achieving net zero. To guard against risk and enable the realisation of opportunities, our Responsible Sourcing Strategy guides us to partner with like-minded organisations who commit to responsible social and environmental standards within their business and wider supply chain.

Towards this:

- our Responsible Sourcing Policy sets out the high standards we expect which every supplier must uphold — from environmental protections to human rights principles aligned with universally recognised standards including the UN Guiding Principles on Business and Human Rights and the International Labour Organization's Declaration on Fundamental Principles and Rights to Work;
- we conduct robust onboarding and tendering checks which determine the level of risk associated with the supplier, whilst considering product type and country of origin as well as financial crime indicators; and
- provide ongoing monitoring and risk rating using our risk segmentation tool. Any supplier identified as higher risk, are subject to enhanced regular risk assessments via our audit programme with third-party specialists undertaking on-the-ground site audits or remote worker surveys. If social and environmental practices fall short of the standards we expect, we collaborate to raise standards whilst reserving the right to report the abuse and/or terminate our relationship.

27 Site inspections and remote worker surveys

Rolled out in higher risk areas of our supply chain during 2024 — spanning the manufacturing of solar panels, battery systems, smart meters and wider electrical products alongside workwear garments

Collaboration across the supply chain

Collaboration is key to a better tomorrow. So we work with suppliers in a number of ways to empower suppliers during the transition and ensure workers aren't adversely impacted by change. For example, we:

- are on track to implement or close the majority of social and environmental improvement opportunities identified via our 2024 audit programme to raise standards for people and planet;
- aim to influence suppliers representing around 70% of our total procurement contract value by introducing the requirement in 2022 for suppliers to present a Carbon Reduction Plan alongside their bid for transactions that exceed £5 million annually, which we evaluate and challenge if necessary;
- reward responsible suppliers who have the best and most sustainable solutions with our business to strengthen their success and further the transition — through positive engagement with suppliers for instance, our Hive products have eradicated the use of plastic in its packaging with materials now coming from sustainable sources that are fully recyclable;
- uphold responsible payment practices across our supply chain to protect workers including through our commitment to pay at least the Real Living Wage in the UK and having slashed payment terms in half to 30 days for charities and small businesses; and
- collaborate with key organisations to share and accelerate best practice via organisations like the Responsible Sourcing Council, the Slave Free Alliance, Utilities Against Slavery and the Solar Stewardship Initiative.

A spotlight on solar

We're acutely aware of the industry-wide concerns relating to the potential use of forced labour in the solar supply chain, and specifically, within the manufacturing of polysilicon which originates from the Xinjiang Uyghur Autonomous Region (XUAR).

Recognising this challenge is not one faced by us alone, we've taken several measures to mitigate risk within our business and through collaboration with others. To reinforce ethical and sustainable procurement of solar panels, we've put together a preferred supplier list that has been developed thorough robust market analysis and alignment to an agreed set of principles designed specifically to address challenges in the solar supply chain. We've also collaborated extensively with the Solar Stewardship Initiative to drive greater visibility within the supply chain which includes the development of a chain of custody solution to be adopted throughout the manufacturing of solar panels to help enhance traceability and reduce risk. To ensure our approach remains effective, we extended our onsite audits and remote worker surveys to our solar supply chain in 2023. Whilst we've not uncovered any instances of modern slavery in the solar supply chain, we remain vigilant.

We'll continue to harness best practice as it evolves and deepen dialogue with suppliers to improve transparency and raise standards, so that we can tackle any potential or actual adverse impacts whilst maximising opportunities during the energy transition.

Culture

Culture

Our people are our heartbeat. So we've introduced our new Purpose to ensure that our business culture and strategy, is fully rooted in 'energising a greener, fairer future'.

My idea centres around making a standardised format for a modular battery storage solution which can have hundreds of different applications in the home and beyond, to help balance the grid and decarbonise energy. I can't believe my idea has received the backing of our leadership team and I'm excited to play a role in its development."

Rob Fallon, Advanced Product Lead at British Gas

Our Purpose

Wherever colleagues are based in the business and whatever job they do, our new Purpose sets out a single shared vision of why we exist as a company and the role we play in the world. As we enter into the next chapter of our business, our Purpose helps ensure we successfully navigate a changing world by accelerating growth in a way that protects the planet, creates long-term energy security, and doesn't leave anyone behind. Whilst our Purpose therefore supports our operational commitment to do business responsibly, it'll also help us unlock emerging opportunities in the green economy and deliver meaningful impact for colleagues, customers and communities.

Consequently, our Purpose is more than a tagline. We live by it. In its first year of existence, we've made a good start embedding the Purpose in our DNA. Through line manager and team meetings alongside 'townhalls' led by leaders, every colleague has actively discussed what 'energising a greener, fairer future' means to them and how their team not only supports it but drives it forward. These conversations will keep happening to ensure our Purpose remains front-of-mind and that we challenge ourselves and each other, to ensure everything we do is in service of energising a greener, fairer future. To further galvanise everyone behind our Purpose, we also launched our first 'Centrica Moonshots' to harnesses the expertise of colleagues to bring our Purpose to life (see below).

Centrica Moonshots

Our all-employee competition inspires colleagues to share bold and ambitious ideas to energise a greener, fairer future.

We received hundreds of applications, four of which were shortlisted and invited to 'the Launchpad'. Here, colleagues shared their innovative ideas with our Senior Leadership Team and pitched for the resources they'd need to make their idea a reality — as well as be in with the chance of winning £10,000 for charity. We're excited to now be putting Rob Fallon's idea of a modular battery storage solution into development.

How we do business

To help us evolve our business in the right way, our Purpose is underpinned by Our Values and Our Code. Together, they shape our mindset and help us make the right decisions about how we do business because we understand that how we do something, is just as important as what we do.

- **Our Values** of Care, Courage, Collaboration, Delivery and Agility, form part of our daily experience which is encouraged and reinforced via an internal recognition platform. Through the platform, colleagues can recognise and reward one another for living our values — an initiative that's gone from strength-to-strength.
- **Our Code** sets out the principles and ideals that guide us to do business responsibly – from safeguarding the environment and valuing people, to upholding human rights, collective bargaining and more. Our Code applies everywhere, every day, and to everyone who works for us, with us or alongside us. Each year, Our Code is reinforced with mandatory training and every colleague is required to declare they'll uphold it.

Colleagues are supported to live our Purpose, Values and Code through ongoing campaigns and forums that encourage them to openly share thoughts, ideas or concerns. This importantly enables us to continuously improve our culture and ensure its conducive to energising a greener, fairer future. Engagement occurs across a range of channels such as engagement surveys, listening sessions and feedback from our ten diversity networks as well as Speak Up — our 24/7 online and phone-based helpline that's independently run and allows colleagues to anonymously report grievances or improper, unethical or illegal practices.

800,000

Recognitions of colleagues by colleagues for living Our Values since 2019

Empowering colleagues

Creating a culture where colleagues feel empowered and able to make a difference for people and planet in and beyond their job, is really important to us. In doing so, we can build a happier and healthier team whilst amplifying positive impact across society.

We believe that awareness stimulates action. So we run colleague awareness campaigns that bring to life our Purpose as well as our People & Planet Plan, whilst providing net zero training via our My Learning Campus (see page 73). This gives everyone a solid understanding of what net zero means and how everyone can play a role no matter how big or small to get there.

We then create opportunities for colleagues to get involved. For example, two key initiatives include:

1. Providing benefits and discounts to reduce carbon

Through Benefits Plus, we offer a wide range of company-funded and flexible self-funded benefits at discounted rates, to make it easier for colleagues to make more sustainable choices. In 2024, this included over 200 colleagues taking up the Cycle to Work Scheme, more than 400 colleagues utilising our Electric Car Scheme and around 8,500 trees being planted through sponsorship of a world-leading reforestation project that's saved the equivalent annual emissions to taking over 500 cars off the road. With the help of colleague incentives and discounts, our people also have the opportunity to more easily take up and champion our low carbon services and solutions such as solar and heat pumps (see page 74).

2. Making a big difference by supporting local communities

We want to build a more inclusive and sustainable future by supporting our communities through donations, fundraising and volunteering. One of the ways we do this is with our Big Difference local community fund which donates £2 million annually to around 1,000 good causes that colleagues care passionately about. At the same time, colleagues can use their two days paid leave to volunteer each year as part of our People & Planet Plan goal to give 100,000 days to make a big difference in local communities by 2030.

Whether running energy support sessions at Post Office Pop-Ups for those who need extra support with their energy bills or inspiring the next generation to make more sustainable choices, volunteering has become a big part of our culture with over a quarter of colleagues now being a volunteer. This means that we're on track to meet our 100,000 day volunteering goal having already delivered more than 31,000 days since 2019 — this includes over 10,000 days donated during 2024.

> **The children were all very keen to share their new-found sustainability knowledge and put it to good use following the Get Set for Positive Energy workshops. As a former teacher and passionate volunteer, I was over the moon to be able to share my skills with the students to energise a greener, fairer future and look forward to signing up to more workshops in the future."**
>
> **Helen Pope**, Customer Resolution Agent at British Gas

Some of the ways we're making a Big Difference...

~9k

Hours donated at Groundwork events to create a healthier planet for current and future generations, with activities including planting trees, litter picking and more

>550k

Young people engaged so far at 3,500 schools via Get Set for Positive Energy

This forms part of our five-year partnership with Team GB and ParalympicsGB, in which our volunteers run workshops to help young people, and their families understand the role they can play to make greener choices and healthier habits

>150

Energy support sessions delivered by colleagues at Post Office Pop-Ups to help people who struggle to pay for their energy and share energy efficiency advice

Governance

Governance

Strong governance is embedded across the full breadth of our business to ensure we've the right oversight to deliver our net zero commitments.

The Board and its Committees

The governance we've set up allows the Board and its Committees alongside senior management, to integrate our Climate Transition Plan into key processes and strategic decisions from the top to the bottom of our business.

The Board has overall accountability for the Company's approach to responding to and mitigating climate change across our operations and activities, which consequently encompasses our Climate Transition Plan. In addition to reviewing strategic and financial planning to ensure integration of climate considerations in the transition to net zero, the Board oversees progress against climate targets and Climate Ambitions whilst ensuring related risks and opportunities are effectively managed. They also provide final approval on our people and planet annual reporting which includes progress against our Climate Transition Plan dashboard. The Board delegates authority to its Committees as necessary, with each Committee reporting relevant matters back to the Board which ensures they're fully informed.

The Safety, Environment and Sustainability Committee (SESC) are primarily responsible for supporting the Board in overseeing climate change matters at the three meetings that occur throughout the year. This is supported by a deep dive on climate change at least annually. SESC review and provide external and independent input to management when assessing proposals whilst monitoring progress towards our net zero targets and Climate Transition Plan dashboard.

They also provide recommendations to the Board for development of our targets and Climate Ambitions, as well as across our annual reporting which includes our Climate Transition Plan as well as TCFD. SESC additionally monitors stakeholder views on climate change alongside evolving reporting and policy requirements.

The Audit and Risk Committee (ARC) aids the Board in reviewing stated matters quarterly. The ARC therefore reviews risk and mitigations related to Principal Risks which includes those related to climate change, whilst overseeing and informing Group audits, financial statements and non-financial disclosures.

The Remuneration Committee (REMCO) supports the Board by managing remuneration arrangements. At the four meetings held across the year, they ensure Executive Directors and other employees are appropriately rewarded across financial and non-financial matters, with the Climate Transition Plan considered within these arrangements (see page 86).

The Nominations Committee is responsible for ensuring that the Board and its Committees have the appropriate balance of skills, knowledge and experience including in relation to climate change, to effectively lead the Company. This is achieved through a formal appointment procedure, an effective succession planning process, reviewing Board composition and skills, and assessing Board training requirements (see page 86).

Driving and monitoring progress

SESC delegates the day-to-day oversight and challenge over climate-related matters to the Centrica Leadership Team (CLT). The CLT is led by the Group Chief Executive who is responsible for ensuring climate change is discussed as frequently as needed at all Committees and at the eleven CLT meetings held each year. Alongside the Group Chief Executive, the CLT is comprised of the Group Chief Financial Officer, other senior executives such as the Managing Directors of each business unit, and leaders of key functions. Together, they monitor, assess and inform progress and plans relating to our net zero targets and Climate Ambitions as well as Principal Risks and opportunities. To do this, they specifically review and provide feedback on progress against our net zero targets and Climate Ambitions at least three times a year whilst every three years, the CLT will review, inform and approve any changes to existing targets and ambitions or the setting of new ones for the upcoming period.

Each of the business units are subsequently responsible for the delivery of respective action areas set out in the Climate Transition Plan. They are supported in this duty by the Group Environment and Strategy team.

Our Climate Transition Plan is fully embedded in key strategic and financial planning processes to ensure we make informed decisions that can deliver our Plan. For example, in the Group Annual Planning process for the year ahead, business unit progress and plans relating to our targets and Climate Ambitions are reviewed and challenged by the Group Chief Executive and Group Chief Financial Officer. Moreover, the monthly Centrica Investment Committee, a sub-Committee of the CLT, reviews investment opportunities with regard to delivering net zero and whether opportunities positively or negatively impact our Plan.

Training and skills

Having climate and sustainability literacy across our Board, senior leaders and workforce is essential.

To ensure the Board are fully equipped to oversee climate matters, the Board's collective skills are reviewed at least annually. The Nominations Committee are charged with ensuring they've sufficient sustainability skills and experience whilst recommending SESC membership for appointment by the Board. A Board Evaluation process supports this process to identify what they're doing well and where they may be able to improve. The process is conducted every year alongside an independent assessment occurring every three years, with recommendations often including a focus on training to deliver appropriate understanding of new and emerging issues amongst others.

With this approach, the Board is able to continuously strengthen capability on climate change across energy, regulation, geopolitics and technology, to reduce risk and maximise opportunities for delivering the Climate Transition Plan. To assess capability, the Board has 'climate change and sustainability' as one of the 12 criteria used in the Skills Matrix, spanning climate science, climate risk and mitigation, alongside evolving stakeholder expectations. In 2024, 60% of the Board were identified as having these competencies, enabling us to effectively govern climate matters which we aim to build on in the future. To nurture capability in 2024, net zero was a core theme for the Board training programme.

They underwent deep-dive sessions run by internal and external experts on issues including stakeholder expectations on climate change, emerging ESG regulation and Centrica's Climate Transition Plan. Regular updates from management on progress against climate targets alongside risks and opportunities at Committee meetings, also help to upskill the Board, SESC and CLT.

The CLT and wider senior leadership team, are further able to build climate-specific skills through our Learning and Development Programme. This includes a wide range of net zero content including the science of climate change alongside industry-specific mitigation solutions, such as hydrogen and demand side response.

Across our broader workforce, we've lots of opportunities to build sustainability skills. We're using our world-class Training Academies to green the skills of 3,000 engineers by 2030, expect to generate around 5,000 jobs in the Humber during the just transition and provide role-specific training coupled with on-demand learning available via My Learning Campus and employee communication campaigns (see pages 73, 75 and 81).

Remuneration

The independent Remuneration Committee sets the Directors' Remuneration Policy and performance measures for Executive Directors and some wider colleagues. The approach is designed to challenge and support Executive Directors and others, to drive progress towards achieving our Purpose whilst delivering shareholder value.

These remuneration plans are tied to short and long-term performance incentives across a range of balanced financial and non-financial scorecard metrics like engagement, safety, complaints and progress towards our Climate Transition Plan — spanning our targets for net zero as well as our Climate Ambitions.

The Annual Incentive Plan (AIP) has targets and weightings allocated annually by the independent Remuneration Committee, whilst the Restricted Share Plan (RSP) has a three-year vesting period and a two-year holding period, with the Committee making decisions on targets and performance subject to a performance underpin which ensures consideration of sanctions, fines and/or a major safety incident alongside overall progress against in scope KPIs. Climate change targets and Climate Ambitions are one of 14 key performance indicators (KPIs) included in both the AIP and RSP, with a combined weight of 37.5% in determining awards.

Engaging shareholders

Every three years, we put forward our Climate Transition Plan for a shareholder advisory vote. The advisory vote isn't mandatory but provides us with an opportunity to have a more informed dialogue with shareholders. At our AGM in 2022, our first Climate Transition Plan achieved a 79.96% advisory approval rate from shareholders which was positive. Shareholders will similarly have the opportunity to support our updated Climate Transition Plan at our AGM in 2025, where we hope to maintain or grow our approval rate. Should the resolution receive less than 80% support, we'll comply with the UK Corporate Governance Code and engage shareholders to fully understand the reasons behind their vote. In addition to this, we regularly engage investors on our Plan throughout the year (see page 67).

Reporting responsibly

We're fully committed to transparently measure and report our impact and performance in line with international standards and adopt best practice as it evolves. Towards this, we've participated in the 'Sandbox Coalition' of organisations contributing to the Transition Plan Taskforce's (TPT) work on best practice Transition Plans and have embraced its subsequent framework. We were furthermore early adopters of TCFD and have achieved compliance for the third year running. Underpinning all, is our robust approach to tracking and reporting environmental performance in line with the Greenhouse Gas Protocol developed by the WRI and WBCSD as well as having achieved limited assurance over our Scope 1 and 2 emissions every year since 2012 (see more on page 88).

Managing policies

The implementation of our Climate Transition Plan is supported by several Group-wide policies. Our Code sets out our shared set of principles and expectations for all those who work for us, with us or alongside us. Our Code represents a high-level summary of our key policies and standards to govern everything we do — from how we safeguard the environment, to how we uphold human rights (see page 77). Our Health, Safety and Environment Policy supports Our Code, and shares our commitment to effectively monitor, manage and reduce our impact on climate, air, land and water. Meanwhile, our Responsible Sourcing Policy outlines terms that suppliers must comply with which includes providing a safe and inclusive working environment whilst acting in an ethical and environmentally responsible way (see page 81).

Appendix

Our greenhouse gas emission reporting

In line with best practice as outlined in Section 3, we report all of our GHG emissions in accordance with the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (2015), as well as other standards including the GHG Protocol Scope 2 Guidance, and GHG Protocol Technical Guidance for Calculating Scope 3 Emissions. We follow a process of continual improvement of our reporting.

Read more in our reporting suite.

A summary of our emission scopes and how we report them

GHG emissions	How we report them
Scope 1 & 2	• Our Scope 1 emissions are from sources we directly own or control such as power generation, gas production and storage alongside emissions arising from our property and fleet. Our indirect emissions under Scope 2 come from electricity purchased and consumed across our offices and assets. • Our gross Scope 1 emissions are reported by operational control boundary, with our Scope 2 being market-based. This approach is employed because we've most control over our operated assets, and therefore can most effectively implement initiatives and targets that reduce our impacts. This includes where we source our imported power. And where we consume zero carbon power, we retire the appropriate certificates including guarantees of Origin (GoOs) and Renewable Energy Guarantees of Origin (REGOs). Scope 2 location-based is also disclosed for completeness. • Our Scope 1 and 2 emissions reporting methodology is detailed in our Basis of Reporting and assured annually. This covers calculation methodologies, assumptions and details of scope.
Scope 3	• Scope 3 emissions arise from the services and solutions we provide including electricity and gas sold to customers from wholesale markets, alongside products and services purchased to run our business. • We follow the Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (2011), for identifying and reporting relevant Scope 3 categories. We asses relevancy based on size, influence, risk and stakeholders. • The following categories were identified as relevant and therefore the gross emissions are tracked and reported: Category 1: Purchased Goods and Services, Category 2: Capital Goods, Category 3: Fuel and Energy related Activities, Category 4: Upstream transportation and distribution, Category 5: Waste generated in operations, Category 6: Business Travel, Category 7: Employee commuting, Category 11: End use of goods and services sold and Category 15: Investments (includes emissions associated with our equity in non-operated assets). • Each category has its own methodology which may be based on estimated, calculated or measured data, or a hybrid of the three. • These methodologies are detailed in the relevant Basis of Reporting. We strive for continual improvement of the accuracy and completeness of the data, prioritising the most material emission sources.

Our GHG and energy performance

Gross	2019 (Base year)	2020	2021	2022	2023
Scope 1 (tCO_2e)	2,299,586	1,924,508	1,018,953	2,004,692	1,674,829
Scope 2 market-based (tCO_2e)	7,926	4,143	5,304	5,193	6,647
Scope 2 location-based (tCO_2e)	33,343	28,996	19,592	16,275	17,041
Scope 3 (tCO_2e)	125,177,821	116,947,439	22,812,989	24,330,208	21,180,922
Carbon intensity of our Scope 1 & 2 emissions (tCO_2e/£m)	102	80	70	85	64
Total energy (gWh)	9,196	8,116	3,561	9,048	7,438

For more metrics, refer to our Data Centre and Annual Report & Accounts in our reporting suite.

Centrica emission projections – methodology and sources

Our modelling for Centrica's Scope 1 and 2 emissions out to 2050 are based on a 'central case' for the activity. This is the emission profile that is considered most likely to occur based on internal ambitions, plans and strategies, as well as external factors such as technology, policy and regulation. The central cases will be subject to change as the internal and external factors develop. We therefore review and update our central case model at least annually.

Future projects, where expenditure has been committed, are included in the central case. Pipeline and early-stage investments are typically excluded from scope until their expenditure has been approved. We believe this approach provides the most accurate central case view.

Our emissions include all GHG emissions under an operational control boundary, with a market-based approach used for Scope 2 emissions.

Target methodology and assumptions

Target scope

As outlined on page 17, our climate targets follow best practice in normalising for acquisitions and divestments across all scopes:

- Emissions from divestments of a material nature are removed back to the baseline. This is done on the premise that a divestment of an ongoing business, is not a true emission reduction if the emissions are continuing under another organisation. Examples of this include divestment of Direct Energy, Spirit Energy's Norwegian assets, and a number of power stations.
- Emissions from acquisitions of a material nature, are added back to the base year as appropriate. We may therefore be adding emissions to our profile prior to Centrica ownership. At time of publication, no acquisitions with material emissions have occurred since our base year of 2019.
- Non-material acquisitions and divestments are retained in scope. Similarly organic growth and organic reductions including closures of businesses, are kept in scope.

Target monitoring

- Performance against the target is reported annually in our Annual Report & Accounts alongside analysis of our performance, with historical progress reported in our data centre.
- Typically the target is reviewed triennially as part of our Climate Transition Plan update. In the event of an internal or external factor impacting the validity of the target, changes may be made in an interim year, and these will be clearly stated.
- Progress and methodology of our targets are assured at least triennially by a third-party. The assurance statement and Basis of Reporting (BoRs) are published in our reporting suite.

Centrica emission projections — methodology and sources

- Centrica's target emission projections are based on Centrica's gross emission projections (see above). These are then scoped to exclude divestments and include acquisitions.

Centrica net zero target

The following apply to our Centrica net zero target:

- The metric used to set the target: Total Scope 1 & 2 emissions (tCO_2e)
- The objective of the target: To be a net zero business by 2040, with an interim target of reducing our total GHG emissions by 50% by 2032
- The part of the entity or its activities to which this target applies: All Centrica's Scope 1 & 2 emissions within the operational control boundary
- The period over which the target applies: 2040
- The base period and value from which progress is measured: 2019 base year value of 2.04$mtCO_2e$
- Any milestones or interim targets: 50% reduction by 2032
- Whether it is an absolute or an intensity target: Absolute target

Customer net zero target

The following apply to our customer net zero target:

- The metric used to set the target: gCO_2e/kWh of energy (gas and electricity) sold to end-users. This includes the emissions from Scope 3: Category 3d: Emissions from generation of purchased electricity that is sold to end-users and Category 11: Emissions associated with the use of sold products (gas)
- The objective of the target: To help our customers reduce emissions in line with the Paris Agreement by targeting a 28% GHG intensity reduction by 2030 and net zero by 2050
- The part of the entity or its activities to which this target applies: Gas and electricity sold to all our end-user residential and business customers — this comprises of sales from our UK, Ireland and Denmark businesses
- The period over which the target applies: 2050
- The base period and value from which progress is measured: 2019 base year value of 183gCO_2e/kWh of energy sold to end users
- Any milestones or interim targets: 28% reduction of GHG intensity by 2030
- Whether it is an absolute or an intensity target: Intensity target

Customer emission projections — methodology and sources

Our projections for total customer emissions from 2024-30 are derived from our electricity and gas sales forecasts, which align with our short-term business unit growth plans. Beyond this period, due to the influence of external factors on customer emissions and the uncertainty surrounding long-term heat decarbonisation, we utilise third-party forecasts to guide our sales and emissions predictions from 2030-50[1]. Although these curves form the basis of our projections, we've adjusted where needed to reflect our business activities and latest changes in the market. For example, we've tracked our long-term residential electricity sales against third-party curves and assumed the electrification of our existing gas market share to represent our customers switching fuels within the home, which we believe will further boost our electricity sales. The total forecasted power and gas sales are then applied to internal projections of power and gas grid carbon intensities.

Like our customer emissions forecasts, estimated lever reductions are modelled based on sales, installation, and capacity projections out to 2030 from our near-term business unit planning. For projections extending to 2050, we make several assumptions regarding whether forecasts will grow, decline, or remain stable, based on market conditions, policy environment and third-party forecasts. For instance, in the UK we anticipate a gradual decline in customers receiving boiler upgrades from 2030. This is based on the assumption of a ban on new gas boilers by 2035 whilst our hydrogen generation capacity is expected to grow beyond 2030.

As market conditions evolve, we'll continue to monitor for changes and review our forecast regularly.

We don't operate in all the markets that could impact our customers' emissions from heating. For example, we do not currently install all forms of electric heating such as ground source heat pumps, or district heating. And even in cases where we are active, such as installing air source heat pumps or gas boilers, we acknowledge that we don't exclusively offer installs to our British Gas energy customers. We ensure that our modelling does not assume a direct relationship between our install and our supply business. Instead, we represent all the changes to our British Gas energy customer book, whether by us or a competitor.

Assumptions by lever

We've made key assumptions when developing our plans to deliver on our strategic ambition. For modelling purposes, the scope of measures we've assumed slightly differ from the scope of our strategic ambitions, which are underpinned by the strategic focus of our business units.

Efficiency measures — We project reductions in gas consumption from Hive smart thermostats based on internal data; insulation measures based on DESNZ public information; smart meters based on behavioural insights; and efficient gas boilers based on internal studies. However, we haven't included the savings from low carbon efficient technology such as heat pumps, as this is accounted for within the fuel switching lever. We've ensured that carbon savings from the decarbonisation of the electricity grid haven't been accounted for within this lever. We've used Ofgem information on average household usage to underpin our analysis, and internal data for business sites.

Fuel switching — For modelling the number of residential fuel switches, we've assumed that our current residential gas market share in the UK and Ireland will be reflected in our share of the residential electricity market for heating from 2030. Carbon savings from all switches are then calculated based on each electric heating unit displacing a gas boiler. In addition to incorporating the annual gas consumption and intensity assumptions used for efficiency measure savings, we've derived per unit consumption assumptions for heat pumps, electric storage heaters and district heating from third-party providers.

Low carbon gas — We've made an assumption that only a small amount of biogas will be included in the gas mix by 2030, with growth continuing until 2050. Additionally, we've overlaid recent announcements regarding the use of hydrogen for heating with third-party forecasts to form our projections. We've furthermore accounted for the sale of hydrogen to industrial off-takers, which is contingent upon our final level of participation in the Hydrogen Allocation Rounds. We'll monitor and reflect our progress within the model in the coming years.

Electricity grid decarbonisation — We've modelled the decarbonisation of Centrica's electricity portfolio in alignment with our targets, utilising our REGO strategy. This process will occur over the next decade to account for advancements in renewable power and the near-term challenges in heat decarbonisation. Our long-term projections are based on Aurora's forecasts and incorporate the assumptions of bioenergy with CCS and CCUS by 2050, to offset a minor portion of gas sales.

(1) Based on Aurora Net Zero Scenario data as of October 2023 for UK sales, and January 2024 for Ireland and Denmark sales.

Sector emission comparisons

To assess our sectoral emissions ambitions against the UK Climate Change Committee's Balanced Net Zero Pathway, we've chosen sectors from the Sixth Carbon Budget that are most applicable to our core business areas.

Power generation — The forecasted emissions for Whitegate power station and our portfolio of rapid response gas engines have been compared to the CCC's emissions forecast for the electricity generation sector. Whilst the CCC focuses exclusively on the UK's decarbonisation, we consider the CCC's projections to be a credible third-party benchmark for our assets in Ireland particularly as there's no comparable net zero forecasts available for the country's power sector. The forecast is based on the CCC's assumption that unabated gas should be phased out by 2035, aligning with the IEA's view that advanced economies should achieve overall net zero emissions in electricity by 2035.

Gas production and storage — The forecasted emissions from our gas production and storage activities have been compared to the CCC's emissions forecast for the fuel supply sector. The CCC includes a range of sources within its fuel supply sector, such as refining, oil and gas platforms, oil and gas processing terminals, gas distribution, coal mines (both open and closed), and other fossil fuel production. Although we've some gas production assets in the Netherlands, we consider the CCC pathway to be a relevant benchmark.

LNG shipping — We've compared the forecasted fuel emissions from our LNG ships to the CCC's emissions forecast for the shipping sector. Although the CCC's forecast encompasses a broad range of maritime activities, some of which we don't engage in, most emissions included are from domestic freight and international shipping which aligns well with our global operating LNG shipping business.

Energy supply — Our emissions from supplying electricity and gas to residential and business customers have been compared to the CCC's emission forecast for the buildings sector. This includes both residential and non-residential buildings. Since most industrial users are accounted for separately in the manufacturing and construction sector, we believe that the CCC's buildings decarbonisation pathway is a suitable comparison to our residential and business supply activities. We also recognise that our supply business spans both the UK and Ireland, the latter of which the CCC does not cover. However, given the alignment between the CCC's target of phasing out unabated gas power generation by 2035 and the IEA's 2035 target of overall net zero emissions in electricity for advanced economies, we see the CCC's forecast as applicable to our supply book emissions in Ireland.

Transition Plan Taskforce Alignment

We actively participated in the creation of the Transition Plan Taskforce's (TPT's) gold standard framework for Climate Transition Plans. We've been guided by their framework and believe we've aligned with it to our best endeavours, in order to create a Plan that meets our stakeholders' expectations. In some cases, our Plan is laid out or titled differently, so we've mapped the contents in the table to the right for ease.

TPT Pillar	TPT sub section	Pages
1. Foundations	1.1 Strategic ambition	7 to 8 and 17 to 18
	1.2 Business model and value chain	6, 9 to 11 and 46 to 48
	1.3 Key assumptions and external factors	12, 27 to 28, 38 to 39 and 91 to 92
2. Implementation strategy	2.1 Business operations	26 to 36
	2.2 Products and services	37 to 50
	2.3 Policies and conditions	77 to 78 and 86
	2.4 Financial planning	51 to 58
3. Engagement strategy	3.1 Engagement with the value chain	69 to 78
	3.2 Engagement with industry	48 and 60 to 64
	3.3 Engagement with government, public sectors, communities and civil society	65 to 66 and 75 to 76
4. Metrics and Targets	4.1 Governance, engagement, business and operational targets	29 to 35, 40 to 45, 49 and 85 to 86
	4.2 Financial metrics and targets	2, 35 and 54 to 55
	4.3 GHG metrics and targets	14 to 23 and 88 to 90
	4.4 Carbon credits	24
5. Governance	5.1 Board oversight and reporting	84 to 85
	5.2 Management roles, responsibility and accountability	3, 55 and 84 to 85
	5.3 Culture	80 to 82
	5.4 Incentives and remuneration	86
	5.5 Skills, competencies and training	73 to 75, 81 and 85

Glossary

BESS	Battery energy storage systems
CCC BNZ Pathway	Climate Change Committee's Balanced Net Zero Pathway
CCS	Carbon capture and storage
CCUS	Carbon capture utilisation and storage
CHP	Combined heat and power unit
Climate Ambition(s)	Stretching actions we intend to take in the short term to drive progress towards our longer term net zero targets
EV	Electric vehicle, including pure battery and plug in hybrid
GHG	Greenhouse gas emissions
Grid scale	Large scale energy generation or storage facility that is directly connected to the national grid
Hydrogen cluster	A concentration of related industries or several industrial sites that are grouped within proximity to one another
Just transition	Ensuring the benefits of the transition to a green economy are shared fairly, with no one left behind
LNG	Liquefied natural gas
NESO	National Energy System Operator helps connect new generation projects with the electricity grid to support energy security
Net zero	When there's no human-related GHG emitted or, when any GHG emissions emitted are balanced by GHGs removed from the atmosphere via offsetting
Offsetting	Compensating for CO_2 or other GHG emissions by funding an equivalent removal or saving elsewhere, such as planting a tree
Paris Agreement	International treaty on climate change to limit global temperature increase to well below 2°C and pursue 1.5°C
Peaker	Power plants that generally run only when there is a high demand
Residual emissions	Emissions that remain after an organisation has implemented all feasible opportunities for reducing emissions
Scope 1	Direct GHG emissions from sources that are controlled or owned by an organisation, such as property, assets and fleet
Scope 2	Indirect GHG emissions from the consumption of purchased electricity, steam, heat, or cooling across properties and assets
Scope 3	Indirect GHG emissions from across an organisations' value chain, including employee travel, customers' use of products and supply chain goods purchased
tCO_2e	Tonnes of carbon dioxide equivalent – one tonne is equivalent to nearly 40% of a homes' annual emissions or driving over 3,700 miles in an average car

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