



# Our Sustainable Business Roadmap

What we're doing today, tomorrow and in the coming years to help Britain achieve Net Zero.



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# How we're helping Britain achieve Net Zero

**The need to get to Net Zero greenhouse gas emissions is now well acknowledged. For Britain to achieve its ambition and reach Net Zero, we'll all need to work together.**

As Britain proudly hosts COP26, and governments and businesses around the world commit to a low carbon future, the spotlight is on industry leaders, like EDF, to set out their Net Zero roadmap.

Changing how we make and use energy is one of the key ways to reduce emissions. Yet the electricity sector is already driving real change, investing in new low carbon generation and implementing energy efficiency and smart meters in homes and businesses. The Government's Net Zero Strategy shows that electrification of the economy is central to decarbonisation. So, as the UK's biggest producer of zero carbon electricity<sup>1,2</sup>, we're perfectly placed to help Britain achieve Net Zero.

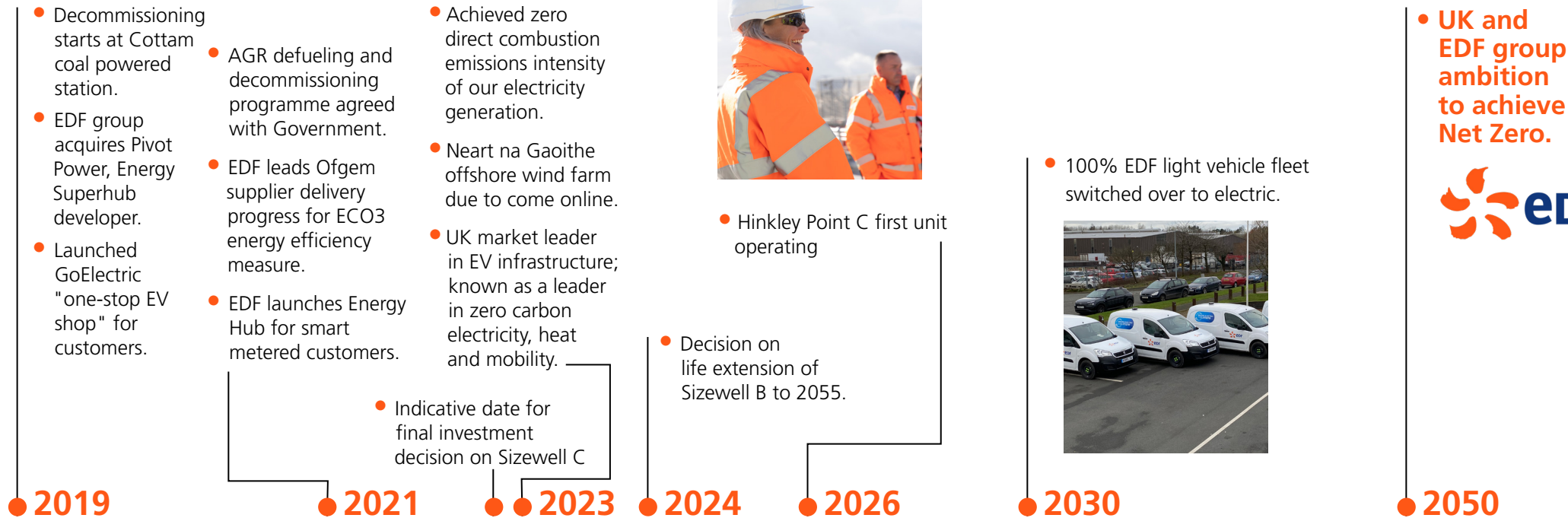
Our vision of a Net Zero economy is a more energy efficient one powered by wind, nuclear and solar. And our mission is to not only reach Net Zero by 2050 ourselves; we're partnering with government, policy makers, communities, start-ups and customers to invest in, innovate and help deliver the infrastructure, technology and solutions that are going to help the UK meet its target by 2050 or earlier.

The challenge ahead is one of the greatest we've ever faced. But we are proud and determined to help. And we're taking steps every day, all 11,000 of us at EDF in the UK.

Net Zero is not just about getting to zero. It is about helping people through the transition to a fairer decarbonised energy system in the future. It means creating jobs. It means recognising and addressing the transition's costs impacts on consumers. And it means helping to educate and empower people to drive cultural and behaviour change that will take us to Net Zero.

Here is our roadmap to Net Zero and the story of how our transition is becoming a reality...





## The steps we'll take on the road to Net Zero by 2050





## Our vision of the country's low carbon future

To achieve Net Zero, the UK needs to switch to low carbon energy over the coming decades. The UK electricity system is predicted to double in size as transport, heating and industry electrify. But where will this electricity come from?

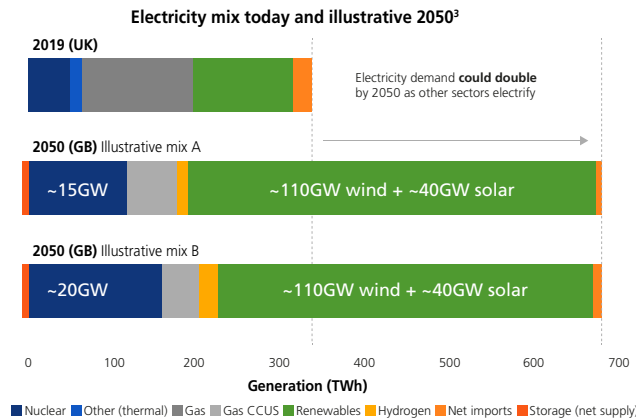
The generation mix will be dominated by offshore wind, with contributions from onshore wind and solar. Such a system will need major increases in storage and demand side flexibility. However, wind patterns in Northern Europe, where lulls can last for weeks, mean that it's impractical and uneconomic for these technologies to do the whole job of providing electricity.

This is where nuclear generation can provide a valuable contribution. It can produce low carbon power round the clock, giving the UK a continuous electricity supply through periods of low wind and sun. It will also help reduce the UK's dependence on volatile international gas markets. It's likely that gas with carbon capture and storage,

and hydrogen turbines, will also play a role if demonstrators of these technologies prove successful.

Renewables and nuclear could also be used to produce low carbon hydrogen and synthetic fuel, helping to decarbonise hard-to-treat sectors such as industry, heavy transport and aviation.

Nuclear could be particularly effective as it can generate low carbon heat, which can improve the efficiency of hydrogen and synthetic fuel production, and direct air capture of CO<sub>2</sub>. By operating flexibly across energy vectors (electricity, heat, transport, etc), it can support the operation of the UK's electricity system.

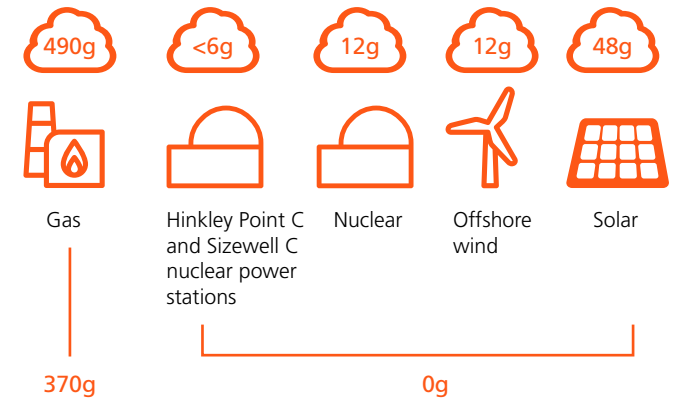


## Lifecycle and point of generation emissions of different electricity generation sources

Nuclear and wind have very low carbon emissions across their full lifecycle.<sup>4</sup> Nuclear and renewables are zero carbon at the point of generation.<sup>5</sup>

### Lifecycle emissions

(gCO<sub>2</sub>e/kWh) of different electricity generation sources



Direct combustion emissions at point of generation (gCO<sub>2</sub>e/kWh)



# What policies will be needed to help Britain achieve Net Zero by 2050?

- **Low carbon infrastructure investment framework** – Government should enable markets to drive investment. This needs to be complemented with strategic planning that considers the right volume and mix of capacity, and factor in the overall long-term societal and system efficiency. Above all, it must be supported by the appropriate financial frameworks that deliver low-cost financing.
- **Carbon pricing** – Maintain and extend a robust carbon pricing policy, providing the market signals to minimise the extent of intervention through support schemes and overall cost of Net Zero.
- **Security of supply** – Support the Independent System Operator to strategically plan for the future and to deliver what's needed in real time (particularly inertia) for grid stability as the energy system transitions to Net Zero.
- **Capacity market** – Evolve the capacity market and wider market framework to procure increasing capacity from low carbon sources, including storage.
- **Low carbon generation** – Over the next decade, use CFDs to drive a planned mix of wind and solar and the RAB model to deliver nuclear, while developing other forms of low carbon generation. Make sure low carbon taxonomy recognises nuclear investment.
- **Customer engagement** – Provide the right information and incentives for customers to adopt low carbon solutions, supported by digital innovation. Rebalance policy costs between gas and electricity and strike the right balance of decarbonisation funding from taxation vs. energy bills and of fixed vs. variable charges on bills. Set regulation that helps customers understand the true and full (lifecycle) emissions impact of their energy choices, while including and protecting the least well off.
- **Energy efficiency** – Provide support and incentives for cost effective energy efficiency schemes across the whole market. Expand the Energy Company Obligation (ECO), so that all homes can benefit from low carbon heating and reduced energy bills.
- **Electrification of heat** – Clear strategy needed to grow the heat pump industry. Engage customers, provide support for up-front costs, develop supply chain and skills base, and progressively phase out high carbon heating (starting with new build).
- **Low carbon transport** – EV charging policy to support progress to 2035 phase out. Install rapid charging on major roads and develop smart chargers for areas without off-street parking. Technology neutral heavy transport decarbonisation framework.
- **Demand side flexibility** – Complete smart metering rollout with fully functioning meters and half hourly settlement. Product standards to automate flexibility provision. Use distribution charging to value customer contribution to deferred reinforcement.
- **Low carbon hydrogen** – Deliver support mechanisms to back early hydrogen projects, including electrolysis using nuclear and renewables. Alongside this, support growth in hydrogen demand, with focus on decarbonisation of industry and heavy transport.



## Our four areas of **focus**

### Here's how our story is unfolding

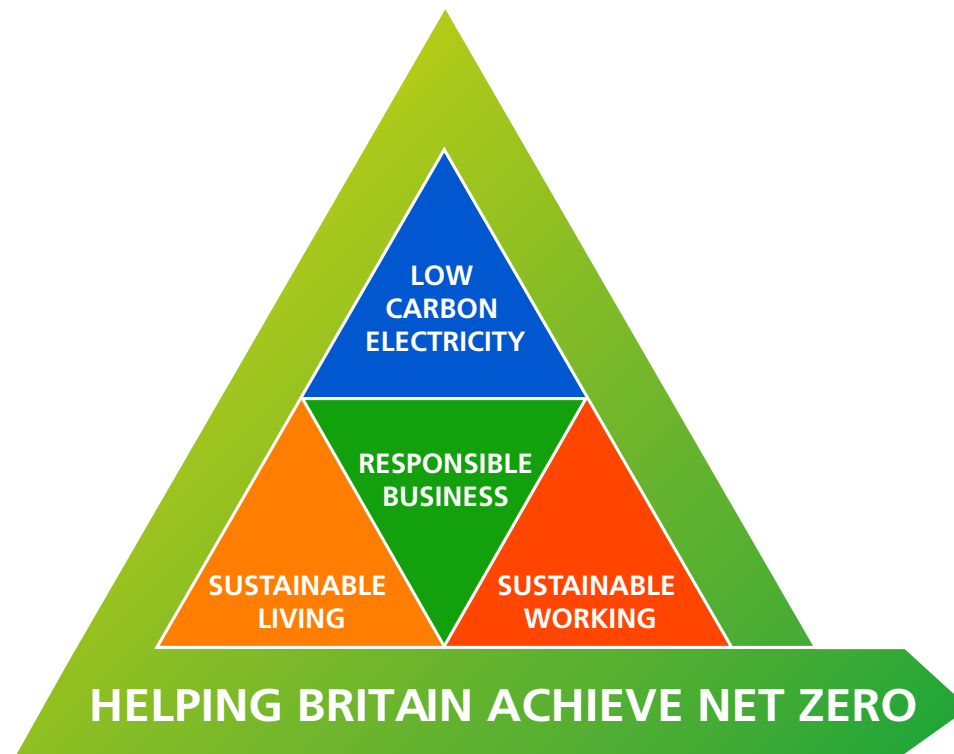
In 2020, we made a commitment to help Britain achieve Net Zero emissions by 2050 and limit the rise in global temperatures to less than 1.5°C.

We started with the changes we need to make ourselves, taking action across our organisation to make sure the electricity we generate, and supply, is lower in carbon than ever before.

But it's not just about *what* we do. It's about *how* we do it.

We're making changes in a way that's responsible, safe and sustainable for our customers, our people, the communities we're a part of and the environment we all share.

Of course, producing electricity isn't just about power. It's about the power to transform the future. So, we're driving initiatives to empower our people and our customers to change the way we all live, work and grow.



#### Four ways we're helping to drive change

- 1 Low Carbon Electricity**  
To accelerate the UK's shift to low carbon nuclear and renewable energy and storage.
- 2 Sustainable Living**  
To help households switch to low carbon lifestyles through smarter innovative solutions.
- 3 Sustainable Working**  
To empower our business customers to switch to low carbon growth.
- 4 Responsible Business**  
To transform our business in a way that is fair for people and positive for the environment.



## We're taking carbon out of the energy mix

The power sector is responsible for around 12%<sup>6</sup> of the UK's greenhouse gas emissions. Yet the importance is much greater as generating and supplying low carbon electricity is one of the main ways we will be able to significantly cut emissions from buildings, transport and industry, and help Britain achieve Net Zero.

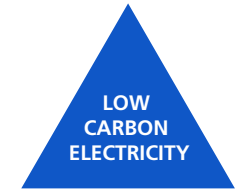
We're already Britain's biggest generator of zero carbon electricity<sup>1,2</sup>, supplying homes and businesses with zero carbon electricity from wind, nuclear and solar.<sup>10</sup>

We're enabling investment in 15GW of wind, nuclear and solar, together covering over a fifth of GB demand<sup>7</sup> with low carbon electricity, bringing in c£50 billion<sup>8</sup> of investment and helping to reduce the direct combustion emissions intensity of our generation from c51gCO<sub>2</sub>e/kWh in 2020 to 0 by 2023.<sup>9</sup>

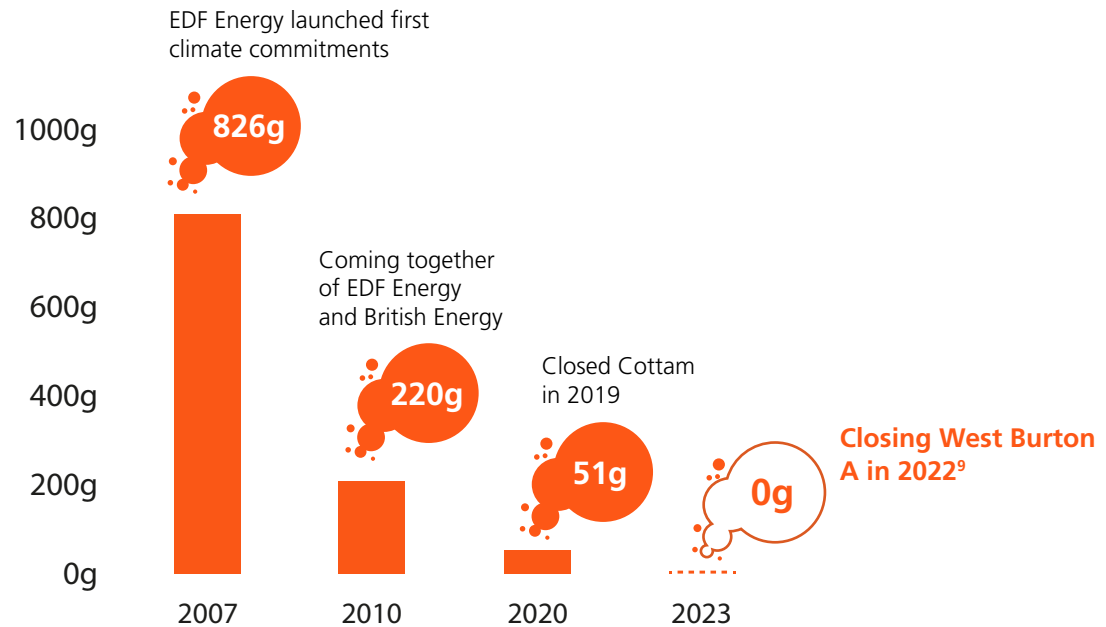
To support and balance a high volume supply of renewable energy on the grid, we're also investing in large-scale battery storage. We have 40 sites planned nationwide - three of those are already under construction and one is operating.



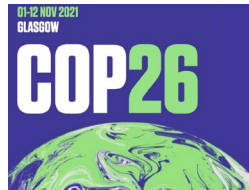
We're enabling investment in 15GW of wind, nuclear and solar capacity by 2035.



### Direct combustion emissions intensity of our electricity generation

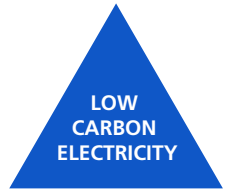
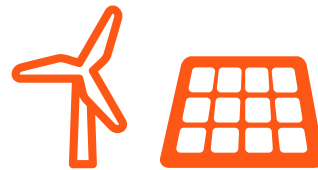






## Looking back: what we've achieved so far

- EDF group has signed the Business Ambition for 1.5°C and is part of the Race to Zero for COP26. Our 2030 targets covering >95% of direct and indirect emissions have been validated by the Science-Based Targets Initiative as aligned with a "well-below 2°C pathway" in line with the power utilities sector methodology.
- In the UK, since 2007, we've transformed our electricity generation mix and reduced the carbon intensity of combustion emissions from 826g CO<sub>2</sub>e/kWh to 51g CO<sub>2</sub>e/kWh in 2020.
- We already have 1GW of renewable generation in operation, from solar and wind, including 37 onshore wind farms and 2 offshore wind farms.
- Since taking on the UK nuclear fleet in 2009, EDF has invested £6 billion and generated >30% more low carbon electricity than originally expected.
- We have taken steps to move away from coal generation, firstly switching from always being on to meeting peak demand. In September 2019, we closed Cottam.

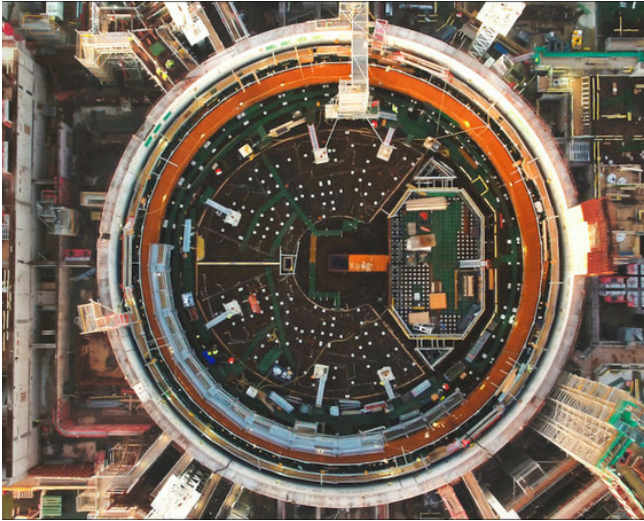


## Looking forward: what we're doing

- We're a major UK investor in renewables, with over 4GW in construction, planning and development and an ambition to reach 7GW by 2035 across onshore and offshore wind and solar.
- We're building a new nuclear station at Hinkley Point C and in talks with the government about Sizewell C. Together, these will provide over 6.5GW of low carbon electricity to meet 14% of UK demand, powering around 12 million homes.
- We're sustaining safe, reliable and commercially viable nuclear operations. We're also making sure nuclear excellence remains our priority as the AGR stations move into defueling and aim to life extend Sizewell B (1.2GW).
- We're closing West Burton A, our last coal-fired power station, by September 2022 – two years ahead of the UK government's deadline. As a result, we will reduce the direct combustion emissions intensity of our generation to zero in 2023.
- We're exploring the viability of other low carbon energy sources. Hydrogen produced with renewables and nuclear could become a low carbon alternative, for example for diesel-powered HGVs.



## Low carbon electricity



### Playing a major role in Britain's zero carbon future

We're helping Britain achieve Net Zero by constructing Hinkley Point C in a low carbon way.

HPC is the first nuclear power station to be built in the UK for over 20 years. It will provide 6 million homes with nuclear power. But powering those homes with low carbon electricity is not enough. Our challenge is to construct and operate it in a way that reduces emissions and leaves a positive impact on the environment.

From the very beginning, our sustainability ambitions have influenced HPC's construction process. They've directed our choice of materials and design, the way we provide our on-site services and how we collaborate with our partners.

By focusing on how we can reduce our impact throughout HPC's construction, we've been able to cut our emissions, reduce the amount of materials used, manage water resources efficiently, and reduce waste.

And we're sharing that knowledge to help set the standard for future low carbon construction projects.

### Here are just some of the ways we're reducing the impact of our construction:

- **98%** of our steel reinforcement – a major material outlay on a project like HPC – is made from recycled materials, all sourced from the UK.
- **80%** of our construction equipment is now powered by mains electricity rather than traditional diesel generators.
- We are increasing the use of EVs to travel around the site.
- We operate a fleet of **102** solar and hybrid tower lights on site, halving the number of diesel-powered units. This has prevented more than **1,000** tonnes of CO<sub>2</sub> emissions.
- We will take **100,000** lorry loads off local roads by transporting components and materials by sea, cutting CO<sub>2</sub> emissions by half compared to HGV deliveries.

### Hinkley Point C's Net Zero contribution



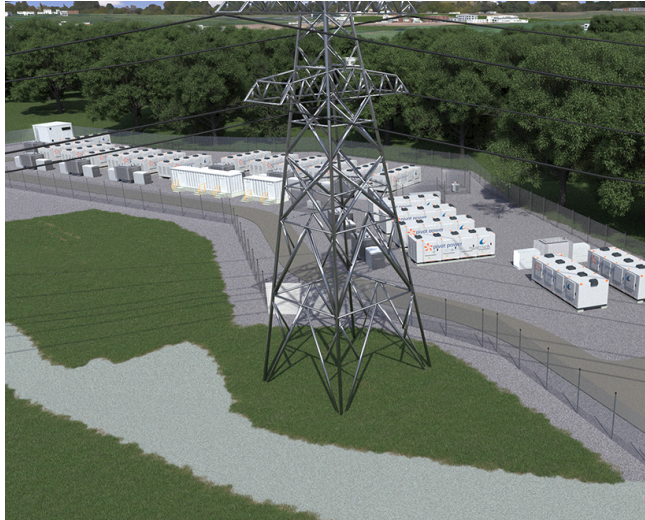
**3.2** Gigawatts of secure low carbon energy for 60 years



**7%** Hinkley Point C's contribution to the UK's electricity needs



# Low carbon electricity



the second challenge – which is the range anxiety felt by many potential buyers of electric vehicles.

By investing in battery storage, we can support high volumes of renewable energy on the grid – and enable a more reliable low carbon electricity system needed to help Britain achieve Net Zero by 2050.

## Innovating battery storage technology

**We're building a cleaner, sustainable and flexible low carbon electricity system. An enabler for this is the adoption of large-scale batteries.**

With large-scale batteries, we can tackle two challenges at once. The first is to store energy from sustainable sources like wind, solar and other renewable sources, so that demand can be better balanced with supply – wherever and whenever we need it.

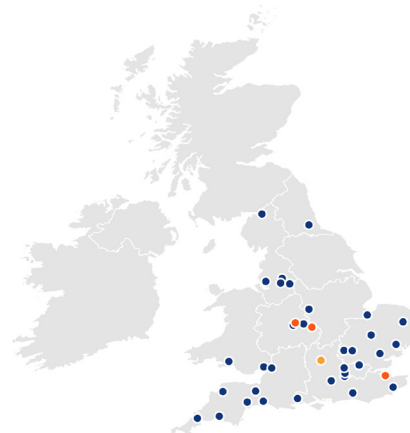
At the same time, the UK government has committed to making our transportation infrastructure electric. Battery storage can address

 **2 GW**  
Flexible capacity

 **33 locations**  
In development

 **1 location**  
Operating

 **3 locations**  
In construction



## Developing carbon capture technology

**We're leading a consortium of academic and industrial partners who have been awarded £250,000 of government innovation funding.**

Together, we're exploring ways of using low carbon heat from Sizewell C to power a Direct Air Capture up to (DAC) system that will remove carbon dioxide from the atmosphere.

This CO<sub>2</sub> can be stored or recycled into, for example, synthetic fuel for use by industries that are difficult to decarbonise – like agriculture and aviation.

Not only is nuclear the cheapest way to produce low carbon heat, the system could one day capture up to 1.5 million tonnes of CO<sub>2</sub> a year using low carbon heat extractable from Sizewell C. It's enough to almost offset the annual emissions of the UK's rail network.





### We're helping households switch to low carbon lifestyles through smart, innovative solutions

Today, around a quarter<sup>6</sup> of the UK's greenhouse gas emissions come from the energy we use in our homes and to power our cars. So, to help Britain achieve Net Zero, we need to do everything we can to make it easy for our household customers to reduce their carbon footprints – at home and on the road.

As we're Britain's biggest generator of zero carbon electricity<sup>1,2</sup>, we reduce the carbon content of the power used by almost all UK households. But we can do so much more to help our customers live a low carbon lifestyle through our smart, innovative solutions.

When it comes to driving, we provide customers with everything they need to go electric - EV tariffs, charge point installations and a car leasing package - to help accelerate their switch to driving electric. We're the market leader in ECO (Energy Company Obligation), the government's scheme to install energy efficiency measures that help fuel poor customers reduce their bills for the long-term.



We're innovating to decarbonise the way customers heat their homes, too. Through accredited installers and funding options, we're offering customers efficient, low carbon air source heat pumps as an alternative to gas, oil and LPG, alongside other lower carbon heating and insulation offers.

Of course, one of the most recent and significant life changes we've seen is more people working from home. So, as part of our mission to help Britain achieve Net Zero, we're looking into the ways we can help power that shift and make it affordable and easier for our customers to live and work more sustainably.



**We provide customers with everything they need to go electric - EV tariffs, charge point installations and a car leasing package - to help accelerate their switch to driving electric.**







**Uswitch**  
Best Value  
for Money  
Large Supplier  
Winner 2021

## Looking back: what we've achieved so far

- In 2020, we acquired the majority stake in Pod Point, one of the UK's leading providers of electric vehicle (EV) charging solutions.
- We've supported customers, including vulnerable groups, to have access to affordable low carbon goods and services, including more energy efficient white goods.
- We've rolled out more than 2 million smart meters to customers, helping them understand their energy use and how to reduce their carbon emissions. From 2025, half-hourly smart meter data will enable a more flexible and resilient energy system.
- We're leading the way in ECO3, having installed more than 56,000 energy efficiency measures in the last year. Our installations to end of 2020 results in £193 million in lifetime bill savings.
- We've helped household customers understand how they can live and work in a more sustainable way. We've shared personalised energy tips and advice through the Energy Hub, offered smart solutions to make their homes more energy efficient, and run national ad campaigns to inspire people to switch to an EV.
- We've helped our customers throughout the pandemic and following wholesale gas price increases, giving reassurance that their energy is safe and offering extra help and advice on managing finances and saving energy at home.



SUSTAINABLE  
LIVING

## Looking forward: what we're doing

- We're finding new, engaging ways to educate and help our customers change their behaviour and adopt ways to live a low carbon lifestyle.
- We're continuing to deliver our regulatory obligations as a leader on energy efficiency installations through the ECO scheme, rolling out smart meters to homes and SMEs in a cost-efficient way.
- We're developing our EV offer to give our customers what they need to drive electric. We're also engaging with the regulation to maximise the benefits from EVs to the energy system, including through smart charging.
- We're introducing low carbon heating options to help our customers lower their home's carbon footprint.
- We're working hard to make sure the transition to low carbon heating is affordable and fair. As heating is a major household cost item, we're positively engaging with the government to develop the policies needed to transition to a low carbon future.





## Powering a community with local energy

In 2019, we launched Project 'CommUNITY' an innovation trial with Repowering London and UCL's Energy Institute. It gave the residents of Elmore House in Brixton access to electricity generated from a solar PV system installed on the roof of their flats. On average, this provided 42% of each household's electricity.

Each resident is allocated a portion of the energy generated. They can then sell or share any unused energy with their local community using a blockchain platform.

Now, 2 years on, CommUNITY+ is generating even more savings for customers, as we've increased community self-consumption. We've installed a battery to store energy and given the residents greater reliability and flexibility.

As the first of its kind, this project not only has social benefits. It also shows the potential of blockchain within the energy sector – and how we can help people live more sustainably.

## Powering a zero carbon city





**We're developing the world's first Energy Superhub in Oxford (ESO), to help decarbonise the city and improve air quality by 2040.**

Nearly three quarters of the UK's councils have declared a climate emergency. The challenge is how to accelerate the transition to renewable energy sources – and clean our cities.

A Superhub is a smart local energy system designed to heat homes and businesses with low carbon electricity, and provide the infrastructure needed to support the uptake of EVs.

ESO is the blueprint to kickstart the energy storage revolution that will power zero carbon cities all over the world. And it's already gathering momentum – Pivot Power recently announced a partnership with Wärtsilä to develop the next two Superhubs in the West Midlands.

 **2 GW** Of transmission-connected battery storage

 **10,000** Tonnes of CO<sub>2</sub> saved a year – equivalent to taking 2,000 cars off the road.



**38** Fast and ultra-rapid EV chargers initially 100% renewable energy



## Accelerating the uptake of EVs

We're busy helping Britain on the road to Net Zero by providing the UK's drivers with everything they need to switch to electric vehicles.

Road transport accounts for around 22% of the UK's total CO<sub>2</sub> emissions.<sup>6</sup> To tackle this, the government has made the shift to zero emission vehicles part of its Ten Point Plan and we're fully behind it.

That's why, through Pod Point, we can now offer homes and businesses electric charger installations.

We've teamed up with DriveElectric to give businesses and individuals access to affordable EV leases.

We're also offering some of the most competitive EV charging tariffs – all backed by 100% zero carbon electricity<sup>1,2</sup>.

**>89,000** home charging points installed<sup>13</sup>

**5,200+** public charging bays in the UK



## Helping our customers reduce their carbon footprint

We've launched the Energy Hub which, unique to EDF, gives smart meter customers free online access to see how much energy they're using, hourly, daily and monthly.



By giving them control over their energy, we're enabling them to become more aware of their carbon footprint. And we're helping them to save energy and money, with simple tips and advice on everything from heating to cooking, to show how they could live a more low carbon lifestyle.

Nearly **100,000** users have accessed the Energy Hub since it launched.

**1/3** customers agreed or strongly agreed that Energy Hub had helped them to reduce their energy use.

**1/2** customers agreed that it had improved their understanding of their energy use at home.

## Improving energy efficiency through innovation

We're leading the way in innovative ways to heat our customers' homes. Within the Energy Company Obligation (ECO3) scheme, half of approved innovation applications come from EDF.

Within the scheme, energy suppliers can deliver up to 10% of this obligation by installing innovative heating and insulations measures.

For example, we sponsored a new product developed by U-Floor Technologies. Installed in 95 homes, it saves each customer around £150 per year and has improved their property's EPC rating.

We also collaborated with our partners to install cavity wall insulation in tower blocks, without the need for scaffolding. We've since helped to insulate just under 2,000 flats, saving £70-£100 off the heating bills of each property.





### **We're empowering our business customers to switch to low carbon growth**

**Some of the biggest contributions to slowing climate change lie in the plant rooms, offices and shop floors in which we all work. In fact, around 75% of UK territorial GHG emissions are related to business activity.<sup>6</sup>**

And yet, when it comes to helping Britain achieve Net Zero, we found that many of our business customers can find it challenging to define a roadmap for reducing their carbon emissions.

The good news is our recent data shows that even making one small change can have a significant impact on an organisation's carbon footprint. That's why we're working with companies large and small – to help them make a difference.

You see, going Net Zero is best done one change at a time. And wherever they are on their journey to Net Zero, we can help our customers identify what their next best step is.

For those just starting out, we provide metering services to give deeper insights into consumption data. By understanding how energy is used across their business, they can make quick wins and benchmark their success.

For those already on the journey to Net Zero, we can help them make their next change through our range of integrated solutions.

SUSTAINABLE  
WORKING

**By 2035, we aim to help our business customers reduce their combined emissions by >80% of their 2019 electricity footprint.<sup>12</sup>**



**We supply around 18% of the business electricity market.**





## Looking back: what we've achieved so far



- We've launched our Net Zero White Paper to help our business customers plan and action their next step on their Net Zero journey.
- We've helped businesses to minimise emissions to meet their sustainability targets and cut costs.
- We provide expert analysis and insight for our customers through Talk Power, webinars and other customer platforms.
- We've installed >13,000 commercial EV charging units<sup>13</sup> through Pod Point to support and accelerate the adoption of EV fleets.



- We've helped our customers to generate their own power on site (through solar panels), minimising their exposure to the wholesale energy markets.



## Looking forward: what we're doing

- We're always finding new ways to put emerging technology to work to support businesses and help them reduce their energy consumption, emissions and bills.



- We're keeping our customers informed through a programme of activities to share knowledge on Net Zero and options for businesses.
- We're investing in and enabling access to zero carbon electricity and technology, to support customers on their journey to Net Zero.
- We're supporting the development of the renewable sector, by working with independent generators of all sizes to build both new renewable generation assets and partnerships with British businesses.



## Supporting new renewable generation projects

**We've worked with Tesco and their advisers to deliver a multi-party Corporate Power Purchase Agreement (CPPA) structure that will support the development of new renewable generation projects.**



The challenge with CPPAs is that they're complex to set up, demand a long-term commitment and can present risks. This explains why take up is low and they account for less than 5% of total renewable generation on the grid.

However, for organisations willing and able to overcome the complexities, CPPAs bring new low carbon generation to the grid, make a significant contribution to decarbonising energy, and reduce emissions.

The Tesco CPPA is helping the company meet its RE100 sustainability targets in a responsible

way. But not only that. With Tesco's long-term commitment to purchase power at an agreed price, the deal has provided the financial security to support the development of 9 new renewable generation projects – 4 new build wind farms and 5 new solar farms.

While a CPPA structure will not work for every business, they guarantee maximum authenticity of carbon credentials – meaning organisations can make a very real contribution to a low carbon future and help Britain achieve Net Zero.

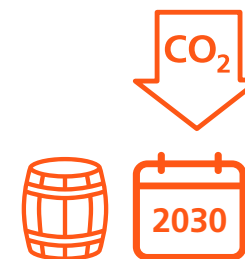
## Powering an iconic Scottish company with renewable energy

**We matched Scottish distillery group, Edrington with Wardlaw Wood Wind Farm.**

Operated by Community Windpower Ltd, it will be the sole provider of 50GWh of 100% renewable energy to all Edrington's distilleries across Scotland for the next four years.

Our challenge was to help Edrington take the first step on their journey to becoming carbon neutral by 2030 and, ultimately, work towards helping Scotland to achieve its Net Zero target by 2045. The Select Renewable energy deal is a new and innovative way to power a business, providing

traceability without the long-term commitment – and enables organisations on their own journey to becoming Net Zero.







## Supplying London's major port with zero carbon energy

We're helping the Port of Tilbury to minimise their impact on climate change.

As the third largest port in the UK, Port of Tilbury is looking at how it can help tackle the environmental crisis we all face. And as their energy supplier, our challenge is how to power their day-to-day operations in a way that aligns with their Net Zero ambitions.

That's why we recommended our zero carbon electricity supply backed by nuclear generation. This helps them to reduce their market-based emissions to zero.

With our help, Port of Tilbury are on their way to a Net Zero future.




## Decarbonising the NHS

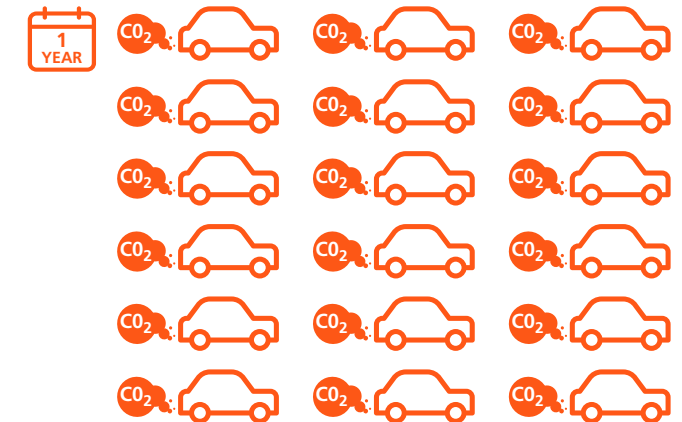
We're supporting the NHS' ambition to achieve Net Zero by 2040 through energy performance works funded by the government's Public Sector Decarbonisation Scheme.

Decarbonising heat is one Britain's major challenges. Through Breathe and Imtech, we're using our technical expertise to help organisations like the NHS to decarbonise their estates.

The measures include heat pump installation, low-temperature distribution networks, insulation, solar panels, and digital solutions to drive better energy efficiency and carbon reductions.

These initiatives are expected to save 300,000 tonnes of CO<sub>2</sub> for NHS Trusts in London and in the North of England – equivalent to the emissions of more than 65,000 cars driven for a year.

 **300,000** Tonnes of CO<sub>2</sub> saved a year – equivalent to the emissions of more than **65,000** cars driven for a year.



## We're transforming our business in a way that is fair for people and positive for the environment.



### Three key commitments

- We're demonstrating real progress towards a positive environmental contribution by reducing our carbon emissions, waste, water use and effect on biodiversity.
- We're creating a great workplace for our people by supporting their health and safety, diversity and inclusion, and skills development in a just way.
- We're making a positive social contribution by supporting vulnerable customers, local economies and communities, and the STEM skills of tomorrow's energy innovators.

The way we achieve Net Zero in our business is just as important to us as playing our role in decarbonising the UK's energy.

As we innovate our business to further reduce our emissions, it's vital to us that our transition is safe, just and positive – for our people, the communities we're a part of and the environment we care for.



EDF in the UK GHG footprint <sup>14</sup>	2020 (MtCO <sub>2</sub> e) <sup>15</sup>
 <b>Scope 1</b>	 2.8
<b>Scope 2</b>	0.002
<b>Scope 3</b>	9.9
<b>Total</b>	12.7





## Positive **environmental contribution**

### **We're doing business in a way that protects a cleaner, healthier and more resilient environment that benefits society and our economy**

As a large organisation with multiple sites, many of which sit on Britain's coastline, we have a duty of care to protect and nurture the environment around us and to use resources wisely.

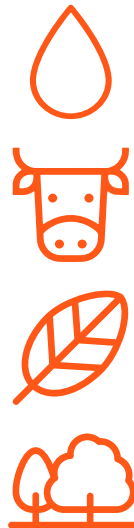
What we do and how we do it will always have an impact on wildlife, the ecosystem and biodiversity. So, as we transition to a decarbonised future, we need to tackle our own environmental impact and leave nature in a better state than before.

That's why, as a responsible business, we're taking every opportunity to reduce our carbon emissions and reach Net Zero by 2050 ourselves. We're introducing circular economy principles into the way we work, choosing to repair, reuse and reduce waste and pollution wherever possible.

Everyone working at our sites shares responsibility for zero harm to ourselves and the environment. In fact, meeting regulatory compliance is our minimum standard. We all strive to deliver continual improvements and achieve best performance in our sector.



**We're demonstrating real progress towards a positive environmental contribution by reducing our carbon emissions, waste, water use and effect on biodiversity.**



### Looking back: what we've achieved so far

- We've changed our ways of working. This has reduced our operational GHG emissions from our buildings, fleet, and business travel.
- We've aimed to minimise and use water sustainably throughout our operations. Overall, more than 99% of the water used by EDF for cooling processes is drawn from the sea or estuaries, where there is no risk of water shortage.

- We've protected and enhanced biodiversity around our sites and managed the land responsibly. Hinkley Point C is committed to leaving local nature in a better state than before.
- We've signed up to the EV100 initiative. So far, we've converted 38% of business-need cars to electric and 11% of our vans – that's 8.2% of our fleet to date. We're also investing in Pod Point chargers at our sites – with 204 installed.
- We've worked to understand the potential climate change impacts for our existing generating assets through to decommissioning, so that we can manage risks into the future. We also carry out Climate Change Resilience Assessments as part of the planning and development consent for our new nuclear builds.



### Looking forward: what we're doing

- We're carrying out lifecycle carbon assessments for some of our nuclear power stations to determine how and where we can reduce our carbon emissions and environmental impact, and calculate carbon avoided.

RESPONSIBLE  
BUSINESS

- We're exploring ways to minimise the impact of decommissioning our nuclear power stations. For example, using alternatives to diesel and introducing energy efficient equipment.
- We're planning to extend the life of Sizewell B by 20 years to 2055 and are currently investigating the environmental impact and viability of doing so.
- We're reviewing our Biodiversity Standard, to create the biodiversity framework and actions for EDF UK.
- We're putting measures in place to protect and enhance the local environment around Sizewell C, predicted to lead to a net gain in biodiversity of 19%.
- We're reviewing all supply chain activity to determine our suppliers' Net Zero activities and commitments, which we'll share to improve and help each other on our journey to Net Zero.
- We're setting new environmental standards for all tenders aligned with our purpose to help Britain achieve Net Zero.
- Sizewell C is exploring decarbonisation of its construction processes by replacing diesel with locally produced hydrogen, potentially linked to Sizewell B. The hydrogen could meet Sizewell C's requirements and other regional stakeholders, such as ports or local transport.

## Positive environmental contribution



And we've made sustainable choices without losing sight of health, safety, time and cost.

Thanks to a co-ordinated approach led by a cross-department team and contract partner collaborations, sustainability has become a key factor of our decision making.

Our experience of closing Cottam has created the blueprint for future site closures – one that will enable us to have a more positive environmental impact.

### Achievements include:

**£1.6 million** saved by redeploying equipment to other EDF sites.

**£533,000** income earned by selling off assets.

**£106,000** worth of equipment donated to a training scheme for EDF apprentices.

**1,695 tonnes** of heavy fuel oil transferred to West Burton A, saving **£500,000** in not buying new.

**4 automatic** voltage regulators transferred to Sizewell B at a fee of **£20,000** – we estimate that brand new, modern replacements would have cost around **£1 million**.

## Turning Cottam off: responsible decommissioning

**We're exploring ways to sustainably decommission and deconstruct Cottam. As the first of our power stations to close, Cottam has posed some unique challenges. After all, end of life for the station does not mean the end for its constituent parts.**

We've taken a circular economy approach and explored opportunities to reuse or recycle materials – and minimise waste. We've adapted our operations to be more energy efficient.

## Minimising waste and environmental impact through freecycling

**We're actively encouraging our employees to think twice about throwing things away.**

By freecycling things like office furniture, carpet tiles, notice boards and pallets, we're taking the opportunity to reduce our waste and our impact on the environment.

Freecycling is a worldwide movement that lets people and businesses offer up their unwanted items for free.

From Torness to Sizewell B, many of our sites follow freecycling initiatives, saving many items from landfill and instead giving them a new lease of life.





## Positive **environmental contribution**

### Conserving eel habitats

We're delivering conservation work across England to help save the European Eel, a critically endangered native fish.

To help revive ailing eel populations, we've worked in partnership with conservation bodies including the RSPB, Wildlife Trusts, Rivers Trusts and the Sustainable Eel Group to complete agreed habitat improvement works at Leighton Moss Nature Reserve.

This project rejuvenated a substantial area of reed bed, with a new bund and sluice to better control water levels, plus new ditches, pools and scrapes.

For the other stations, our work focussed on opening up migratory pathways to existing but inaccessible high-quality habitat.



### Nurturing biodiversity around Dorenell Wind Farm

We're committed to enhancing the biodiversity around Dorenell Wind Farm, our largest onshore wind farm in Europe.

Here's what we've set out to do:

- Tag and monitor up to **25 golden** eagles for five years
- Create an education project relating to golden eagles and tagging
- Restore peat bogs and reinstate historic water levels
- Monitor vegetation across the site.

We opened the Dorenell Visitor Centre in September 2019 and have our own Dorenell Ranger Service, led by dedicated local countryside rangers.

Our objective is to continually improve outdoor access in the local area, improve biodiversity, and outreach to local schools and groups to encourage future visits to the area.

### Recording biodiversity in action

We're protecting the habitats around our nuclear sites.

At Dungeness B, we've enhanced the habitat that's home to several protected or endangered species:

**Sussex emerald moth** – protected and very rare moth, historically only found at Dungeness. We recorded 26 larvae on the EDF Energy landholding.



**Red hemp-nettle** – a critically endangered plant. We recorded 476 plants on the main site in 2018, up from 55 in 2012.



### **We're looking after our people and creating a culture of positive change**

**We've made it our purpose to help Britain achieve Net Zero by 2050. Now, as we embark on what will be a decade of significant change, we want to ensure safe and fair working conditions for our people as we transition our business towards a low carbon economy.**

At EDF, our Everyone's Welcome culture is helping us to create a great place to work – a place where everyone can get the most from their work and the workplace, and in return, give their best. As part of this, we're focused on cultivating meaningful relationships, mutual trust and appreciation for one another.

We engage, inform and consult with our people in different ways to give them a voice and make sure their interests are factored into our decision-making.

We're putting diversity and inclusion at the top of our employee agenda, enabling people from all backgrounds to feel safe and welcome to be their true selves at work.

And we're giving employees the opportunity to develop the skills they'll need to prosper in a Net Zero economy – whether that's with or beyond EDF. This is only a small part of our just transition plan to protect and empower our people, as we continue our journey to help Britain achieve Net Zero.



**We're creating a great workplace for our people by supporting their health and safety, diversity and inclusion, and skills development.**





## Alongside You

### Looking back: what we've achieved so far

- We've expanded our 'zero harm to people' safety culture, to support mental health and wellbeing. We also launched "Alongside You", to share resources on physical and mental health, look out for each other and help people feel included.
- We've engaged with employees and Trade Unions on the actions we're taking – and why. For example, working closely on large change programmes, such as the pensions reform and transformation plans in our Customer and Generation businesses.
- We've involved all our diversity networks in our decision making to improve inclusion. As a result, we've recently published a Standards of Behaviour Statement and our employee engagement survey results for our minority diversity demographic groups have improved.
- We've maintained the highest standards of human rights, labour standards, ethical conduct, and occupational health and safety for all our workers, including our supply chain, offshore and outsourced partners.
- We've maintained a Living Wage employer accreditation by the Living Wage Foundation since 2016. This covers the employees of our suppliers who work regularly on our sites. We also encourage our suppliers to pay the Real Living Wage.



### Looking forward: what we're doing

- We're aiming to provide industry leading physical and mental health and safety performance across all our business activities.
- We're learning from the COVID experience are committing to flexible and a blended ways of working in future.
- We're investing in low carbon skills development of our people to enable their participation in a future Net Zero economy, with good quality jobs and competitive wages.
- We're providing training opportunities for thermal and nuclear workers to move into renewables, securing jobs for the future.
- We're continuing to work hard to create an inclusive, safe place for our people to work, innovate and grow. We'll continually review and partner with relevant D&I campaigns and organisations to help us achieve our ambitions.
- We're listening to our trade union partners and thought leaders to make sure we involve our people early, specifically in decisions around the transition process.





## Securing the future for retirees

We've set up a new myRetirement plan scheme, considered a best-in-class Defined Contribution scheme, which new employers can now easily match. It means our people will now have greater pension continuity and security as they move into other job roles in other organisations.

**"The default investment strategy will take a responsible environmental, social and governance (ESG) focused investment approach aligned to EDF's mission to help Britain achieve Net Zero."**

## Increasing accessibility across the business

**We're placing accessibility at the heart of our organisation. And, as a result of our response during the pandemic, we've seen a big improvement in feelings of inclusion from our disabled employees and those who identify as vulnerable people.**

As part of EDF Energy's Valuable 500 Commitment, we're taking action to make our digital platforms more accessible for our disabled customers, employees and those who work with us. We've recently recertified as a Disability Confident level 2 employer.

Here's how we're taking action to improve the lives of our people:

- On our digital platforms, we've switched on the accessibility features in MS Teams and translation in Chat. Where appropriate, we're meeting web accessibility guidelines, and we've introduced a dyslexic-friendly font for our digital communications.
- We're rolling out more flexible and hybrid work arrangements.

- We're turning our offices into more relaxed, collaboration spaces.
- We're proactively engaging all our Employee Networks on future changes.



## Positive **social contribution**

### **We're contributing to local and regional communities and economies, and supporting the next generation of energy innovators.**

With our size and power comes great responsibility – for the local economies, the people we work with, and the places in which we're based.

And as we focus our activities on our mission to help Britain achieve Net Zero, we're making sure every decision and action has an overall positive impact on these local communities.

This means looking after the most vulnerable customers, giving them affordable, fair and easy access to low carbon energy options and services. It means making sure we create the right conditions and opportunities for local businesses and suppliers to access and share benefits from the construction and development activities of our new nuclear builds, as well as the operation and defueling of our existing sites.

And it means investing in tomorrow's energy innovators, through education and training opportunities, to develop the STEM skills we'll need to power a Net Zero economy.

RESPONSIBLE  
BUSINESS

**We're making a positive social contribution by supporting vulnerable customers, local economies and the STEM skills**





### Looking back: what we've achieved so far

- We've trained 756 apprentices to date on HPC, and we have active work experience, apprenticeship and graduate schemes for current operations.
- We've worked with Local Enterprise and Supply Chain partners through Apprenticeship Levy transfer supporting six apprentices to provide adult care at people's homes and two YMCA youth worker apprentices.



- We've adapted our employee Net Zero quiz for HPC Inspire helping the next generation understand how to help Britain achieve Net Zero.
- We've helped 1,240 people at HPC into new jobs and supported 450 people struggling with employment due to Covid.
- We've created alliance models on HPC to promote innovation and share investment costs, benefits and risks with supply chain partners.
- We've worked with over 3,800 suppliers during 2020, of which over 90% are UK-based.
- We've partnered with Boots UK, with around 70 of our field engineers volunteering to deliver prescriptions to vulnerable and self isolating people during the pandemic.
- We've partnered with local communities to co-create and share value. EDF Renewables projects and HPC have community benefit funds that invest year in projects that communities care about.



### Looking forward: what we're doing

- We're working with supply chain partners to improve affordability and access to zero carbon products and services.

RESPONSIBLE  
BUSINESS

- We're supporting diverse UK businesses to access opportunities through skills development, high quality jobs, and financial and education support.
- We're committed to doing what we can to preserve technical skills and capabilities during the transition period over the next 10+ years.
- We're reviewing the positive social contributions of our supply chain partners and finding ways to share our learnings or draw lessons from partners further along their Net Zero journey.
- We're looking beyond our own employees and exploring how to encourage, support and drive greater D&I in our supply chain.
- We're responsibly lobbying government and policy makers both directly and through membership of trade associations to ensure a just transition to a fairer Net Zero energy system.
- We're supporting the STEM skills development for tomorrow's energy innovators and creating job and training opportunities in the supply chain that support the transition to a Net Zero economy.



## Positive social contribution

### Upskilling our people to become EV installers

**We're building the workforce needed to install Britain's EV charge points.**

When the government announced that all new cars produced from 2030 must be electric or hybrids, it led to a significant demand for safe, competent and authorised EV charge point installers. However, there are not enough qualified electricians to meet this demand alongside other time-critical construction activity.



And it can take over a year's full-time training to equip people with the skills and qualifications to safely install EV charge points.

To address this shortage and build our own capability, we have initiated a programme to upskill our smart meter installers. Working with Pod Point and Energy and Utility Skills, we identified people with existing qualifications that would enable them

to complete the 'existing electrically skilled' EV training journey.

Rather than the full-time year-long electrician training, this includes 1-3 weeks' classroom training, followed by 2-6 weeks' field training with a Pod Point mentor. Competency is then signed off internally. Thanks to this approach, we now have 25 EV installers.

We're now working with industry bodies (EICNIC & NAPIT) to agree an accelerated and safe pathway to convert our existing Smart Meter electrical install skills to those needed to safely install EV charge points.

If accepted, this cross-industry proposal will mean we'll play a significant role in rolling out the UK's EV infrastructure.



### Helping create the UK's first Net Zero town

**We're backing Net Zero Leiston, an ambitious project to reach Net Zero carbon emissions in the Suffolk coastal town of Leiston.**

Working with local councils, community groups, Sizewell C and industry experts, the aim is to

explore and showcase various technologies and materials as pilot projects in the town, and help Leiston achieve its aim of being a leading town in the new green industrial revolution.

**There are three clear objectives:**

- Create a route map from current emissions to Net Zero.
- Create a socially acceptable pathway to Net Zero that the community can own.
- Make sure this is replicable for other villages, towns and cities.

On average Leiston needs to reduce its emissions by >1,000 tCO<sub>2</sub>/year to reach Net Zero by 2030 - equivalent to removing 567 petrol cars off Leiston's roads per year. Whilst challenging, this is achievable with the support of Leiston's residents.



## Positive **social contribution**

### Making a positive difference to local communities

We're providing grants through the Blyth Offshore Demonstrator Wind Farm Community Benefit Fund to finance projects and initiatives to support the local community.

Managed by the Community Foundation, the £55,000-a-year fund has backed many one-off and ongoing projects in Blyth, East Bedlington, Cambois and the Seaton Valley.



### Supporting local businesses

We're committed to championing the local economy. As a result, the Hinkley Supply Chain team has helped over 1,300 South West companies secure more than £3.5 billion in direct investments to date.

One company is Bridgwater based Mike Morgan Electrical Services. They've benefitted directly from the support, advice and guidance provided by the team to access the huge economic opportunity of Hinkley Point C.

Now working as part of the COMA joint venture on a £50 million contract, the company has increased its workforce by 70% and now employs 70 people across the site and its base in Bridgwater. It's also investing in the next generation and is busy training 14 apprentices.

### Championing community projects and the next generation

We're investing in the community projects and initiatives – and supporting the next generation of energy innovators.

As Hinkley Point C is a huge commercial undertaking, we have a responsibility to create a positive social impact in the local area – to make sure they benefit too. That's why we launched the Hinkley Point C community fund. Since November 2017, we've awarded over £4.5 million to 144 local organisations.

The HPC Education, Employment and Skills pipeline – launched back in 2011 – has also made a clear positive social contribution to the region:

**756** new apprentices trained on HPC to date

**1,240** helped into new jobs by the HPC Jobs Service

**500** education institution engaged through the Inspire programme

**1,000+** active members of the Young HPC initiative



# How we're helping Britain achieve Net Zero

**We've made it our mission to help Britain achieve Net Zero by 2050 – for real, for everyone, through innovation. But it's not just about *what* we do to get there. It's also about *how* we do it.**

As Britain's biggest generator of zero carbon electricity<sup>1,2</sup>, we're helping the transition to a cleaner, low emission electric future and tackling climate change.

We're speaking with industry leaders and influencers. We're engaging with our people, supply chain and employee networks and we're listening to our customers. All to understand the best way to map out the journey to Net Zero.









We're aligning with the UN's Sustainable Development Goals, to help us achieve Net Zero in a sustainable way – environmentally, economically and socially. We're committed to COP26 ambitions and initiatives such as Race to Zero that unite the public and private sectors, cities and regions, as well as investors and higher education institutions, on the path to sustainable growth.

And we're right behind the government's Net Zero strategy, launched in October 2021.

We may not have all the answers yet. But we stand ready to support the government as they develop and roll out the policies needed for a low carbon future.

For us, this course has been set. Now, by working together, we will accelerate the momentum and actions needed to help Britain achieve Net Zero by 2050.


























Ambitions	UN SDGs <sup>16</sup>	Performance indicators	Goals	2019 <sup>15</sup>	2020 <sup>15</sup>
<b>How EDF will achieve Net Zero</b>					
Net Zero GHG footprint by 2050 <sup>14</sup>	 	Scope 1 GHG emissions (MtCO <sub>2</sub> e)	Net Zero by 2050; Contribute to EDF Group's 2030 science-based targets;	4.5	2.8
		Scope 2 GHG emissions (MtCO <sub>2</sub> e)		0.003	0.002
		Scope 3 GHG emissions (MtCO <sub>2</sub> e)		9.8	9.9
		Total GHG emissions (MtCO <sub>2</sub> e)		14.3	12.7
<b>How EDF is helping Britain achieve Net Zero</b>					
Low carbon electricity <sup>7,8,9</sup>	 	Carbon intensity: combustion emissions from the production of electricity (gCO <sub>2</sub> e/KWh)	0 by 2023	72	51
		Assets under construction and in operation (GW)	15	4.3	4.3
Sustainable Living and Sustainable Working <sup>11,12</sup>	   	Helping household customers reduce their collective emissions compared to 2019 electricity and gas footprint (% reduction)	>70% by 2035	N/A	N/A
		Helping our business customers reduce their combined emissions compared to their 2019 electricity footprint (% reduction)	>80% by 2035	N/A	N/A
		Household and small business customers with a smart meter (%)	Deliver regulatory commitments	33%	38%
		Number of Pod Point EV charging units installed (home and commercial)	To install an EV charge point everywhere that people park	45,441	77,498





# EDF in the UK 2020 KPIs

Ambitions	UN SDGs <sup>16</sup>	Performance indicators	Goals	2019 <sup>15</sup>	2020 <sup>15</sup>	
Responsible business	      	Percentage of electric vehicles in the light vehicle fleet (%)	100% fleet to EV by 2030	0.7%	8.2%	
		Water intensity (litres / KWh generated)	<0.95 l / KWh 5 year average	0.11	0.12	
		Amount of Conventional Waste Generated, Recovered and Recycled exc. HPC (t)	-	16,000	20,377	
		Volume of Low-Level Radioactive Waste sent off site (m <sup>3</sup> )	-	444.2	352.4	
		Biodiversity action plans in place for EDF generation sites	100%	100%	100%	
	Great place to work	       	Work-Related Fatalities Total Recordable Injury Rate (TRIR / 100,000 hours) (excl. HPC) RIDDOR Accident Frequency Rate (HPC site only)	Zero Zero Harm HPC Zero Harm	Zero 1.03 0.084	Zero 0.59 0.081
			Women at Senior Leadership Level (%) Female employees %	40% by 2030 40% by 2030	16 30	16 30
			Inclusion Index (based on myEDF employee engagement survey)	-	80	83
			Employee pride (myEDF Q: I am proud to tell people where I work)	Maintain >80% score	80	83
			Positive social contribution	       	Number of customers on Priority Services Register for extra support (some on a dual fuel contract)	- -
	EDF supply chain spend with SMEs (%)	-			26	25
	EDF supply chain spend with diverse businesses (%)	-			7.75	8.53
	HPC project contracts awarded to UK-based companies (%)	64			64	64
	Number of apprentices trained to support HPC project to date (HPC and contractors)	1000			644	756



### Zero carbon

1. UK Fuel Mix disclosure information, published by Government Department BEIS, recognises electricity from wind, solar and nuclear fuel produces zero carbon dioxide emissions at the point of generation.
2. The zero carbon electricity purchased is supplied to the National Grid. Customers receive electricity via the National Grid, not directly from zero carbon generators. The [table](#) on our website summarises zero carbon generation by company demonstrating EDF generating 32.4%. The data supporting the table and the % values is sourced from a mixture of industry settlement data and the UK government renewable obligation database.

### Electricity mix today and illustrative 2050 mixes

3. HMG Energy White Paper, December 2020 and EDF analysis. HMG's energy white paper did not specify a precise future electricity mix, EDF's analysis and other reputable scenarios predicts the indicative numbers above.

### Lifecycle and point of generation emissions

4. Independent analysis conducted and verified by a third party. Referenced the International Environmental Product Declaration Standard.

Assessed the carbon impacts across the full lifecycle of HPC and SZC from the start of construction to the end of decommissioning.

5. Gas, offshore wind and solar are median estimated values from the [Intergovernmental Panel on Climate Change \(IPCC\)](#) Table A.III.2 | Emissions of selected electricity supply technologies (gCO<sub>2</sub>e/kWh)

### EDF analysis of UK GHG emissions by sector

6. Total emissions figures for 2019 are based on BEIS and CCC data. The breakdown of business related and household emissions is based on EDF Energy analysis combining emissions & consumption data from BEIS, DUKES, National Grid-FES and DfT with emissions statistics from BEIS & ONS. Due to discrepancies across different emissions statistics, there are uncertainties around the categorisation and allocation of emissions.

### Low carbon electricity ambition

7. Over a fifth of GB demand, as estimated for 2019 (pre-pandemic) based on BEIS Energy Trends excl. Northern Ireland: 320TWh total GB need including net imports, before losses. Excluding changes to demand from electrification, UK sector mix or energy efficiency.

8. Newly invested low-carbon generation: EDF Energy and EDF Renewables UK; total project capacity, not weighted by ownership %. Excludes EDF Renewables in Ireland; excludes and battery storage. Assets under construction / operation include c1GW of renewables and HPC. In addition, SZB (1.2GW) life extension is under active consideration, and negotiations are ongoing with the UK Government on SZC (3.26GW). Illustrative real £2019, excl/ interim interests.
9. Carbon intensity: Point of generation emissions. EDF Energy and EDF Renewables UK; total capacity of consolidated assets, not weighted by ownership %. Excludes Barkantine gas-powered combined heat and power installation that Imtech, owned by Dalkia and EDF Energy, operates to provide energy efficient heating to customers through a local district heating network.



### Zero carbon electricity at zero extra cost

10. All of our home energy tariffs are backed by zero carbon electricity as standard and are backed annually. At the end of each fuel mix reporting year, we'll make sure we have enough nuclear generation declarations to match the total volume of electricity supplied to all of our customers on zero carbon nuclear backed tariffs.

### Sustainable Living ambition

11. Emissions savings compared to collective 2019 GHG footprint of our B2C customers for power (11.1TWh; c2.4MtCO<sub>2</sub>e at grid carbon intensity of 0.221kgCO<sub>2</sub>e/kWh (CCC 2020 Progress Report)) and gas (c28TWh; c6.6MtCO<sub>2</sub>e at intensity of 0.236CO<sub>2</sub>e/kWh (Carbon Trust for EDF in the UK)). No change to customer base assumed; for 2035, energy efficiency assumed as for UK average (CCC Net Zero Technical Report 2019). In line with UK average (National Grid 2020 System Transformation (NG ST) scenario), assuming EDF in the UK supports customers switch to heat pumps (c330k households; +1.4TWh elec, -4.6TWh gas) and EVs (1.4m vehicles; +4.1TWh). This in total reduces customers' gas demand to c21TWh (emissions -26% to 4.9MtCO<sub>2</sub>e) and increases power demand to c16TWh; with reduction in grid carbon intensity to 0.041kg/kWh by 2035

(BEIS UEP 2018), emissions from electricity demand fall to c0.6MtCO<sub>2</sub>e. Supporting the switch to 1.4m EVs allows avoiding 3MtCO<sub>2</sub>e vs. ICEs, based on 14.5m UK EVs (NG ST) or c45% of 2019 total, 10% market share, 95% private mileage incl. commuting (DfT, 2020 Vehicle Mileage and Occupancy), c68.5Mt total UK emissions from cars (2018).

### Sustainable Working ambition

12. Emissions savings compared to collective 2019 GHG emissions footprint of our B2B customers for electricity (33.5TWh; c7.4MtCO<sub>2</sub>e at grid carbon intensity of 0.221kgCO<sub>2</sub>e/kWh (CCC 2020 Progress Report)). No change to customer base assumed; for 2035, energy efficiency assumed as per UK average (CCC Net Zero Technical Report 2019). In line with UK average (National Grid 2020 System Transformation (NG ST) scenario), assuming EDF in the UK supports customers in switching to EVs (123k vehicles; +0.4TWh). In total, these changes reduce our customers' elec demand to c31.9TWh; with reduction in grid carbon intensity to 0.041kg/kWh by 2035 (BEIS UEP 2018), emissions from elec portfolio fall to c1.3MtCO<sub>2</sub>e. The switch to 123k EVs allows avoiding 0.3MtCO<sub>2</sub>e vs. ICEs, based on 14.5m UK EVs (NG ST) or c45% of 2019 total, 17% market share, 5% business mileage (DfT, 2020 Vehicle Mileage and Occupancy), c68.5Mt total UK emissions from cars (2018).

### Data

13. Pod Point data as at 30 June 2021
14. Basis of EDF in the UK's GHG emissions: Analysis based on Greenhouse gas protocol and approach developed with the Carbon Trust and subject to continuous improvement; including 100% of assets consolidated by EDF. 2020 analysis includes Pod Point (based on average-data or investment spend). Includes 50% of lifecycle emissions associated with power purchase agreements (PPAs) with energy-from-waste (EfW) generators. Under the EU ETS, EfW is treated as a part of an integrated renewable disposal option, and EfW qualifies at 50% under the UK Renewable Energy Generator Obligations (REGO). Previously published 2019 emissions included EfW PPA emissions at 100%. Renewables construction emissions accounted for within PPA emissions are spread over the lifetime of each asset, based on Carbon Trust approach (lifetime emissions / kWh output)
15. All 2019 and 2020 data is as at 31 December or calendar year
16. United Nations' Sustainable Development Goals (UNSDGs)





