



Unleashing the green economy

The role of UK business in fast-tracking climate action

Policy Briefing July 2024

The University of Cambridge Institute for Sustainability Leadership

The University of Cambridge Institute for Sustainability Leadership (CISL) is an impact-led institute within the University of Cambridge that activates leadership globally to transform economies for people, nature and climate. Through its global network and hubs in Cambridge, Cape Town and Brussels, CISL works with leaders and innovators across business, finance and government to accelerate action for a sustainable future. Trusted since 1988 for its rigour and pioneering commitment to learning and collaboration, the Institute creates safe spaces to challenge and support those with the power to act.

CISL works across four main areas:



Foresight – We develop pioneering ideas, research and resources for better decision-making and system design.



Education – We empower individuals and organisations to lead change at scale.



Convening – We build transformative alliances across business, finance, and policy.

Innovation – We catalyse entrepreneurial leadership to accelerate solutions to global challenges.

The UK Corporate Leaders Group

The UK Corporate Leaders Group (CLG UK) provides a strong voice to support UK leadership, nationally and internationally, for the transition to a climate neutral, nature-positive and socially inclusive economy.

Copyright

Copyright © 2024 University of Cambridge Institute for Sustainability Leadership (CISL). Some rights reserved. Excluding photographic images, the material featured in this publication is licensed under the Creative Commons Attribution-NonCommercialShareAlike 4.0 International Licence (CC BY-NC-SA 4.0).

Authors and acknowledgements

This briefing was prepared by Harry Greenfield with input from Beverley Cornaby, Viola Meyerweissflog and Serena Liuni.

We would like to acknowledge Julia King, Baroness Brown of Cambridge, UK Corporate Leaders Group members and CISL colleagues for their input, constructive comments and feedback on this publication.



Contents

4
5
6
7
10
10
12
13
14
15
16
17
18
19
20

References		

21

Foreword

by Baroness Brown of Cambridge



We can no longer ignore the reality of climate change. Temperature records are broken with increasing regularity, while UK farmers this year have faced record-breaking rainfall, impacting national food production. The Met Office prediction that climate change in the UK will mean "warmer,

wetter winters and hotter, drier summers"¹ is fast becoming the new normal. This means both much wetter and much drier. The past winter has been almost 30 per cent wetter than average in the UK, conditions which could be typical in the second half of the century, and by 2050 summers will be up to 24 per cent drier as well.

The UK can help to address the climate crisis in three ways: urgently reducing our emissions; taking adaptation measures to deal with the climate impacts already baked into the system; and providing leadership at the global level to support and encourage other countries to be similarly ambitious.

Geopolitical instability makes delivering these goals much harder because global co-operation is more difficult to achieve. Often this instability is itself intwined with climate change, for example global trade has been impacted by drought in the Panama Canal and up to 40 per cent of recent increases in prices of fresh food are climate-related. Even when the root cause is not climate-related, such as attacks by Houthi rebels in the Red Sea and the war in Ukraine, the disruption to supply chains and high inflation make the economic costs of local climate shocks more keenly felt, while eroding support for climate action that appears to further increase the cost of living.

Despite impressive emissions reductions in the UK, further rapid progress is needed to meet our net zero commitments and to build climate resilience. This will require redoubled efforts, particularly in sectors such as power, industry, heating, transport and land use. Investment and technological innovation will be needed, for example to roll out heat pumps and decarbonise industrial processes. This in turn brings opportunities, positioning the UK at the forefront of the global net zero transition and developing new solutions that can be exported. Addressing climate change can bring with it commercial benefits, economic prosperity and sustainable jobs. The development of the offshore wind industry along the UK's east coast, with local manufacturing and control centres in the north-east has reduced male unemployment in Hull by around 50 per cent.

But to tackle the problem, harnessing the opportunities and avoiding the pitfalls of a transition to a net zero and climate resilient economy, requires a partnership between businesses and government. The examples in this document from members of the UK Corporate Leaders Group show leading businesses working hard to turn their climate commitments into tangible delivery of both emissions reductions and improved climate resilience.

This kind of business action requires consistent, robust government policy to send the signals and create the enabling environment for transforming the economy. Public policy can also help ensure that the costs of the transition are distributed fairly between the public and private sectors and the impacts on vulnerable households minimised.

The right policies, and bold political leadership, can allow leading businesses to go further and faster in their climate action and more UK businesses to follow suit. This will unlock the economic rewards associated with this transition while safeguarding the future for our children and grandchildren.

Baroness Brown of Cambridge, DBE FREng FRS FMedSci, June 2024

Introduction to the UK Corporate Leaders Group

The UK Corporate Leaders Group (CLG UK) provides a strong voice to support UK leadership, nationally and internationally, for the transition to a climate neutral, nature-positive and socially inclusive economy.

Our ongoing mission is to offer leadership on the UK economy, by convening significant progressive and credible business voices to show leadership and furnishing them with the intellectual insight and evidence to make the case for action to policy and business audiences.

CLG UK has frequently defined the UK's business response to climate change – one of the greatest challenges of our time. Since its founding in 2005, CLG UK has helped build consensus across the UK business community in support of climate action. It spoke first and loudest in support of the UK's Climate Change Act, and now sits at the heart of a growing community of progressive business voices in Europe and around the world. As a focused cross-sectoral group, CLG UK is able to convene thoughtful and engaged discussions with policymakers, where the challenges and opportunities of securing a sustainable economy can be explored in a setting that is often informal, intimate and in an atmosphere of trust.

The group is united by a commitment to work towards a sustainable and prosperous future. It is diverse enough that its perspectives will not be limited to any one sector or interest. These characteristics and the high-quality facilitation provided by the secretariat allow broader, deeper and more focused engagement with policymakers around the actions required to raise climate ambition, build low carbon policy and drive innovation to deliver a low carbon society.



Current state of UK climate leadership

The UK has long been regarded as a climate leader, boasting significant achievements in decarbonisation. It was the first major economy to pass laws to end its contribution to global warming by 2050² and, from 1990 to 2022, annual emissions were successfully halved³ – a testament to the nation's commitment to avoiding climate change. This success was fuelled by a combination of factors: a robust cross-party political consensus, delivering strong legislation and governance, and a collaborative effort from businesses, the financial sector and government.

It is an unhappy irony that even as the reality of climate change becomes harder to ignore, with extreme weather and its knock-on impacts causing disruption around the globe, the political consensus around addressing it is starting to fray. In the UK and globally, ambitious climate policies are the target of political challenges and in some cases have been reversed. Across the Atlantic, the United States is witnessing a backlash against environmental, social and governance (ESG) policies, while Europe backtracked on green policies in the face of farmer protests. Worldwide, the issue is being exploited for political gain, frequently being used as a divisive issue to try and gain votes, exacerbating the situation.

Moreover, the global race towards achieving net zero emissions is intensifying, putting the UK's leadership position at risk. As other nations accelerate their efforts, investment opportunities are at risk of shifting away from the UK. In the US, the Inflation Reduction Act (IRA) attracted \$110 billion in private investment within its first year.⁴ Similarly, the EU's Green Industrial Plan has leveraged an additional \$45 billion from the European Investment Bank (EIB), and is expected to mobilise over €150 billion in new green investments.⁵ Meanwhile, the hardest leg of decarbonisation still lies ahead, particularly in challenging sectors like agriculture, buildings, and manufacturing, necessitating even greater consistent leadership and implementation efforts.

While some progress can be made in the UK through the implementation of existing policies, there remains a lack of coherent plans in certain areas and the risk that we are not yet on track to meet future climate targets. As the journey towards decarbonisation progresses, the challenges intensify, demanding heightened collaboration, strategic planning, and partnerships between government and business. Furthermore, securing public support becomes increasingly crucial.

Businesses have been at the forefront of driving change, mobilising investment, technology and innovation to achieve the shared goal of net zero emissions. However, this endeavour requires collective action between the public and private sectors. Progressive businesses often encounter obstacles that prevent them from advancing as swiftly and extensively as they would like; these include regulation that can block innovation, difficulty securing investment and cost barriers to change. Overcoming these barriers will require concerted efforts and a renewed commitment to collaboration and innovation.

The next 5 years will determine the UK's success in meeting internationally agreed 2030 climate and nature targets. These include the Nationally Determined Contributions (NDCs)⁶ and the Global Biodiversity Framework (GBF)⁷ targets aimed at halting and reversing nature loss by 2030.

Not only is this an important time to set the UK on the right course to meet international targets and maintain its position as a global leader on climate and nature, but it is also a vital moment for global collaboration between governments and businesses, which can help address these challenges collectively. The UK has played an important role in the past in encouraging global ambition and in convening those who can work through the solutions.

CLG UK's ambition is that it continues to do so. Our role is therefore more important than ever, as climate action, net zero and the environmental agenda all come under more scrutiny. Given this, our core messages for 2024 all centre around our north star: **unlocking UK leadership and maintaining ambition for climate, nature and people**.

Recommendations for unlocking net zero

Use political and business leadership to capitalise on net zero

Net zero is a unique economic and political opportunity. We are likely to see dramatic change between now and 2050 regardless of government policy, with climate impacts and technological changes transforming society and the economy. The transition offers the potential to deliver growth, prosperity and health but poorly managed, with the wrong policies at the wrong times, it could be a far less rosy picture. Political leadership is crucial to navigate the change by providing a clear and consistent steer through ambitious climate policy.

Businesses in the UK are seeking the following:

From government

The government has an important role to play in setting a clear, consistent and long-term strategy that sends reliable signals on where investment is needed (priorities and targets) and how investment requirements of the net zero transition will be met. Policy clarity and certainty inspires business confidence, allowing the private sector to make long-term investment decisions and operational changes. Government can also do more to ensure the over-arching narrative on net zero is clear and consistent. This includes engaging at the sector level, with households and with harder to reach businesses, including small and medium-sized enterprises (SMEs).

From political parties

The cross-party consensus on net zero is in need of repair, building on previous foundations from recent years. Political parties should place net zero and sustainability issues above the political fray again and focus on creating long-term green investment strategies, which require bipartisan buy-in and support the UK in building a stronger economy. While there are different pathways to achieving net zero which can be debated, this should be done on a foundation of scientific evidence, a shared consensus about the goal (net zero emissions by 2050 and climate resilience), and without using the topic for short-term political gain.

From businesses

Businesses can help provide climate leadership and contribute to emissions targets, as is shown in the examples in this document. Choosing where to invest, pushing innovations and using their influence in the supply chain can give businesses power to shift the dial on emissions. Businesses can unlock economic benefits from the climate transition including jobs and economic growth. But to do this, government needs to ensure a level playing field with a regulatory framework and policy context that encourages, enables, supports and rewards aggressive, fast and transformative business action on climate.

Through acting together, emissions reductions can be accelerated, and we can bridge the gap between current delivery and required action to achieve a net zero future.

Deliver a swift, secure and just energy transition

Energy security and achieving net zero are two sides of the same coin. A swift, secure and just transition to a zero carbon energy system will not only help to improve UK energy security but also serves as a key interdependency for the decarbonisation of many other sectors of the economy.

We need to address both energy supply and demand. This means ramping up deployment of renewables and low carbon energy, as well as ensuring our energy infrastructure is fit for purpose while securing supplies of critical materials for renewable energy. At the same time, reducing demand for energy through energy efficiency measures will help deliver net zero and energy resilience. A series of stronger, clearer and more actionable policies from government would help deliver the energy transition needed, including:

- Accelerate renewables and make the UK a renewables powerhouse: unleash our world-leading offshore wind potential and scale up the development of emerging technologies such as carbon capture, utilisation and storage (CCUS), green hydrogen and battery storage.
- Set an end to new oil and gas projects.
- Modernise the grid: fast-track investment in electricity networks to turbocharge green economic growth across all regions.
- Reform the retail energy market, enabling consumers to make low carbon choices, including rebalancing the price of electricity vs gas.
- Build new flexible capacity: revitalise UK industrial heartlands by pioneering clean, flexible energy technologies.

Support greening of key economic sectors

While a net zero energy sector will go a long way to meeting our climate targets, it is of course not enough. Each sector is developing its own pathway to net zero and will require a tailored policy package to support this. The examples below show how policy can support the transition in relation to the climate action businesses are taking outlined in the remainder of this document.

Industry

A long-term decarbonisation strategy is needed for industry without further off-shoring of UK industry and manufacturing. Policies could include:

- Support the rollout of data and digital tools to support industrial decarbonisation.
- Design policies to support low carbon products and materials in the foundation industries, such as by creating demand, encouraging innovation and supporting international collaboration.

Built environment

Significant focus is needed on the built environment, including retrofitting, embodied carbon regulation and energy-efficient building requirements, stressing the importance of considering whole life carbon in manufacturing and construction. Policies could include:

- Incorporate Indoor Environmental Quality (IEQ) in policy aimed at making buildings more sustainable, including consideration of occupant comfort.
- Consider the (embodied) energy demands for manufacturing, constructing and demolishing buildings in building regulations as well as the operational energy demands, given that buildings account for 40 per cent of global carbon emissions.
- Elevate the energy efficiency of Britain's homes to a vital national infrastructure priority. Greater policy support for home energy efficiency improvements, including acceleration of energy performance certificate (EPC) reforms and fiscal incentives for home retrofits.

Water

Government can encourage and facilitate the adoption of sustainable water management practices through targeted regulations and incentives. Policies could include:

• Increase funding for research into advanced treatment technologies to further reduce greenhouse gas emissions from water recycling processes.

Agriculture

As emissions from other sectors decrease, agricultural emissions are becoming a relatively higher proportion of total UK emissions. The government can continue its reform of agricultural policy with policies including:

- Provide an agriculture decarbonisation and nature strategy and the Land Use Framework.
- Develop a standardised, government-backed methodology for measuring farms' environmental impact.
- Take action to unblock barriers to flows of green finance to farmers, including around lending for new technologies and engagement with Voluntary Carbon and Nature Markets.

Bring together the climate and nature agenda

Integration of nature and climate frameworks is vital to address environmental challenges holistically, incentivise businesses for nature-based solutions, elevate biodiversity, and create unified approaches to climate and nature-related concerns. This will include unifying the policy and business agendas for climate mitigation, adaptation and nature recovery.

The UK's 2030 Strategic Framework for International Climate and Nature Action gives a taste of how such joined-up policy might look, bringing together three departments (Department for Energy Security and Net Zero, Department for Environment, Food & Rural Affairs, and Foreign, Commonwealth & Development Office) to address these issues at the international level. A similar approach for domestic policy and within businesses would help capitalise on the synergies between climate and nature action and avoid policy or departmental silos.

Implement enabling policies for net zero and climate resilience

To keep the UK on track to achieving its net zero targets and a competitive economy based on green growth, cross-sectoral and cross-government leadership is needed. Addressing the following cross-cutting levers could unlock action across the economy:

- Fair funding and affordability: ensuring the costs of the net zero transition are fairly shared between households, businesses and government.
- **Skills and jobs:** delivering the skills and jobs needed for net zero and ensuring a just transition.
- **Finance and investment:** ensuring the right investment levels to deliver net zero.
- **Innovation:** creating the enabling conditions for innovation and ensuring results are mainstreamed into the economy. This should include policies to harness the role of artificial intelligence (AI) for sustainability.

- Infrastructure: ensuring that infrastructure needs are anticipated, investment unlocked and barriers to net zero infrastructure removed, including reform of the planning system.
- Harmonise reporting standards: advancing harmonised, best-in-class standards of ambition, transparency and disclosure for corporate climate action in order to provide clarity and stability for businesses.



Further reading

UK Corporate Leaders Group (2023), 'Leading the Way: Identifying the actions government can take to accelerate UK climate action across the economy', https://www.corporateleadersgroup.com/reportsevidence-and-insights/collections/reports/leading-wayidentifying-actions-government-uk-climate-actionacross-economy

UK Corporate Leaders Group (2023), 'UK Policy: Climate Adaptation and Resilience Advocacy Toolkit', https://www.corporateleadersgroup.com/reportsevidence-and-insights/uk-policy-climate-adaptationresilience-advocacy-toolkit

UK Corporate Leaders Group (2022), 'The Best of Both Worlds: How tackling cost-of-living and decarbonisation creates win-wins for the UK economy', https://www.corporateleadersgroup.com/best-bothworlds-how-tackling-cost-living-and-decarbonisationcreates-win-wins-uk

Businesses leading the way

The remainder of this document showcases business members of CLG UK and whatthey are doing in their own organisations to drive forward climate action. These examples show what is already possible and demonstrate what a transformation of the UK economy could look like if more businesses adopted these approaches.

1. Amazon

Amazon is a major contributor to the UK economy, investing more than £56 billion in their operations since 2010. Amazon is committed to becoming net zero carbon across their operations by 2040. To achieve this, they are:

- on a path to powering their operations with 100 per cent renewable energy by 2025
- investing £300 million to decarbonise their transport fleets
- investing in technologies and developing public facing guidance to address the embodied carbon in their buildings
- working to reduce waste across their operations and from the products they sell, prioritising resell, recycle or donate
- committing funding to nature-based solutions.



Renewable energy deployment

Amazon has 29 operational on-site solar projects and has enabled seven large-scale offsite renewable energy projects, with a capacity of more than 900 MW in the UK. Once all projects are operational, they are expected to generate enough energy to power the equivalent of more than one million UK homes annually. These projects also supported 600 local, full-time equivalent jobs in 2022 alone.

To support the deployment of renewables, Amazon Web Services and WindEurope have developed a pilot tool to digitise the permitting process for wind projects. The tool, EasyPermits, simplifies and expedites permitting approvals, offering a solution to decarbonise the grid network faster.

Logistics electrification

Amazon expects to roll out more than 700 electric heavy goods vehicles (eHGVs) in the UK in the coming years. They already have over 1,000 electric vehicles (EVs) on the road, along with six micro mobility hubs for e-cargo bikes and on-foot deliveries, enabling them to make around 2.5 million deliveries in the UK every year via lower- or zero-emission methods of transport.

They have launched an open-source technology tool – Charging Location for Electric Trucks (CHALET) – supporting industry, governments, electricity network operators and local authorities to determine where electric charging points for eHGVs should be built.

Investing in nature

As part of Amazon's \$100 million Right Now Climate Fund, set up to protect wildlife habitats, biodiversity and quality of life for communities, they have committed £2.8 million for the Woodland Trust's Emergency Tree Fund and the London Wildlife Trust and Mayor of London's Rewild London Fund.

These projects will help plant over 450,000 trees across six UK local authorities and support more than 20 critical rewilding projects. These include reintroducing beavers and harvest mice, helping to combat the impact of the climate crisis and create a biodiverse ecosystem, encouraging plants and animals to thrive.



www.sustainability.aboutamazon.com/

www.wildlondon.org.uk/news/harvest-mice-have-beenreturned-perivale-wood-west-london-first-time-45-years





2. Anglian Water

Anglian Water has been a leader in the water industry for carbon reduction, beginning their decarbonisation journey in 2010. Committed to reaching net zero carbon emissions by 2030, the company integrates innovative and sustainable practices across their operations. Anglian Water's efforts align with global and national climate goals, aiming to significantly reduce greenhouse gases and enhance climate resilience across the East of England – a region particularly vulnerable to climate change impacts.

Anglian Water's climate action

Constructed wetlands for sustainable sewage treatment

Anglian Water manages the treatment and recycling of about a billion litres of sewage daily. Traditional sewage treatment is energy and carbon intensive, and expanding treatment facilities to meet increasing demand is costly. Seeking a sustainable alternative, Anglian Water has explored the use of constructed wetlands as a natural treatment solution. In collaboration with the Norfolk Rivers Trust, Anglian Water transformed the edge of a farmer's field along the River Ingol into a series of four ponds designed to naturally treat sewage water. The primary function of these ponds is to remove ammonia and other chemicals before the water is reintegrated into the river system. The result has been a significant reduction in energy and carbon usage compared to conventional sewage treatment methods; cost savings, which help to keep customer bills lower; and the creation of new habitats that support local biodiversity. Plans are now underway for additional wetland constructions across the region.

Satellite technology for leak detection

Anglian Water operates a water network extensive enough to stretch from the UK to Australia and back. Given the rural and remote nature of much of this network, traditional leak detection methods are often inadequate. With the region being the driest in the UK and facing increasing temperatures and climate variability, the company has prioritised advanced technological solutions to manage their water resources effectively.

In December 2022, Anglian Water began employing satellite technology to enhance their leak detection capabilities. This technology, provided by ASTERRA in partnership with SUEZ, uses satellite pulses to detect the specific backscatter signature of drinking water beneath the Earth's surface, indicating potential leaks. The satellite technology has led to a daily saving of over two million litres of water, enough to supply 8,000 homes in the region. Enhanced leak detection has allowed for quicker repairs, reducing water loss and associated costs and environmental impacts.

Methane emission reduction in wastewater treatment

Methane is recognised as the second most important greenhouse gas globally, contributing to 25 per cent of current global warming. Anglian Water acknowledges the urgent need to reduce methane emissions, especially from their wastewater treatment facilities, where such emissions are concentrated. Starting in 2019, Anglian Water invested in advanced anaerobic digestion technology at their bioresources sites, which has significantly cut methane emissions. These efforts have reduced methane emissions by approximately 55,000 tonnes of CO₂e annually compared to older, less efficient systems. This reduction exceeds the current annual methane emissions, showcasing the effectiveness of the investments. The company has proposed further investments of £153 million to mitigate operational greenhouse gas emissions between 2025 and 2030, focusing on maximising methane collection and utilisation, minimising leaks and optimising technology at methane-generating plants.

www Further reading

www.anglianwater.co.uk/corporate/about-us/our-purpose/



3. AVEVA

Headquartered in Cambridge, AVEVA is a global leader in industrial software, sparking ingenuity to drive responsible use of the world's resources. Over 20,000 enterprises in more than 100 countries rely on AVEVA to help them deliver life's essentials: safe and reliable energy, food, medicines, infrastructure and more. By connecting people with trusted information and AIenriched insights, AVEVA enables teams to engineer efficiently and optimise operations, improving efficiency, circularity, traceability and resilience.

Their customers are using AVEVA software to drive industrial sustainability and the energy transition in multiple ways, including emissions reductions, carbon capture and storage, advancing the hydrogen economy, optimisation of biofuels production, and supporting renewable energy generation, transmission and management.



Aveva's climate action

Keeping renewable electricity flowing with AI

AVEVA's predictive analytics software enables Enel, a global leader in renewable power, to optimise the performance and reliability of their power generation business. The savings in operational costs help to lower the cost of lower carbon energy.

Accelerating the global clean hydrogen economy using process simulation software

AVEVA software is enabling engineers at Topsoe, a Danish leader in energy decarbonisation, to design and optimise their green hydrogen electrolysers with increased speed and efficiency. Accelerating the engineering cycle of pioneers like Topsoe, so that innovations can be executed fast and deliver greater carbon reductions, is critical in reducing the capital costs of emerging green technology.

Using big data to drive sustainability

German consumer goods leader Henkel is deploying AVEVA's software to obtain real time visibility over the energy consumption of their global operations. Using machine learning, Henkel has been able to reduce the energy intensity of their processes, resulting in a reduction of over 16 per cent in their energy use in the past few years – equivalent to the combined daily energy use of two European capitals: Amsterdam and Vienna.

Improving design and performance of offshore wind

German engineering leader Schlattner used AVEVA's design and engineering solutions in constructing the ultra-heavy-weight steel foundations for the wind turbines that now supply much of Germany's wind power. Each weighing three times more than the Eiffel Tower, these enormous tripod foundations had to be sufficiently robust to withstand the rough North Sea. Norwegian energy company Equinor is also using AVEVA's solutions in their offshore wind projects, to gather data from turbines across their entire fields, feeding meteorological data and AI into the system to optimise energy production and storage.

Digital innovation in biofuels

Neste, the world's leading producer of renewable diesel and sustainable aviation fuel, is using AVEVA's supply chain optimisation software across 80 sites to reduce emissions, streamline production of renewable diesel and schedule renewable credits.



www.aveva.com/en/about/sustainability/



4. EDF

As the UK's largest zero carbon electricity producer, EDF is leading the way in the transition to a cleaner, electric future. With five nuclear power stations and upcoming projects like Hinkley Point C and Sizewell C, they are committed to sustainable energy generation. As a major investor in renewables, EDF operates over 30 onshore and two offshore wind farms, with 1.5 GW in operation and almost 14 GW in planning or development, including solar and battery storage. EDF is also helping customers to decarbonise, being a key energy supplier to British businesses and households and a pioneer in innovative energy solutions. Their energy services branch, Dalkia, is a major technical service provider in the UK and Ireland. EDF is proud to be a part of the EDF Group, the world's largest electricity generator.



Helping customers to save cash and carbon, and use energy efficiently

EDF is delivering solutions to help British households, businesses and the public sector to achieve net zero, including onsite photovoltaics (PV), electric mobility, low carbon heating, flexibility services, and metering and data services. In 2022, EDF acquired CB Heating, boosting upskilling of heat pump engineers across the UK. More recently they acquired solar panel and battery installer Contact Solar, moving them one step closer to being able to offer 'whole house' net zero home offers, combining solar, battery, EV charge points and heat pumps. They have also launched the UK's first heat pump tracker tariff, helping customers to achieve greater savings by shifting consumption to off-peak windows.

Developing zero carbon generation and supporting UK energy security

Twenty-five years ago, EDF embarked on their journey to become a long-term partner to Britain.

In those years they have invested over £25 billion, and by 2035 will go even further, enabling £50 billion to develop 15 GW of zero carbon electricity – wind, nuclear and solar. EDF has launched ground-breaking projects, forged important partnerships and pioneered innovative technology, such as Blyth offshore wind farm. The demonstrator project has delivered UK firsts and, together with their proposed Blyth 2 project, it is now well positioned to unlock the significant benefits of floating offshore wind, which is predicted to play a vital part in the UK achieving its net zero ambitions.

Hinkley Point C – new skills, better jobs

EDF is re-establishing the UK's nuclear capability through their new nuclear project at Hinkley Point C. The skilled workforce being trained and developed at Hinkley Point C is helping to overcome nationally significant skills gaps that represent a risk to delivering net zero as a whole, while powering growth throughout the UK. So far, 23,500 jobs have been created at Hinkley Point C, and the project has helped young people stay and thrive in the local area, with a 25 per cent growth in younger people aged 25–39. The project has invested £24 million into education, skills and employment, with three new centres of excellence now up and running. They specialise in welding, electrical skills and mechanical engineering; 8,000 people have been trained, with almost one third of those being trained today from some of Britain's most deprived areas. Over 1,300 apprentices have been trained so far. Find out more in their latest Socio-economic Impact Report.



www.edfenergy.com/manifesto

www.edfenergy.com/energy/nuclear-new-build-projects/ hinkley-point-c/realising-socio-economic-benefits

5. GSK

GSK is a global biopharma company with a purpose to unite science, technology and talent, to get ahead of disease together and positively impact the health of 2.5 billion people by the end of 2030. GSK is committed to a net zero, nature-positive, healthier planet, with ambitious goals set for 2030 and 2045. These aim to address their impacts across their entire value chain, from drug discovery to disposal of their products. They are also investing in research and development (R&D) for medicines and vaccines for climate aggravated, infectious diseases which disproportionately impact the most vulnerable communities.



Investing in renewable energy

As a member of the RE100 initiative, GSK has committed to reach 100 per cent of their imported electricity from renewable sources by 2025 and 100 per cent of all electricity they generate and import from renewable sources by 2030. To support this goal, GSK is investing in wind turbines and solar energy at five of their manufacturing facilities across the UK. In addition, they signed a power purchase agreement to source renewable electricity to cover 50 per cent of their electricity demand for their sites in Europe from mid-2026.

Innovating to reduce emissions from medical products

GSK's rescue metered dose inhaler (MDI) medication is an essential medicine prescribed to approximately 35 million people with respiratory conditions worldwide. Patient use of this inhaler, due to the current propellant, accounts for just under half (48 per cent) of their carbon footprint. They are investing in a low carbon programme with the potential to reduce greenhouse gas emissions from the inhaler by 90 per cent by transitioning to a next generation, lower carbon propellant. Phase III trials will begin in 2024 and, if successful, regulatory submissions will start in 2025. This is to supplement their existing low carbon dry powder inhalers.

Supporting women and nature

As part of GSK's nature strategy, they are a founding partner of the Women + Water Collaborative in India, working with the Water Resilience Coalition, an initiative between the UN Global Compact and The Pacific Institute. This programme brings together companies from different sectors to leverage women's leadership to improve access to clean water and sanitation, ultimately supporting the health of local communities.



www.gsk.com/en-gb/responsibility/

www.gsk.com/media/10528/nature-reportseptember-2023.pdf



6. Lloyds Banking Group

Lloyds Banking Group provides financial services to 27 million customers in the UK. They help millions of customers – individuals, families and businesses – to spend, save, borrow and invest and help Britain prosper.

Lloyds recognises that they have an important role to play in creating a more sustainable and inclusive future for people and businesses, by shaping finance as a force for good. Their lending, investments, products and services are powerful contributors to this transition, as well as enabling the Group to grow profitably with their customers.



Supporting British farmers' transition to sustainable agriculture

Under their commitment to help British farmers deliver a sustainable transition in agriculture, Lloyds has partnered with the Soil Association Exchange, a new service which helps UK farmers measure and improve their environmental impact. There is a free, online or app-based version of Exchange which any British farmer can use; and the option of a bespoke on-farm consultancy service, which provides tailored advice. Lloyds is funding bespoke on-farm consultancy for up to 1,000 British farmers. The service helps farmers identify actions to improve their sustainability, profitability and productivity, and signposts sources of funding that they can use to make changes, and access reward for doing so. It focuses on six areas: biodiversity, soil health, carbon, animal welfare, water quality and wider social impacts.

The partnership underscores the need for shared responsibility among the supply chain, finance and wider industry to support farmers in this crucial transition, both in terms of knowledge and finance.

Incentivising energy efficiency in the UK's homes

Lloyds' home owning customers have told them that cost is the biggest obstacle that prevents them from making energy efficiency improvements.

To help overcome this barrier to action, Lloyds' green mortgage range offers financial rewards for purchasing more energy efficient homes – cashback for residential properties EPC band A–B, and an interest rate discount for buy-to-let purchases with EPC band A–C.

In addition, their Green Living Reward product offers residential customers (Lloyds and Halifax) up to £1,000 cashback for making eligible improvements, which when used in conjunction with the Government's Boiler Upgrade Scheme reduces the up-front cost of heat pump installation to a price comparable with that of a gas boiler for the majority of customers. This offer is enhanced by their strategic partnership with Octopus, which offers customers a co-branded journey to a trusted heat pump installer and retrofit supplier.



www.lloydsbankinggroup.com/who-we-are/ sustainability.html



7. Salesforce

Salesforce is a cloud-based enterprise software company and has been operating in the UK since 2004. Their products make it easier for companies of all sizes, and in all sectors, to manage and improve their relationships with customers. Their sustainability vision is to leverage the full power of Salesforce to accelerate their customers' journey to net zero emissions with Net Zero Cloud, lead the nature-positive movement through 1t.org, invest in the ecopreneur revolution, and drive the energy transition to halve global emissions by 2030 while reducing Salesforce's value chain emissions by 50 per cent by FY31.



Investing in renewable energy

Salesforce has achieved net zero residual emissions across scope 1, 2 and 3 emissions, and reached 100 per cent renewable energy by utilising renewable energy or renewable energy certificates that are equivalent to the electricity they use globally on an annual basis. They prioritise emissions reductions and compensate remaining emissions with carbon credits, primarily from nature-based solutions and technology.

Salesforce believes every organisation has its own core competencies or 'superpowers' to drive climate action at scale. For Salesforce, it is putting technology into the hands of customers to help them navigate successfully into the future. With Net Zero Cloud they are enabling organisations like AT&T, Clif Bar, Crowley Maritime, Cushman & Wakefield, Deloitte Germany, JetBlue, Mastercard, MillerKnoll, South Australian Government, TELUS, Werner Enterprises and others to accelerate their sustainability journeys. Salesforce's Nature Positive Strategy, rooted in people and climate justice, focuses on reducing their impact on nature, protecting and restoring nature at scale with 1t.org, and supporting customers on their net zero, nature-positive journey. As a founding member of 1t.org, the global movement to conserve, restore, and grow healthy forest ecosystems by 2030, Salesforce pledged to fund 100 million trees by the decade's end. They are proud to have funded 52+ million trees. Follow their progress here.



www.salesforce.com/company/sustainability/

www.salesforce.com/content/dam/web/en_us/www/ assets/pdf/reports/carbon-markets.pdf?d=cta-bodypromo-1/?nature-crisis/?d=cta-body-promo-8

www.salesforce.com/content/dam/web/en_us/www/ documents/white-papers/nature-positive-strategy.pdf

https://trees.salesforce.com/



8. ScottishPower

ScottishPower is a major UK energy company with renewable generation, retail supply and networks businesses; they are a leading developer of wind power in the UK, and part of the Iberdrola Group, a world leader in renewable energy sources. Iberdrola is a global leader in tackling climate change, with a commitment to reaching net zero before 2040. ScottishPower is the UK's first major integrated energy utility to be generating 100 per cent renewable electricity, and they are committed to supporting their 4.5 million plus gas and electricity retail customers to make greener choices as part of the journey to net zero.

ScottishPower's climate action

Driving action on the UN Sustainable Development Goals

In 2023, ScottishPower launched their Sustainable Development Strategy Action 2030. As part of the global Iberdrola Group, ScottishPower has matched their purpose to the UN Sustainable Development Goals (SDGs) and embedded them throughout their business strategy. As a clean, renewable energy utility serving millions of customers across the UK, employing thousands of staff and investing billions of pounds in the UK economy, they recognise the responsibility to use every opportunity they can to contribute to the global effort to meet the UN SDGs.

ScottishPower's twin focus is on delivering affordable clean energy and taking action on the climate. Two SDG goals link directly to ScottishPower's purpose and are the areas where they have the potential to make the greatest impact. These are SDG7, affordable clean energy, and SDG13, climate action. These goals match their business ambitions to generate renewable energy, connect to their customers, and provide them with the solutions that allow them to cut the environmental footprint of their homes and businesses. However, ScottishPower does not pursue these ambitions in isolation; their efforts to power an energy revolution and tackle climate change are also the levers for responding to the nature crisis, enabling a just transition and much, much more.

ScottishPower has set targets from their Science Based Targets initiative climate targets to commitments on turbine blade recycling, sustainable supply chain, being nature positive, mental health training, green skills, the circular economy and much more.

Supporting solutions through collaboration

They see the pressing need for collaboration across the sector if they are to drive forward the solutions we need to see. For example, ScottishPower is a founding member of the Scottish Business Climate Collaboration and has developed a free-to-use training platform for the SME sector to upskill on all things climate and build their own size-appropriate climate action plan. They are also an active member of the Low Carbon Concrete Ecosystem partnership and are working alongside others in the infrastructure space to explore alternatives to high carbon footprint carbon.



www.scottishpower.com/pages/sustainability.aspx

9. SSE

SSE is a UK FTSE 100 energy company headquartered in Scotland. Their strategy is to create value for shareholders and society from developing, building, operating and investing in the electricity infrastructure that is vital to the clean energy transition, including onshore and offshore wind, hydro power, electricity transmission and distribution networks, power stations, carbon capture and hydrogen storage, solar and batteries, as well as providing energy products and services for businesses and customers. Sustainability is one of SSE's core values, defined as 'we do the right thing for people and the planet'. They are committed to being operationally net zero by 2050.



A just transition for workers

Since publishing its Just Transition Strategy in 2020, SSE has focused on practical actions to promote a fair and just transition of working people into good, green jobs as it expands its workforce in response to the net zero challenge. SSE has been including a question on the worker transition within its annual all-employee engagement survey to understand the true nature of the transition within its workforce. The results of the most recent survey in September 2023 highlight that just over one in four employees had already transitioned from a high carbon role to a low carbon career with SSE.

Collaborating for a circular economy in wind

The University of Strathclyde, SSE Renewables and Renewable Parts established the Coalition for Wind Industry Circularity (CWIC) in March 2023. In a net zero world with global supply chain challenges, CWIC seeks to bring together the UK wind sector to create a supply chain for the refurbishment and reuse of wind turbine components within the UK. To date, over 40 organisations have committed to working as part of CWIC to unlock the skills, technology and infrastructure required to enable this emerging industry.

Delivering biodiversity net gain in development projects

To target enhanced value for nature, SSE has made a commitment to achieve biodiversity net gain on all its large, onshore, capital projects. Recognising that this is a complex target to achieve, it is specifically working to ensure that all projects consented from 2023 onwards achieve no 'net loss' in biodiversity, and for those projects consented after 2025, to achieve 'net gain'. In preparation to monitor and report against the 'net loss' in biodiversity target this year, several SSE businesses have been developing methods to measure and baseline their biodiversity units.



www.sse.com/sustainability/



10. VELUX

Established in 1941, VELUX is a leading manufacturer of roof windows, rooflights and accessories. Its UK & Ireland business opened in 1954 and is based in Glenrothes, Fife. In 2020, the company set ambitious targets to reduce their own carbon emissions and halve that of their supply chain, both by 2030. They also set out to capture the equivalent of their historical operational carbon emissions by 2040, through forest restoration in collaboration with WWF.

The VELUX Group is part of VKR Holding A/S, which is owned by the Villum Foundation and Kann Rasmussen family. Ninety per cent of profits are distributed for philanthropic causes through the VELUX Foundations.



Leadership in showing how to build affordably and sustainably

As part of their ambition to show how to build sustainably, VELUX opened Living Places Copenhagen. This is a prototype village with affordable family homes that have a third of the embodied carbon of a typical Danish family home. They are estimated to have around a sixth of the embodied carbon of a UK house. Visitors from across the world have been visiting to be inspired and implement the findings in their projects and local policy. Importantly, the homes are focused on the occupants, showing optimal indoor comfort for things like daylight, fresh air and thermal comfort, as well as low operational and embodied carbon.

In addition, since 2020 VELUX has been implementing its ambitious sustainability plans. It has now redeveloped the packaging of its main roof window product to be zero plastic, and agreed long-term supply arrangements with two recycled aluminium suppliers.



https://buildforlife.velux.com/en/livingplaces

https://sustainability.velux.com/



References

- 1 Ayesha Tandon, "Analysis: How UK winters are getting warmer and wetter," Carbon Brief, February 16, 2024, https://www.carbonbrief.org/analysis-how-uk-winters-are-getting-warmer-and-wetter/.
- 2 "UK becomes first major economy to pass net zero emissions law," GOV.UK, June 27, 2019, https://www.gov.uk/government/news/uk-becomes-first-major-economy-to-pass-net-zero-emissions-law.
- 3 "UK first major economy to halve emissions," GOV.UK, press release, February 6, 2024, https://www.gov.uk/government/news/uk-first-major-economy-to-halve-emissions.
- 4 "Fact Sheet: One Year In, President Biden's Inflation Reduction Act is Driving Historic Climate Action and Investing in America to Create Good Paying Jobs and Reduce Costs," The White House, press release, August 16, 2023, https://www.whitehouse.gov/briefing-room/statements-releases/2023/08/16/fact-sheet-one-year-in-president-bidensinflation-reduction-act-is-driving-historic-climate-action-and-investing-in-america-to-create-good-paying-jobsand-reduce-costs/.
- 5 "EIB to support Green Deal Industrial Plan with €45 billion in additional financing," European Investment Bank, July 12, 2023, https://www.eib.org/en/press/all/2023-270-eib-to-support-green-deal-industrial-plan-with-eur45-billion-in-additional-financing.
- 6 For more information on the UK's NDCs see CLG UK's Business Briefing: *The UK's Nationally Determined Contribution: Setting an ambitious climate change target for 2030* (CLG UK, 2020), clg-business-briefing-uk-ndc.pdf (corporateleadersgroup.com. See also: "Nationally Determined Contributions (NDCs)," UNFCCC, accessed May 9, 2024, https://unfccc.int/process-and-meetings/the-paris-agreement/nationally-determined-contributions-ndcs.
- 7 See "2030 Targets (with Guidance Notes)," Convention on Biological Diversity, accessed May 9, 2024, https://www.cbd.int/gbf/targets.



Cambridge insight, policy influence, business impact

The University of Cambridge Institute for Sustainability Leadership (CISL) brings together business, government and academia to find solutions to critical sustainability challenges.

Capitalising on the world-class, multidisciplinary strengths of the University of Cambridge, we deepen leaders' insight and understanding through our executive programmes; build deep, strategic engagement with leadership companies; and create opportunities for collaborative enquiry and action through our leadership groups.

Over the past 30 years we have built a leadership network of over 40,000 leaders and practioners from business, government and civil society, who have an impact in every sector and on every continent. Their experience and insights shape our work, which is further underpinned by multidisciplinary academic research.

His Majesty King Charles III is CISL's Royal Founding Patron and has inspired and supported many of the Institute's initiatives, during his time as the Prince of Wales.

Head office The Entopia Building 1 Regent Street Cambridge CB2 1GG, UK

T: +44 (0)1223 768850 info@cisl.cam.ac.uk **Brussels** Sustainable Hub Rue du Commerce 72, Brussels 1040 Belgium

T: +32 (0) 2 894 93 19 info.eu@cisl.cam.ac.uk Cape Town Workshop17 NCG 146 Campground Road Newlands 7780 Cape Town, South Africa

T: +27 (0)21 300 5013 info.sa@cisl.cam.ac.uk

www.cisl.cam.ac.uk

@cisl_cambridge