

An illustration on a dark blue background. In the upper left, there are three stylized clouds in shades of purple and white. On the right, a large sun is depicted with concentric circles in shades of orange and yellow. In the foreground, there are five stylized human figures of varying heights and colors (teal, dark teal, white, light blue, dark teal) standing on a light purple ground.

# A Vision for a Strong, Sustainable UK Economy



**THE PRINCE OF WALES'S**  
**CORPORATE LEADERS GROUP**

**The Prince of Wales's Corporate Leaders Group (CLG)** is a select club of European business leaders working together, under the patronage of The Prince of Wales and with the support and advice of the University of Cambridge Institute for Sustainability Leadership, to advocate solutions to climate change to policy makers and business peers at the highest level, both within the EU and globally.

The CLG works in partnership with others and has co-founded the Corporate Leaders Network, the Green Growth Platform and the We Mean Business coalition.

CLG members actively working on UK engagement and leadership include:



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### **Rewiring the Economy: Ten tasks, ten years, another future**

Business thrives on a clear, long-term plan, yet the ability of the world's business leaders to plan for the future is undermined by a dramatic set of global challenges which remain unaddressed: inequality is rising, greenhouse gas emissions are rising, water and natural resources are becoming scarcer, and the responses to all of these are not yet clear. The global economy has proved its ability to drive innovation, but in key respects is unsustainable; its necessary reforms discussed but not delivered.

In 2015 – a year which sees the climax of a number of international discussions to agree new approaches to these global challenges – the University of Cambridge Institute for Sustainability Leadership is seeking to harness the power of its network and the lessons learned during its 26 year history to develop a new ten year, ten point plan to rewire the global economy. Designed for business, policy and financial leaders, the plan will identify the steps necessary to ensure capital flows into sustainable business models. In developing it, CISL will draw on the insights and achievements of its leadership, groups including The Prince of Wales's Corporate Leaders Group.



# The Case for Action

Low carbon goods and services employ nearly 1 million people in the UK, and are worth over £120bn from a global market worth £3.3trillion.<sup>1</sup> This is growing - for example overall investment in clean energy in 2014 rose 3% in the UK to £10bn.<sup>2</sup>

Over the next 15 years nearly £60trillion will be invested in global infrastructure in urban, land-use and energy systems. Resource efficiency, infrastructure investment and innovation are key drivers of a new low-carbon growth model.<sup>3</sup>

The UK can reverse its relative economic decline if it is able to achieve stable planning, a strategic vision and a political consensus on the right policy framework to unlock investment in skills, infrastructure and innovation.<sup>4</sup>

<sup>1</sup> 'Low Carbon & Environmental Goods & Services', Department of Business Innovation & Skills, July 2013

<sup>2</sup> 'Rebound in clean energy investment in 2014 beats expectations', Bloomberg New Energy Finance, 9 January 2015 - \$15.2bn figure converted to sterling.

<sup>3</sup> 'Better Growth, Better Climate', The Global Commission on the Economy and the Climate, September 2014

<sup>4</sup> 'Investing for Prosperity', The LSE Growth Commission, September 2013

# A Vision for a Strong, Sustainable UK Economy

As business leaders, our interests are aligned with the future of the UK economy, and we believe that that the future could be bright. The UK has world-leading expertise and capacities in innovation, engineering, finance, and business that provide the foundation for leading the global transition to a sustainable, resilient and low carbon economy that would create jobs, prosperity and growth.

As major UK businesses, we are playing our role by investing in new low-carbon infrastructure, goods and services, but a new economy will only be realised if government actively works with us to deliver this transformational change. This means a strong and stable policy framework, consistent rhetoric, and making the right choices about the infrastructure we plan to build, the way we intend to run it, and the incentives faced by business.

## **Building the New Business As Usual**

Looking to the future, it is clear that resource scarcity, energy security, climate change and in particular increased extreme weather are real and growing threats to the long-term viability of business, and to the security and prosperity of the public. A fundamental structural transformation of the UK economy is required to ensure that the UK develops new resilience, redoubles its economic strength, and is well positioned for the new risks, the new opportunities and the uncertainty that lie ahead. Undertaking this change in the right way, could ensure that the UK takes a leading position in the sustainable industries, techniques and technologies of the future.

The UK should commit to this transformation, and align strategies across government under this goal. There are businesses, including our own, that are already investing to help grow and transform the UK economy and that will be able to do more if presented with a credible pathway to a sustainable future. We look to government to reaffirm that it understands the implications of climate change science and set a long term, stable strategy and policy framework which will enable us to invest and act.



### Driving the vision into action

There are four key characteristics of a prosperous and sustainable economy:

1. A secure, efficient and decarbonised power sector
2. A resilient, efficient and low carbon built environment
3. An integrated and secure transport system that enables ultra-low carbon choices
4. Sustainable consumption patterns that are supported and encouraged by policy frameworks, business models and supply chains

Business and government are already working to unlock these priorities, but a more sustained and ambitious strategy is required. A greater collaborative effort between business, academia and government, and better deployment of limited financial resources will be needed to unlock the new home-grown technological solutions to these challenges – but success offers a breakthrough in delivering the solutions to global challenges and strengthening the UK economy, whilst keeping goods and services affordable and accessible.

This is an agenda that will deliver new business opportunities, develop new markets, create jobs and drive innovation. Business can provide goods and services that deliver wellbeing and prosperity but are also carbon, resource and energy efficient. To deliver this successfully UK businesses need to be on a level playing field with businesses in other economies and there should be support and encouragement for those able to innovate ahead of the crowd.

Commitment is required from across society – business and government need to work together, alongside academia and wider society - creating a vision of the future UK economy that everyone can participate in and support.

# Case Studies

As members of the **Corporate Leaders Group** we are all playing our part in driving the transition to a low carbon, resilient, and sustainable economy in the UK and across the world. We are active across most major sectors of the economy, and, as these case studies illustrate, across the board we have found that action to reduce emissions can deliver growth as well as emission reductions and benefits to consumers. However, government support has been key to much of the progress we have been able to deliver; shifting the transition up a gear will only be achieved with a clear and ambitious vision driving a long-term and consistent policy framework across Government.



## Kingfisher: Delivering comfortable, low carbon homes

Household energy use is responsible for 27% of the UK's carbon emissions, and energy bills have become a major concern across Europe. Cutting energy use is the simplest and most cost-effective to address these problems. By 2020 the European market for energy efficient products could be worth €70bn, which would be a win for business, a win for householders and a win for the environment.

Kingfisher plc's ambition is that all our stores and customers' homes are zero carbon or net generators of energy. That's why we are developing market-leading products that give householders greater control over their home energy use, such as the

range of smart products. The iQE range has been created in collaboration with leading product manufacturers, trade installers and academia, and has seen the launch of the iQE Simplicity A-rated gas boiler - the first to carry the Energy Efficient Buildings BSI kitemark. Used with the iQE Halo heating control system, it enables customers to control their heating remotely and save up to £305 annually off their heating bills.





## EDF Energy: Leading the transition to a low carbon and resilient power sector

Delivering sustainable energy to customers at an affordable price is a priority at the heart of our business.

Affordability of energy, security of supply for the future, and climate change are the three biggest challenges we face as an energy sector. We believe these can be addressed by a diverse energy mix, including nuclear and renewables.

EDF Energy is the UK's largest producer of low-carbon electricity, producing around one-fifth of the nation's electricity, and supplying gas and electricity to 6 million business and residential customer accounts.

Our investments in a new generation of nuclear power stations and the life extension of our existing stations will be vital if the UK is to meet its legally binding climate targets. And we are leading the UK's nuclear renaissance through our project at Hinkley Point C, which would generate 7 percent of UK electricity and avoid the emission of ten million tonnes of CO<sub>2</sub> each year

Our renewables business, EDF Energy Renewables, opened our first offshore wind farm at Teesside in 2014, and by the end of 2014 we operated 28 wind farms with a total installed capacity of 551 MW, powering over 300,000 homes. We also have a proposed 970MW offshore wind farm off the Dorset and Hampshire coast to the west of the Isle of Wight currently under development, Navitus Bay, a 50-50 Joint Venture between Eneco Wind UK Ltd and EDF Energy Renewables.



## Sky: Investing in renewable energy

In 2009, Sky set itself a series of bold environmental targets through to 2020. One of these was to obtain 20% of its energy from owned or controlled renewable energy sources.

Since then, Sky has worked to create several renewable energy sources at its Osterley, Livingston and Dunfermline sites. In 2012 it unveiled its first wind turbine and Combined Cooling and Heating Plant (CCHP) to power its Osterley campus. The CCHP supplies up to 40 per cent of the total energy needs for its Sky Studios, while the wind turbine provides enough energy to meet the studio's annual lighting requirements. We have also built biomass boilers at our Dunfermline and Livingston sites in Scotland.

Renewable energy provides Sky with increased energy security, and helps us deliver against our carbon emission reduction goal of halving emissions relative to revenue by 2020. We believe further investment and research into renewable technologies are key to take renewable energy to scale.





## Jaguar Land Rover: Driving down emissions in the automotive sector

Fuel economy and CO<sub>2</sub> emissions regulations are driving technological change and innovation across the automotive sector. Average CO<sub>2</sub> emissions from Jaguar Land Rover's EU fleet have been reduced by 24% since 2007.

We have invested £10bn in the last five years to transform the business, delivering new lower CO<sub>2</sub> emitting vehicles and more efficient manufacturing facilities in the UK. In 2014/15 alone, we invested £3.5bn in new product creation and capital expenditure, making Jaguar Land Rover the UK's number one R&D investor in the manufacturing sector.

For example, almost £2 billion has been invested in the Solihull plant over the past three years, including Europe's largest capacity automotive aluminium bodyshop facility, which created 1,700 jobs to date, with a further 1,300 new jobs announced in January 2015. The use of adhesives and rivets in the construction of aluminium bodied vehicles also uses 75% less energy in the assembly process compared to a steel bodyshop using traditional welding technologies.

The breakthrough Jaguar XE, revealed in September 2014, spawned two new factories, 2,300 new jobs and around of £2bn of investment in this country. Constructed largely of aluminium, its aerodynamic design and efficient Ingenium engine delivers impressive CO<sub>2</sub> emissions for its class of <99g/km and fuel economy of 75 mpg.





Anglian  
Water  
Group

## Anglian Water: Tackling embodied carbon

In 2006 Anglian Water recognised a changing climate and population growth were two long-term challenges we face in supplying water and water recycling services to our customers. We also understood that being part of the developed world that uses over three times the planet's available resources on an annual basis was not sustainable. In response to these challenges, we set two challenging goals for 2015 against a 2010 baseline: to reduce embodied carbon by 50% and operational carbon by 10%.

With embodied carbon being an excellent proxy for resource and energy use in building and maintaining infrastructure, Anglian Water has worked hard in collaborating with their value chain to deliver low

carbon solutions. A number of case studies have shown how Anglian Water's governance process can drive down embodied and operational carbon, whilst also spurring innovation to deliver low cost solutions. For example, carbon modelling indicated the high carbon contribution of trench excavation in operating water pipelines, prompting increased use of no-dig processes to lay pipes, leading to less disruption for the public, reduced embodied carbon, and lower resource use and costs. Similarly this approach has driven the redesign of built infrastructure like wastewater storage tanks to use far less material and hence save both carbon and capital.



## Thames Water: Planning for resilience to flooding

It is widely accepted that climate change impacts are a real issue and a major challenge to society in the UK, however it is almost impossible to predict the extent and timing of its impact. This makes planning for issues like flooding resilience extremely difficult, as we do not want to either invest inappropriately or at the wrong time. Despite this, not unreasonably, our customers, regulators and other stakeholders expect us to plan appropriately to accommodate the impacts of climate change, presenting us with a real challenge.

As part of our investment planning process we therefore applied a three phase explicit risk methodology to existing and potential future investments. This process involved

identifying and prioritising investment in service-critical assets that are at risk from flooding today and assessing the rate of degradation in flooding resilience and the performance of protection options in a range of possible climate change futures. This allowed us to take a strategic long-term view and better prioritise investments based on current flooding risk, but develop solutions that are resilient to a range of plausible future climates, and understand the need, extent and timing of potential future flooding resilience expenditure.



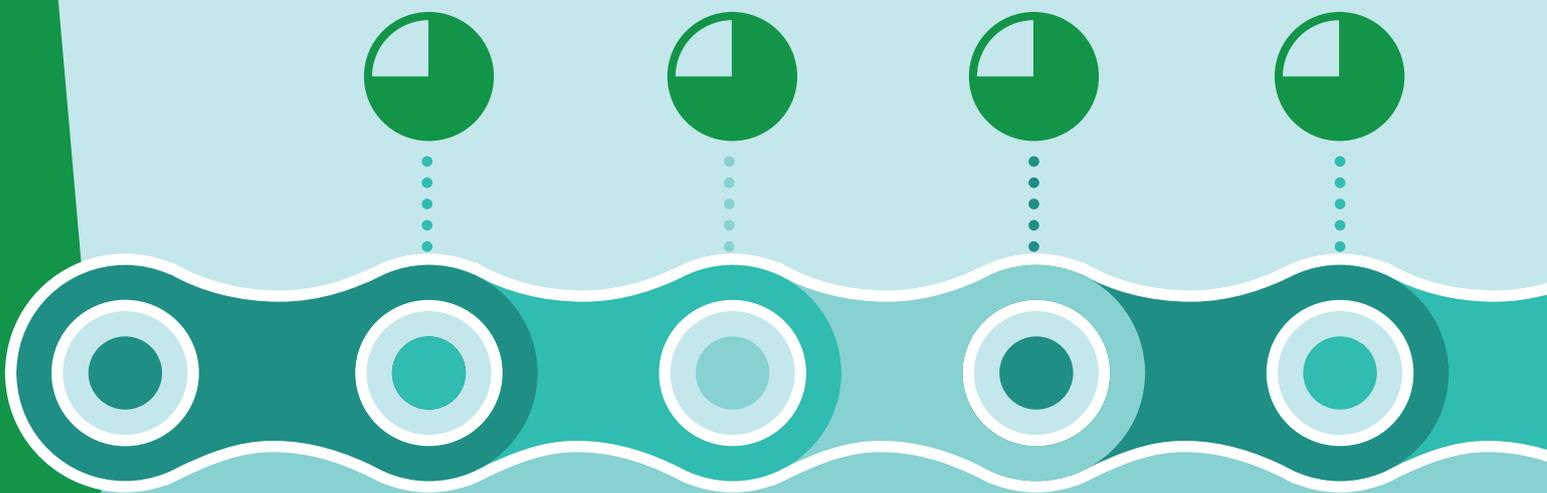


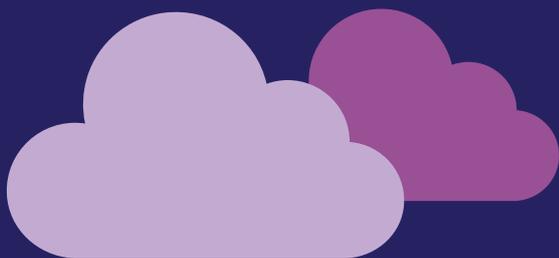
## GlaxoSmithKline (GSK): Building sustainable supply chains

50-60% of the world's CO2 emissions appear in the supply chains of just 500 global corporations. So decarbonising these supply chains could make a huge impact. GSK is showing how this could be achieved through its Environmental Sustainability Strategy, which aims to cut its carbon footprint across the 'value chain' by 25% by 2020 and become carbon neutral by 2050.

We plan to achieve this by being more efficient in our use of raw materials, which account for 40% of our value

chain footprint, focusing on reducing the footprint of our top 35 products, and collaborating with others to tackle environmental sustainability challenges. For example, we are piloting the 'GSK Innovation Exchange' for around 200 suppliers and GSK to share practical solutions and best practice. Success will not only cut carbon emissions; it will cut our costs and enhance competitiveness.





## 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, CISL deepens leaders' insight and understanding through its executive programmes, builds deep, strategic engagement with leadership companies, and creates opportunities for collaborative enquiry and action through its business platforms.

Over 25 years, we have developed a leadership network with more than 5,000 alumni from leading global organisations and an expert team of Fellows, Senior Associates and staff.

HRH The Prince of Wales is the patron of CISL and has inspired and supported many of our initiatives.

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