

TIME FOR ACTION 
**BUSINESS PRIORITIES FOR
A PROSPEROUS UK**

THE BUSINESS CASE » An ambitious and stable environmental policy after Brexit	6
ONE » A detailed Clean Growth Plan	10
TWO » A resource efficiency strategy	14
THREE » A commitment to improve the health of the UK's environment	16
FOUR » A low carbon Industrial Strategy	18
FIVE » A long-term investment strategy for the UK	20

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ALDRSGATE GROUP

The Aldersgate Group is a politically impartial alliance of leaders from business, politics and civil society that drives action for a sustainable economy in the UK.

Our members include some of the largest businesses in the UK, leading NGOs, key professional institutes and politicians of all parties. We believe that economic success, both now and in the future, depends upon a political and economic framework that delivers a healthy environment and sustainable use of resources, good environmental performance at the

organisational level, growth, jobs and competitive advantage in rapidly growing environmental sectors.

Our policy proposals are formed collaboratively and benefit from the expertise of our members who span a wide range of industry sectors and public interests. Our breadth and collegiate approach allows

us to formulate progressive policy positions to benefit all organisations and individuals.

While members support this publication and provided extensive input, individual recommendations cannot be attributed to any single member and the Aldersgate Group takes full responsibility for the views expressed.

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THE BUSINESS CASE

The need for an ambitious and stable environmental policy after Brexit.

Developing an ambitious and stable environmental policy that supports the UK's economic competitiveness and the health of its environment is critical for the UK as it leaves the European Union (EU).

Today, the UK faces important environmental challenges ranging from the impacts of climate change on its infrastructure and environment to the degradation of its natural resources. Tackling these challenges will be crucial in ensuring the economy remains productive and resilient and will provide significant growth opportunities for the UK. Priorities for the new government include:



Publishing a detailed Clean Growth Plan without delay, to deliver the UK's emissions reduction commitments under the fifth carbon budget in timely way, attracting affordable private finance for energy efficient buildings, low carbon energy and transport infrastructure. This will also deliver wider economic benefits and grow supply chains;



Introducing a cross-departmental resource efficiency policy to drive better management of resources across the economy and encourage greater use of secondary materials;



Improving the state of the UK's natural environment via the prompt publication of a 25 Year Environment Plan;



Finalising an Industrial Strategy to build on the UK's strengths in the low carbon and resource efficient sectors and support continued growth and job creation in its supply chains – with a White Paper published by the Autumn Budget;



Developing a new finance strategy to increase the levels of private investment flowing into the UK's modern, green infrastructure, new technologies and innovative business models.



The UK's low carbon economy is already sizeable

Government policies to meet those challenges, such as the Climate Change Act 2008, have cut carbon emissions, helped households save money,¹ significantly reduced the cost of new technologies like offshore wind and delivered growth in new industries.

The Office of National Statistics (ONS) estimates that the UK's low carbon and renewable energy economy employed some 432,000 people in 2015 and delivered a turnover of more than £77bn.²

UK businesses have developed strengths in numerous areas of the low carbon economy such as the manufacturing of ultra-low emissions vehicles, energy efficiency services and engineering, low carbon construction, financial and legal services for clean energy projects, ICT solutions to cut carbon emissions and the manufacturing and maintenance of offshore wind farms. UK businesses are also leading the way in improving the resource efficiency of their operations³ and the UK is home to cutting-edge pilot projects to address the degradation of its natural environment, as demonstrated by the partnership between the RSPB and Crossrail to create a major wetland on Wallasea Island in Essex.⁴

Critically, much of this investment and growth is taking place in parts of the UK that need it the most. In the North of England for instance, low carbon investment has had a significant impact on regional regeneration. It has created thousands of skilled jobs, developed local supply chains, encouraged innovation and produced clean energy generation.⁵ In 2013, there were already 136,000 people working in the low carbon economy in the North⁶ and this is set to grow with major ongoing investments such as those from Siemens, Associated British Ports and DONG Energy at Green Port Hull. On the Isle of Wight, MHI Vestas' investment in an offshore wind turbine blade factory has created hundreds of jobs on the Isle as well as jobs and other positive impacts across the wider Solent area.

1 ➤ Improvements in energy efficiency have saved the typical household around £290 per year since 2008 as demand for electricity and gas has reduced, more than offsetting the price of low carbon policies and network costs. Committee on Climate Change (March 2017) *Energy Prices and Bills – impacts of meeting carbon budgets*.

2 ➤ ONS (6 April 2017) "UK environmental accounts: Low carbon and renewable energy economy survey, final estimates: 2015".

3 ➤ Aldersgate Group (January 2017) *Amplifying resource efficiency: UK edition*.

4 ➤ Aldersgate Group (November 2015) *Investing in our natural assets: how government can support business action*.

5 ➤ Aldersgate Group (September 2016) *Setting the pace: Northern England's low carbon economy*.

6 ➤ BIS (2015) *The size and performance of the UK low carbon economy*.



OUTPUTS FROM THE HUMBER'S LOW CARBON ECONOMY

Siemens, DONG Energy and ABP projects in Green Port Hull will deliver:



£6.3bn
investment

over
1,000
direct long-term jobs



1,000,000
homes powered
(8 times the number of homes in Hull)



With the right support, UK businesses are well placed to tap into significant and fast growing low carbon export opportunities

The UK's low carbon economy could grow from around 2% of the UK's GDP today to 8% by 2030 and 13% by 2050.⁷ The UK's strengths mean that its businesses are well placed to meet the demand for low carbon goods and services in the domestic market and capitalise on export opportunities. In 2011, UK low carbon goods and service exports already totalled £12bn creating a £5bn trade surplus.⁸

The global market for low carbon goods and services, which is already worth over \$5.5tn,⁹ is rapidly growing, spurred by major investments in low carbon technologies by countries such as China, India, Mexico and South Africa.¹⁰ Going forwards, analysis by the International Finance Corporation indicates that the Paris Agreement will help open up \$23tn worth of opportunities for climate-smart investments in emerging markets between 2016 and 2030.¹¹

In an increasingly low carbon global marketplace, trade partners will expect products and services that deliver within international climate and sustainability commitments such as the Paris Agreement and Sustainable Development Goals. Clear policy commitments and thriving business investments in low carbon and resource efficient solutions will help to strengthen the UK's position in negotiating new trade deals. **Strengthening the UK's areas of competitive advantage in the low carbon economy will help ensure UK businesses are best placed to capitalise on these global opportunities.**

A constructive relationship post-Brexit

As the UK leaves the EU, a pragmatic approach to the future relationship with EU legislation and initiatives will be required to ensure the UK can deliver its policy objectives in a way that is as cost-effective as possible. Whilst there are areas such as farming subsidies where a specific UK approach is likely to be more effective than current EU policy in delivering environmental improvements, for other sectors continuing to work with the EU will be important.

For instance, ongoing membership of the Internal Energy Market will help support investment in interconnection infrastructure with European grids, lowering the cost of building a secure, low carbon power system in the UK with significantly higher levels of renewable generation.¹² Working with the EU on the development of product standards for energy and resource efficiency is also in the UK's interest given that many UK manufacturers will be exporting to the European Single Market after Brexit and will be required to meet those standards.

7 > Ricardo Energy & Environment (March 2017) *UK business opportunities of moving to a low carbon economy*.

8 > BIS (2013) *Low carbon environmental goods and services (LCEGS) Report for 2011–2012*.

9 > New Climate Economy (July 2015) *Seizing the Global Opportunity*.

10 > Frankfurt School-UNEP Centre/BNEF (2016) *Global Trends in Renewable Energy Investment 2016*.

11 > International Finance Corporation (2016) *Climate Investment Opportunities in Emerging Markets*.

12 > Imperial College London (April 2017) *Interconnectors, the EU Internal Electricity Market and Brexit: A discussion paper*.



ONE: A DETAILED CLEAN GROWTH PLAN

A detailed Clean Growth Plan is essential to cut the UK's emissions in a way that is timely, affordable and benefits the economy.

Why?

Government policies to support the deployment of low carbon technologies have helped to reduce their cost and grow supply chains. Onshore wind and solar power have almost reached cost parity with unabated gas power plants¹³ and the cost of energy from offshore wind in the UK has fallen by 32% since 2012.¹⁴ In Europe, offshore wind auctions have delivered multiple projects at €50–60/MWh,¹⁵ and in some cases without any subsidies over recent months.¹⁶

To build on these achievements and ensure that the UK can cost-effectively cut its carbon emissions 57% by 2032 as required by the fifth carbon budget, **a detailed Clean Growth Plan (CGP) will urgently be needed.** This should set out sufficiently detailed policies to attract affordable private sector investment in low carbon power technologies, energy efficiency, low carbon heat and low carbon transport infrastructure.

Low carbon power: Policy Priorities

In order to build up a project pipeline, provide investment stability in the low carbon power sector and increase affordable private finance, the CGP will need to:

Provide clarity that the £730m earmarked for auctions of less established technologies during the last parliament will be committed by 2020 as originally planned, supporting the further build out of offshore wind farms;

Provide a suitable replacement for the Levy Control Framework (LCF) that gives investors clear visibility of future Contract for Difference (CFD) auctions: a new scheme should (i) be linked to the ambition of emission reductions set out in the fifth carbon budget; (ii) be based on a more stable reference price than the volatile wholesale price of electricity used under the LCF; (iii) provide forward visibility of at least five years to allow developers to plan a pipeline of projects in the most cost-effective way and invest in UK-based supply chains and (iv) set out clear rules to explain how government would adjust the size or availability of support in case of a major change in circumstances;

Introduce subsidy-free/market stabilising CFDs¹⁷ for new projects using mature technologies such as onshore wind and solar PV to help decarbonise the power system in the most cost-effective way;

Provide continued support for flexible solutions, such as interconnection, power storage and demand side response to help maintain system security at the lowest possible cost.

¹³ BEIS (November 2016) *Electricity Generation Costs*.

¹⁴ Offshore Wind Programme Board (January 2017) *Offshore Wind Cost Monitoring Framework 2016*.

¹⁵ Wind Energy Update (5 December 2016) "Europe's new record offshore LCOE forecast at 40 euros/MWh".

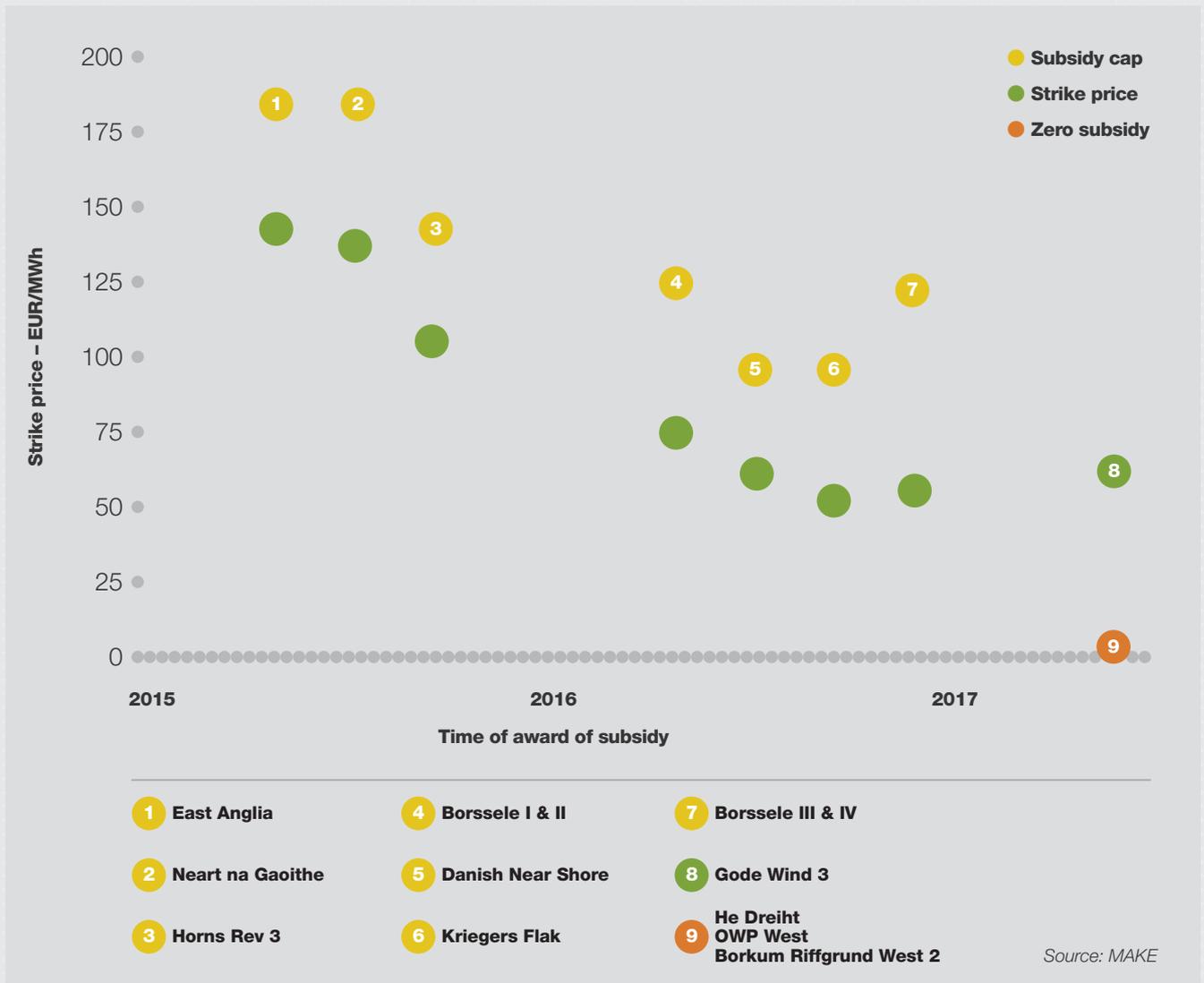
¹⁶ It is important to note that auction systems are structured differently, for instance these bids did not have to include grid connection costs. OffshoreWIND.biz (13 April 2016) "Germany Accepts First Subsidy-Free Offshore Wind Auction Bid".

¹⁷ Defined as a CFD contract capped at the level of support given to conventional power generation such as new gas power plant.



DECLINING COST OF OFFSHORE WIND

Values on Final Investment Decision (FID)





Buildings: Policy Priorities

Tackling energy efficiency in buildings in the near term is vital if the UK is to meet its carbon budgets, reduce energy use and save households money. With buildings responsible for nearly 18% of all emissions,¹⁸ investment in energy efficiency could save 23.6MtCO₂ per year by 2030, roughly equivalent to cutting the CO₂ emissions of the UK transport fleet by one third.¹⁹ Beyond making homes more comfortable to live in and energy bills more affordable, an ambitious energy efficiency programme could deliver significant economic benefits.

To ensure the UK can significantly improve the energy efficiency of its building stock over the course of the next parliament and reduce heat-related emissions, the new government should:

Set meaningful ambition for energy consumption and emissions reductions in existing buildings with clear delivery dates and gradually tightening energy efficiency standards, for example using Minimum Energy Efficiency Standards (MEES);

Provide new fiscal incentives for energy efficiency improvements for the able to pay domestic market at key 'trigger' moments in a building's life (such as stamp duty rebates) coupled with increasingly rigorous standards to be met at the point of sale;

GREATER ENERGY EFFICIENCY, HIGHER GDP

Analysis by Verco and Cambridge Econometrics has found that an energy efficiency programme bringing all low income homes to an EPC Band C by 2025 and all other homes to the same standard by 2035 would deliver £3.20 in increased GDP per £1 of public investment. It would create 108,000 net new jobs across the country between 2020 and 2030 and deliver net annual benefit of £4.95bn from the total energy bill savings across the building stock.²⁰

Introduce a new nearly zero carbon target for all new buildings by 2020 and ensure that all new build homes are '2050 ready' to avoid retrofit at a later date. This should tackle the "performance gap"²¹ by requiring that the energy performance modelling of new buildings takes better account of the real energy consumption of the building once occupied;

Develop a clear action plan for the decarbonisation of heat by 2050, in particular pursuing low regret near-term options such as rolling out electric heat pumps in properties off the gas grid, encouraging the development of heat networks in urban areas and developing large scale pilot projects to test new technologies such as the production of hydrogen for heating. Building up a robust evidence base now will facilitate key strategic decisions on the wider decarbonisation of heat in the mid-2020s;

Focus on improving skills in the industry to carry out better quality energy efficiency retrofits and low carbon heat installations and improve consumer confidence.²²

¹⁸ Committee on Climate Change (June 2016) *Meeting Carbon Budgets – 2016 Progress Report to Parliament*.

¹⁹ Cambridge Econometrics and Verco (2015) *Building the Future*.

²⁰ Cambridge Econometrics and Verco (2015) *Building the Future*.

²¹ UKGBC (May 2016) *Delivering Building Performance*.

²² Peter Bonfield (December 2016) *Each Home Counts: An Independent Review of Consumer Advice, Protection, Standards and Enforcement for Energy Efficiency and Renewable Energy*.



Transport: Policy Priorities

Domestic transport emissions make up about a quarter of the UK's greenhouse gas emissions²³ and contribute significantly to urban air pollution crises, but limited progress has been made to decarbonise this sector to date. Alternatively-fuelled vehicles accounted for just 2.8% of market share in 2016,²⁴ which means stronger policy signals are needed to meet the Committee on Climate Change's recommendation that 60% of new car and van sales are electric or hybrid vehicles by 2030.

Ultra-low emissions vehicles (ULEVs) offer real opportunity for cleaner air, emission reductions and have the potential to save drivers money, as models on the market today are already cost comparable with traditional combustion engine vehicles on a lifecycle basis.²⁵

NEW MANUFACTURING IN THE LOW CARBON ECONOMY

A new electric taxi factory opened in Coventry in March 2017 will create 1,000 jobs in the Midlands, thanks to £325m of investment by Chinese firm Geely. The plant will include a new state-of-the-art research, development and assembly facility to develop a zero emissions taxi and other hybrid technology vehicles.²⁹

Domestic demand for ULEVs has increased 49% year-on-year and this is a growing manufacturing and export opportunity.²⁶ One in every five electric vehicles sold in the EU in 2015 was manufactured in the UK²⁷ and global sales in electric vehicles and plug-in hybrids are predicted to grow from around \$12bn in sales in 2015 to \$88bn by 2020 and \$244bn by 2025.²⁸

Specific measures to be taken by the new government should include:

Continued support for the uptake of electric vehicles:

the government's current commitment to spend £600m on the uptake of ULEVs up to 2020/21 is essential if take up is to spread beyond early adopters;

A continued roll out of a national network of rapid charging points;

Forward visibility of the future emission reduction requirements for new vehicles:

the EU is working on vehicle emissions standards post-2020 which, if sufficiently ambitious, could help drive continued innovation in low emission vehicle technology and cut emissions. Given that the Single Market is a growing export market for ULEVs manufactured in the UK, the UK should work as closely as possible with the EU on the development of future EU vehicle emission standards.

²³ > Committee on Climate Change website: <http://bit.ly/2q34hao>

²⁴ > SSMT (June 2016) *2016 UK Automotive Sustainability Report*.

²⁵ > Go Ultra Low website: <http://bit.ly/2pXUxhq>

²⁶ > DfT, Office for Low Emission Vehicles news story (8 September 2016) "More drivers choose ultra low emission vehicles".

²⁷ > DfT (October 2016) *Consultation on proposed ultra low emission vehicles measures for inclusion in the Modern Transport Bill*.

²⁸ > Goldman Sachs (November 2015) *The Low Carbon Economy*.

²⁹ > BEIS (22 March 2017) "1,000 jobs created at new £325 million factory for electric taxis".



TWO: A RESOURCE EFFICIENCY STRATEGY

A coherent resource efficiency policy is essential to enhance the competitiveness of the UK economy and reduce vulnerability to resource constraints.

Why?

Resource efficiency is a practical response to resource constraints and the sharp rise in resource price volatility since 2000, which undermines business resilience and long-term planning.³⁰ To date, EU Directives have largely driven resource policy; as the UK leaves the EU, the government has an opportunity to develop a domestic framework for a country that is increasingly dependent on imports.

Businesses are already seeing success in embracing resource efficiency, though they cannot make rapid progress in isolation and require a coherent resource efficiency policy framework to enable the transition to happen at scale. The REBus project³¹ has demonstrated that helping businesses in sectors such as electronic products, textiles, construction and ICT to increase their resource efficiency offers significant financial, material and greenhouse gas savings.³² This could deliver an increase in gross value added to the UK economy of up to £76bn by 2030 if the results of these pilots were replicated across their sectors.³³

Policy Priorities

The UK will need to develop a clear resource efficiency strategy which is backed by all key departments across Whitehall to harness these benefits. For example, BEIS is a well-placed partner for Defra to drive forward this strategy and resource efficiency should be at the heart of the Industrial Strategy. Priorities should include:

 **Standards that require products sold in the UK to be designed with resource efficient principles,** to minimise waste and ensure consumers benefit from better quality products that last. These standards should be at least as good as those to be set out in the EU Circular Economy Package to avoid putting British businesses and consumers at a disadvantage;

 **Facilitating better access to finance and technical advice** for businesses, especially SMEs, through the National Productivity Investment Fund and the British Business Bank;

 **Building on the success of the UK's landfill tax by promoting other fiscal incentives to encourage the re-use of materials,** such as variable VAT rates that favour resource efficient goods and services over their counterparts. Such a change would give clarity to business as to the direction government wants businesses to innovate in;

 **Developing a public procurement policy that favours resource efficient goods and services:** the lack of public sector demand for innovation is a major barrier for suppliers in certain sectors, such as construction and ICT, and for suppliers with a commitment to R&D and product innovation. Public procurement can put innovative products on a level playing field with tried and tested solutions, which is of particular importance to SMEs.

³⁰ > Green Alliance (2015) *UK resource governance for the 21st century*.

³¹ > Aldersgate Gate is a partner on the REBus project. For more information, see www.rebus.eu.com

³² > In the first 3 years of the project, the 26 pilots carried out in the UK and the Netherlands have so far totalled £4.98m in financial savings, over 62,000 tonnes of material savings and nearly 2,000 tonnes of greenhouse gas emissions reductions. These figures are correct as of 30 November 2016. The gains from the pilot projects continue to be monitored.

³³ > Aldersgate Group (January 2017) *Amplifying action on resource efficiency: UK edition*.



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PRODUCING FERTILISER FROM THAMES WATER'S SEWAGE

The UK uses 138,000 tonnes a year of phosphate fertiliser, all of which is imported from abroad. The first of its kind in Europe, Thames Water's £2m nutrient-recovery reactor produces slow release fertiliser from the wastewater coming into Slough sewage works. Wastewater is a sustainable source of phosphorus and nitrogen, which are key ingredients in fertiliser, the price of which has increased five-fold since 2007.

Thames Water expects to avoid spending money on chemical dosing to remove phosphorus from the

wastewater and clear equipment of struvite at Slough. All such operational savings help put a downward pressure on customers' bills. The new reactor will also improve the quality of treated effluent leaving the sewage works, reducing nutrient levels and in turn reducing algae growth in rivers and streams that would otherwise suck oxygen out of watercourses leaving little for fish and other wildlife. The reactor is expected to sustainably produce 150 tonnes a year of top-grade fertiliser for sale to crop-growers, golf green-keepers and gardeners.



THREE: A COMMITMENT TO IMPROVE THE HEALTH OF THE UK'S ENVIRONMENT

Improving the state of our natural environment is essential to provide valuable services to the UK's society and economy.

Why?

Our dependency on natural resources is fundamental. It underpins the economy and our health and wellbeing. Soil is a good example of this, performing several vital functions such as supporting food production and storing water and carbon, but its ability to do so is lessened as it becomes degraded. It has been estimated that the costs of soil degradation in England and Wales amount to £1.2bn per year.³⁴ This impacts agricultural production, both in terms of reduced output and increased costs, and the UK's ability to regulate greenhouse gas emissions, flood risk and water quality.

High quality wildlife and green spaces also provide significant health and wellbeing benefits, saving money for the NHS.³⁵ Environmental damage therefore feeds directly into costs for government, business and households, whereas investing in natural resources will improve the resilience, health and productivity of our economy.

Policy Priorities

To reverse the degradation of the UK's natural environment³⁶ and ensure that the UK economy and society can rely on the long-term availability of critical natural resources, the new government **must enact the commitment made in its Manifesto to be the "first generation to leave the environment in a better state than we inherited it."**³⁷ Policy priorities in the new parliament should include:

 **Publishing a 25 Year Environment Plan (25YEP) early in the new parliament, which should be closely integrated with the UK's new agricultural framework post-Brexit:** with the UK no longer part of the EU's Common Agricultural Policy, private sector investment in natural capital projects could be incentivised by moving the focus of subsidies towards agri-environment schemes and supporting the development of markets for eco-system services. This would provide clear signals to farmers and their supply chains about the importance of investing in sustainable resource use and ecosystem restoration;

 **Confirming that the Natural Capital Committee (NCC) will continue to have a role throughout the next parliament:** this should include monitoring the state of the UK's natural environment, overseeing the development of the natural capital pioneer projects and supporting the government in the development of the 25YEP;

 **Supporting the continuation of the work of the ONS on integrating natural capital into the UK's Environmental Accounts by 2020** and consider expanding their coverage and including estimates of capital maintenance and restoration costs as recommended by the NCC;

 **Leading by example by ensuring government infrastructure projects deliver enhancements to the UK's natural environment.**

³⁴ > Cranfield University (2015) *The Total Costs of Soils Degradation in England and Wales*.

³⁵ > The Land Trust (January 2017) *The Hidden Value of our Green Spaces*.

³⁶ > The Wildlife Trusts (September 2016) *State of Nature 2016*.

³⁷ > The Conservative and Unionist Party (May 2017) *Forward, Together: Our Plan for a Stronger Britain and a Prosperous Future*.



RSPB'S WALLASEA ISLAND WILD COAST PROJECT

Mike Clarke, Chief Executive, RSPB: "Made possible through a unique collaboration between the RSPB and Crossrail, more than 3m tonnes of earth tunnelled from beneath London's streets is helping to transform Wallasea Island into the largest recreated coastal wetland in the UK. Once complete, Wallasea will provide a wetland haven for thousands of migratory birds and become one of the UK's most innovative flood defence systems."

There are economic benefits from this landmark conservation and engineering scheme. In particular, the scheme will prevent the negative impacts on navigation and sea defences elsewhere, which would otherwise occur following an unmanaged breach in the sea walls at Wallasea. Furthermore, it is estimated that the new intertidal mudflats at Wallasea will sequester carbon at a rate of about four tonnes per ha per year. The tourism and leisure industry

can also benefit by playing an increasingly significant role in the local economy.

Since completion of the first phase of wetland creation at Wallasea in 2015, the site has so far supported a maximum of 12,000 waterbirds, and already holds the second largest breeding colony of Avocets in the UK.



© RSPB



FOUR: A LOW CARBON INDUSTRIAL STRATEGY

The Industrial Strategy should strengthen the UK’s competitive advantages, drive productivity and grow export opportunities.

Why?

Developed in close co-ordination with the Clean Growth Plan, 25 Year Environment Plan and a UK resource efficiency strategy and considering the major opportunities offered by the global low carbon market and the UK’s existing strengths, the Industrial Strategy can have a transformative impact on the UK economy, driving the continued growth of jobs, skills and supply chains.

Policy Priorities

The Industrial Strategy must set an ambitious long-term framework that is compatible with existing long-term targets such as the UK’s carbon budgets, and establishes why world-leading businesses should choose to base themselves in the UK. It should:



Put more focus on low carbon skills in education:

the development of a low carbon skills strategy in line with the needs of business and industry is essential. Existing educational funding should be better targeted to support the integration of environmental education across different disciplines, whilst Local Enterprise Partnerships (LEPs) should be supported in running STEM skills and engagement programmes.³⁸ Both could have considerable impact on inspiring young people to pursue careers in the low carbon sector and creating a pipeline of skills. The Industrial Strategy should also support and facilitate employer investment in skills development, placing more control and resources with industry to ensure greater opportunities for in-work training;



Support better co-ordination between central government and LEPs to facilitate low carbon growth:

this is essential to help ensure that businesses throughout the country are aware of the implications of the government’s environmental and low carbon policies, and the economic growth opportunities that this presents. Some LEPs are already playing a central role in growing low carbon enterprise by ensuring local businesses have the right skills, abilities and information to bid for supply chain contracts. For example, Humber LEP secured Regional Growth Funding to support 90 local businesses in the offshore wind sector;³⁹



Set high environmental standards in building energy efficiency and product design:

standards contribute to the creation of new markets and export opportunities, investment in innovation and demand for high quality skills;



Connect Energy Intensive Industries (EIs) with low carbon supply chains:

the Industrial Strategy must consider how EIs can be supported in a way that is consistent with the UK’s emissions targets, whilst safeguarding well paid jobs in high value businesses and forming the supply chain for new low carbon industries.

³⁸ For example, the campaign being run by the Liverpool LEP to encourage Eureka! the children’s science exhibition based in Halifax to open a new gallery in Liverpool focused on energy.

³⁹ Regeneris Consulting (November 2015) *Report of the impact of DONG Energy Investments in the Humber Area – November 2015.*



MHI VESTAS AND SOLENT LEP

MHI Vestas Offshore Wind (MHI Vestas) designs, manufactures, installs and services offshore wind turbines. MHI Vestas responded to a funding competition for skills development, launched by Solent LEP in November 2014, which prioritised large-scale transformational projects. In response, MHI Vestas formed a partnership with the Isle of Wight College to create a comprehensive skills development programme for the West Medina Mills workforce, including a Level 3 NVQ in composite engineering.

The Solent LEP funding allowed the circa £1m MHI Vestas Isle of Wight training programme to go ahead, supporting MHI Vestas' commitment to deliver up to 800 jobs and £200m of investment in the UK over the

coming years. The training has developed into a positive, ongoing relationship between MHI Vestas and the College, supporting the latter's recent investment into a new Centre of Excellence for Composites, Advanced Manufacturing and Marine (CECAMM).

MHI Vestas now directly employs over 300 people on the Isle of Wight, with an additional 50–100 in island-based suppliers and many more across the greater Solent area. MHI Vestas' presence has helped Solent LEP raise awareness of the attractiveness of jobs in advanced manufacturing. For example:

- ❖ Southampton University is working with industry stakeholders to make the case for the National

Composites Centre to have a large composites structures centre in the Solent area, which would help the UK to take a leadership position in the deployment of very large composite structures across a range of applications.

- ❖ Solent LEP, through Local Growth Deal funding, has supported the new Centre of Excellence for Composites, Advanced Manufacturing and Marine on the island, which is due to open in September 2017. This will accommodate 300 full-time students, over 160 apprentices and 80 higher education learners.



© MHI Vestas



FIVE: A LONG-TERM INVESTMENT STRATEGY FOR THE UK

The UK needs a new strategy to attract private finance into green infrastructure.

Why?

Growing the UK's low carbon economy and meeting the UK's environmental objectives will require significant investment in green infrastructure over the next decade, from renewable power generation to natural flood management systems. It is estimated that £330bn of investment between 2011 and 2020 and an annual investment in 2020 close to £50bn will be needed in the UK's green economy to meet our targets.⁴⁰

Low carbon investments offer considerable opportunities. The UK's low carbon financial services market could grow to up to £17bn per year in 2050⁴¹ and low carbon investment strategies can shield investors from physical, liability and transition risks arising from climate change.⁴² Nonetheless, private finance is still not being invested in these projects at either the scale or speed required.

Policy Priorities

The Aldersgate Group is a partner in the Centre for Understanding Sustainable Prosperity (CUSP).⁴³ CUSP research has found that increasing private investment to finance the UK's green infrastructure will require:

 **Improving policy stability for investors** in order to generate a pipeline of investible projects and to reduce regulatory risk which drives up the cost of capital. Actions highlighted above, including the publication of a detailed CGP, 25YEP and clear resource efficiency strategy will be essential to build confidence in the intentions of the new government;



Developing a new strategy to crowd in private sector finance in novel low carbon technologies and complex projects at commercial scale. This is particularly important following the privatisation of the Green Investment Bank and the likely decrease in funding from the European Investment Bank post-Brexit. Strategic use of public funds can de-risk private investment, providing certainty that policy is unlikely to change. It can also increase the attractiveness of the UK for investment and capital distribution by building deal making and risk management expertise in this emerging market;

⁴⁰ Vivid Economics (October 2011) *The Green Investment Bank: Policy and Finance Context*.

⁴¹ Ricardo Energy & Environment (March 2017) *UK business opportunities of moving to a low carbon economy*.

⁴² World Bank (December 2016) *How banks can seize opportunities in climate and green investment*.

⁴³ For more information, see www.cusp.ac.uk



 **Supporting access to finance for low carbon SMEs:** SMEs seeking £250,000 to £2m investments face a financing gap, particularly when needing longer term investment. New and existing government supported interventions are required to stimulate investment in early stage low carbon businesses that lack the track record to attract bank finance. Government policy can facilitate collaborative financing and attract further investment of patient, long-term capital;⁴⁴

 **Supporting the provision of better information for investors:** adopting recommendations by the Financial Stability Board's Task Force on Climate-related Financial Disclosure (TCFD) in the UK would encourage consistency of climate-related disclosure across economic sectors, building on current mandatory carbon reporting requirements. It would help to establish a direct link between the financial performance of a business and its climate risk strategies. Greater reporting on sources of green revenues would also aid investors in low carbon investments;

 **Increasing engagement with the finance community** to ensure that it better understands the objectives of government policy and upcoming changes, and that government is better aware of the needs and risk considerations of the finance community when developing policy.

⁴⁴ > Owen, R and Lyon, F (2016) *A Review of UK Government Interventions to assist SMEs to address Green Sustainable Investment*; Owen, R, Lyon, F and Brennan, G (in press) *Enabling investment for the transition to a low carbon economy: Government policy to finance early stage cleantech innovation*.



UK INFRASTRUCTURE INVESTMENT

Pipeline of investment from 2016/17 (£bn)

