

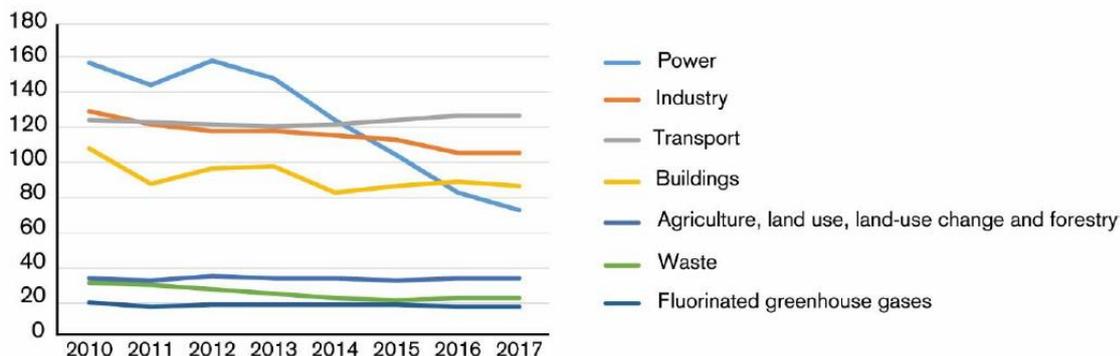
Energy and the environment: a ten-point action plan on tackling climate change

Ten years on from the passing of the 2008 Climate Change Act, the power sector has led the way in the decarbonisation of our economy, making huge steps forward in reducing emissions and accelerating clean growth.

Since the passing of the Act:

- **The use of coal has fallen drastically from providing 33% of all electricity generated in 2008 to just 7% in 2017¹;**
- **Electricity from low carbon sources has increased from 20% when the Act became law to 51% now, with renewables representing 30%²;**
- **England’s renewable capacity grew almost tenfold from 2,618 MW in 2008 to 25,801 MW in 2017³;**
- **The power sector has cut its emissions by more than half over the last ten years which has meant the majority of greenhouse gas (GHG) emissions reductions have come from the power sector⁴;**
- **And there are now almost 400,000 low carbon job across the country⁵ - and the sector is growing.**

Million tonnes carbon dioxide equivalent



Source: CCC, Reducing UK emissions – 2018 Progress Report to Parliament (2018)

While the energy industry has led the way in decarbonisation there is more we can do, working with government and other industries, to go further and faster with the decarbonisation of our economy.

The ‘Global Warming of 1.5 °C’ report⁶, published by the Intergovernmental Panel on Climate Change (IPCC) underlines the importance to taking further steps to tackle climate change, with climate-related risks to health, livelihoods, food security, water supply, human security,

¹ CCC Reducing UK emissions – [2018 Progress Report to Parliament, 2018](#)

² Source: Energy UK’s [“Energy in the UK 2018”](#)

³ Source: Energy UK’s [“Energy in the UK 2018”](#)

⁴ Source: BEIS - [2017 Provisional UK GHG emissions](#)

⁵ Source: BEIS [Green GB & NI 2018 toolkit](#)

⁶ Source: IPCC [Global Warming of 1.5 °C’ report](#)

and economic growth projected to increase with global warming of 1.5°C, and increase further with 2°C.

As we mark the tenth anniversary of the 2008 Climate Change Act, Energy UK is setting out a ten-point plan on how industry and Government can work together to ensure we continue to drive clean growth which will benefit the environment, the economy and consumers.

1. Fostering routes to market for all low carbon generation technologies

Government support for low carbon and renewable generation has to date created an environment which has driven down costs, encouraged investment, supported innovation and made the UK a world leader in low carbon energy.

To go further we need to ensure that a route to market exists for all low carbon technologies going forward, which includes Contract for Difference and Capacity Markets, as well as those projects which come through with power purchase agreements or on a merchant basis. For the UK to affordably fulfil its decarbonisation ambition, we must make use of all our assets, including onshore wind and solar, to enable consumers to fully benefit from least-cost forms of generation.

2. As the UK leaves the European Union, the UK Government should provide urgent clarity on the long-term future of carbon pricing

Co-operating with our neighbours and the rest of the world will be essential if we're to continue the fight against climate change. The EU has played a significant role in that and the creation of carbon pricing, and an emissions trading system (EU ETS) has been pivotal.

Carbon pricing has a key role to play in enabling the UK to address greenhouse gas emissions over the next decade. It is essential for the long-term future of carbon pricing for the UK to remain closely linked to the EU ETS in order to deliver the best results for customers while ensuring that all sectors share the responsibility for emissions reductions.

3. Rollout a National Energy Efficiency Programme across the UK for domestic and non-domestic premises

In addition to the environmental benefits, the Committee on Climate Change estimate that since 2008, improvements in energy efficiency have saved the typical UK household around £290 per year as gas and electricity use have been cut by 23% and 17% respectively⁷.

We have been calling for energy efficiency to become a national infrastructure priority, a call supported by the National Infrastructure Commission. The Government should put in place incentives, regulations and support structures to enable households and business to improve their energy efficiency and help us to meet our carbon targets. Improving the energy efficiency of the UK's worst homes will also help to reduce customers' bills, supporting those most in or at risk of fuel poverty.

4. Reinstate zero-carbon homes initiative

Energy used in homes accounts for about 20% of UK greenhouse gas emissions and three quarters of that comes from heating and hot water⁸.

⁷ Source: Committee on Climate Change - [Energy Prices and Bills Report March 2017](#)

⁸ Source: '[Scaling Up Retrofit 2050](#)' report from the Institution of Engineering and Technology (IET) and Nottingham Trent University

It makes no sense to be building homes today that which will require retrofitting in the future to meet the government's own carbon targets. Government should revise planning regulations to ensure that housebuilders are again required to build zero-carbon homes that are sustainable and affordable to heat for both current and future generations.

5. Decarbonisation of heat should be given the same priority as the decarbonisation of transport

The decarbonisation of heat is the biggest challenge in our transition to a low carbon economy and finding new ways to decarbonise our domestic and industrial heating is vital. There is no single answer to address this challenge and therefore large-scale trials will be key. We want to see the Government increase funding in this area to fund trials in suitable sites across the country to build a robust evidence-base and gain an understanding of different low carbon heating solutions. Alongside these trials there should be a review of the Renewable Heat Incentive and other initiatives due to end in the early 2020s to ensure that they deliver value for money over their final years.

6. The Government should go further and commit to ending the sale of new combustion engines by 2035 at the latest

Transport remains the highest single source of emissions⁹. The potential of electric vehicles (EVs) offers an exciting opportunity to accelerate the decarbonisation of transport. We would like to see the Government go further and commit to ending the sale of new combustion engines by 2035 at the latest and encourage greater low emission vehicle take up.

7. Support the development of Carbon Capture Utilisation and Storage (CCUS) and new nuclear

To decarbonise beyond current levels, new and existing technologies will be required. The Government should support the development of CCUS that could provide a source of firm and flexible generation and help decarbonise other sectors where there are few cost-effective alternatives such as industrial processes, shipping, haulage and heating. We recognise that alongside new nuclear and renewables, there will be a role for gas-fired generation which will require CCUS for hydrogen as a fuel in the long-term.

The development of CCUS and new nuclear in the UK could also stimulate the growth in the UK supply chain in terms of manufactured goods and services. A strengthened industrial base could in turn create significant export potential in a growing market.

8. Realising opportunities for job creation and skill development across the whole of the UK in low carbon technology

The UK has the opportunity to become a world leader in innovative low carbon technologies that both help decarbonise our economy and deliver new employment opportunities. Government and industry need to work together to ensure that the sector has a robust, sustainable and diverse workforce in the future. Greater effort is needed to develop a diverse workforce through the promotion on STEM education opportunities and career paths.

9. Maintain current environmental standards, including air quality improvements

⁹ Source: Ofgem's State of the Energy Market 2018

As we leave the EU, the UK should commit to no backsliding and, at least, maintaining environmental standards set at European level. We should take the opportunity to review current environmental principles and governance and strengthening them where necessary while maintaining a proportionate and risk-based approach to regulation.

We share the Government's objectives of the 25 Year Environment Plan, including its focus on cutting greenhouse gas emissions from industries including transport, agriculture waste and land use.

10. Continue to drive forward the creation of a 'smarter' more connected energy system through smart metering

The energy sector is committed to delivering the roll out of the smart meter programme. With over 12million smart meters installed in homes and businesses across the country to date, many energy customers are already benefiting from more information and data on their energy usage. This data revolution will allow customers to make informed decisions about how and when they use energy – making it easier for customers to save energy and save money.