

Powering Britain



Four ways to create a strong energy future:

- Keep consumer energy bills down by investing in domestic, affordable, low carbon power
- Set a long term, low carbon vision for energy system
- Build modern, flexible, and smart energy infrastructure which matches the needs of 21st century consumers, British industry and the UK economy
- Secure the economic and export opportunities of renewable energy and its supply chains for Britain as we leave the EU

Invest in an affordable energy future

In recent years, fluctuations in fossil fuel prices have been the principal cause of rising household energy bills. Maximising the use of our domestic energy resources can help protect consumers from this¹, and the UK has world-leading marine and wind energy resources. Over the last decade, renewable energy has become a mainstream energy technology. Today, onshore wind would expect to deliver projects cheaper than new gas generation, and offshore wind is already predicted to deliver prices well below those of new nuclear, in the June 2017 auction. Innovations in all renewable technologies mean that we expect cost reductions to continue, and likely faster than predicted; offshore wind recently met its cost reduction targets four years early, for example. Investing in renewables as a substantial part of our domestic energy mix is a sound investment² for the economy and for bill-payers.

Renewable energy is affordable today, and new renewable energy projects are reducing costs at record-breaking pace. It is the right thing for consumers today and tomorrow that Government buys cheap renewable electricity generation.

Build a 21st century power system

Over three quarters of the UK public support renewable energy. There is majority support for an energy system powered by renewable energy across all UK demographics³. In this, the public is aligned with the industry view that the modern electricity system should be powered by smart, low carbon technologies^{4 5}. Renewable electricity already provides a quarter⁶ of our power, and in 2016 renewables provided more of the UK's electricity than coal for the first time⁷. As energy use and technologies change, the power system will enable the transformation of our heat and transport sectors. National Grid has made clear that it sees flexible technologies and smart system management as key to grid security; and renewables today contribute to our energy security, through second by second response or with longer-term reserve and storage. This is also a sector that can deliver for Government in terms of scale. By 2030 offshore wind alone could reach 30GW

¹ [BEIS \(2013\) Policy impacts on prices and bills](#)

² BNEF (2015) [Wind and solar boost cost competitiveness versus fossil fuels](#). System integration costs are minimal at between £6-9/MWh [NERA for Committee on Climate Change \(2015\) System Integration Costs for Alternative Low Carbon Technologies – Policy Implications](#). Offshore wind has reached its cost reduction target set by Government four years ahead of schedule [Offshore Wind Programme Board \(2017\) Cost Reduction Monitoring Framework 2016](#)

³ BEIS (2017) Public Attitudes Tracker, Wave 20

⁴ [National Infrastructure Commission \(2016\) Smart Power](#)

⁵ [Committee on Climate Change \(2015\) Power sector scenarios for the fifth carbon budget](#)

⁶ [BEIS \(2017\) Energy Trends](#)

⁷ [Financial Times \(2017\) Wind power overtakes coal for first time in UK](#)

and renewable energy overall almost 100GW⁸.

Renewable energy has record breaking support from the public. Wave, wind and tidal energy are the gateway to an exciting, ongoing energy transition

Use the energy sector to support UK-wide industrial growth and export capacity

Renewable energy companies employ more than a quarter of a million people and will invest more than £15.6bn in UK infrastructure between 2016 and 2021, with benefit spread across the areas of the UK which need it most. The industry offers new opportunities in areas of existing British excellence. For example offshore wind is a new energy powerhouse in the North Sea, and the onshore wind supply chain includes traditional UK steel companies. In areas like the South West, the Solent and the Isle of Wight, Wales, and the Scottish Highlands and Islands, wave and tidal companies are building a world-class new sector.

UK renewable energy companies export to 43 different countries both inside and outside Europe⁹ and the sector attracts significant foreign direct investment. With the right safeguards in place, this sector can be a leading light as the UK looks for global opportunities outside the EU.

The renewable energy sector is an industrial powerhouse, and can be a stable and growing source of investment as the UK's global role changes.

Recommendations for Government:

1. Clarify and invest in the current energy framework by confirming existing commitments to Pot 2 Contract for Difference auctions, and secure the cheapest forms of generation up to 2020;
2. Maintain investor confidence by committing to the 4th and 5th carbon budgets, bringing forward policies sufficient for their delivery, and maintaining a strong carbon price floor;
3. Set a long-term vision for energy. Introduce formalised and competitive processes to procure new capacity open to all technologies. In the context of an un-investable wholesale price¹⁰, underpin this framework with market stabilisation measures for new capacity and generation;
4. During the Article 50 negotiations, enable the future growth of the UK's energy sector by:
 - a. Committing to a decision on EU Emissions Trading Scheme membership by the second half of 2017 and engage with reform for as long as the UK remains a member;
 - b. Retaining membership of the Internal Energy Market and the bodies within it, and ensuring that the Single Energy Market continues within Ireland and Northern Ireland;
 - c. Ensuring mutual ability to move products, services and a skilled workforce between the UK and Europe;
 - d. Ensuring that the UK has a strong framework of technical and environmental standards that facilitate trade and maintain Britain's reputation for high quality goods and services;
5. Realise the UK's excellence in early stage research and innovation in the market by:
 - a. Establishing new approaches to support late-stage innovation development phases, such that new technologies and industries can compete in the market; and
 - b. Maintaining or replacing the UK's participation in European research funding.

⁸ [National Grid \(2016\) Future Energy Scenarios](#)

⁹ [RenewableUK \(2017\) Export Nation: A year in wind, wave and tidal exports](#)

¹⁰ [Amber Rudd \(2015\) Amber Rudd's speech on a new direction for energy policy](#)