

Renewables investment: building on UK strengths at the 2016 Budget



“green
alliance...”

February 2016

Renewables are a UK success story. They are a source of private investment and jobs; they have a proven track record of delivery; and they are persistently popular with the public.

What's more, renewable technologies have demonstrated impressive rates of cost reduction. Many are projected to fall below the cost of new gas plants (including the carbon price) during the early 2020s, if deployment is steady.

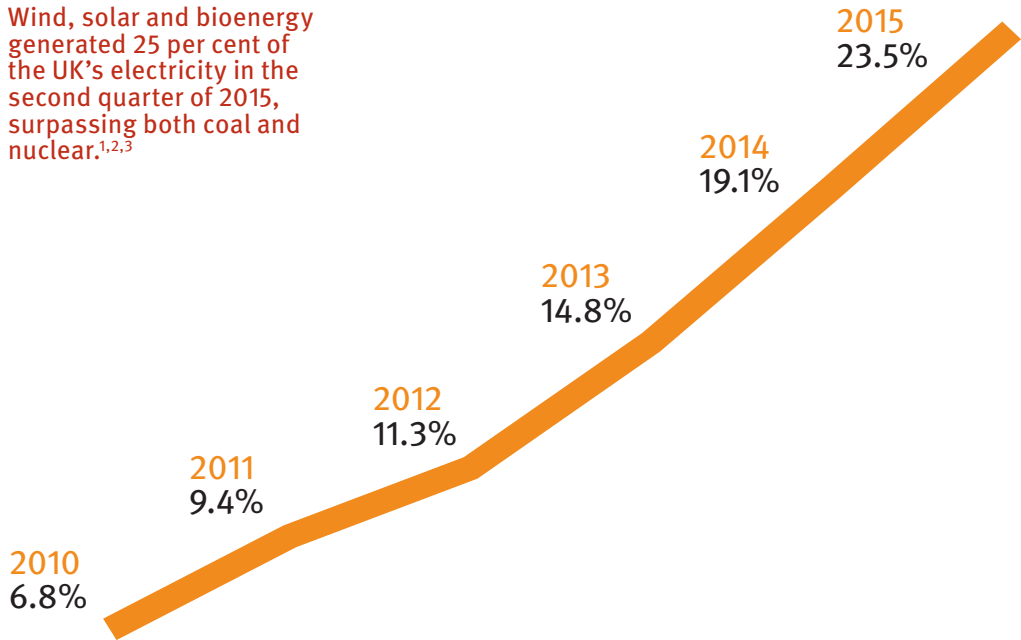
But, right now, the wholesale electricity price is too low to incentivise any new power generation, renewable or otherwise. And the unclear policy context is not helping.

We are tantalisingly close to the point where the clean power technologies of the future will out-compete their old, polluting rivals.

The 2016 Budget is an opportunity for the government to make clear its commitment to this successful sector, by setting out an adequate level of support after 2020 and establishing a mechanism to enable the most competitive technologies to compete on a subsidy free basis.

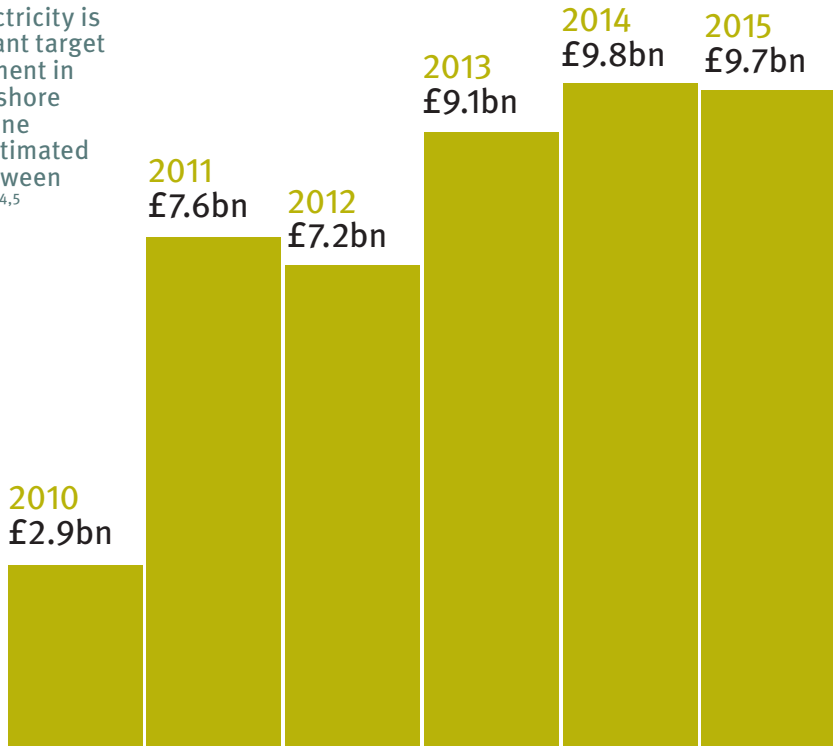
Renewables have rapidly increased as a proportion of UK electricity supply since 2010

Wind, solar and bioenergy generated 25 per cent of the UK's electricity in the second quarter of 2015, surpassing both coal and nuclear.^{1,2,3}



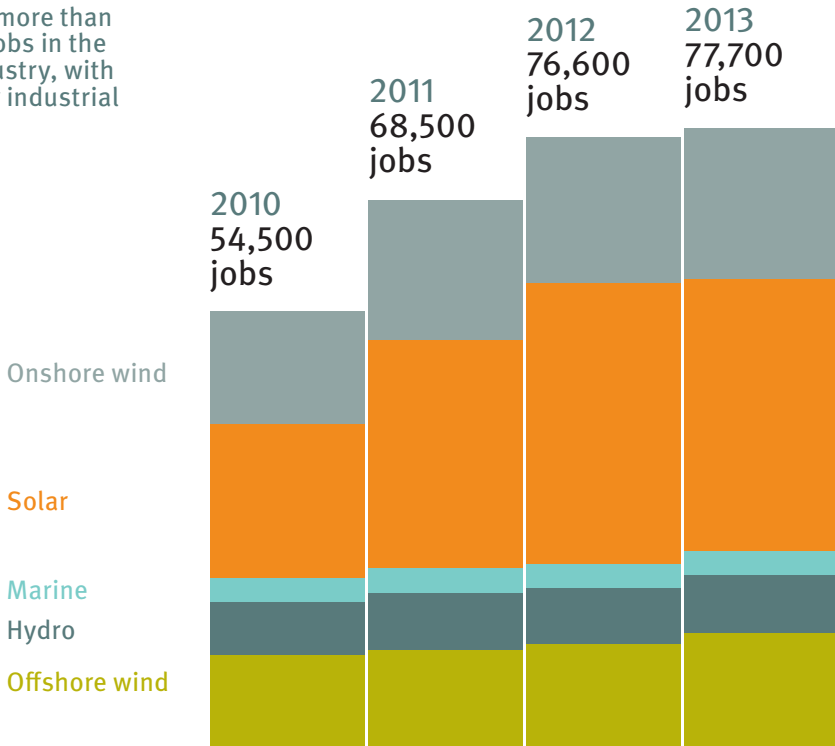
Investment in renewable
electricity is growing

Renewable electricity is now an important target for new investment in the UK. The offshore wind sector alone attracted an estimated £9.5 billion between 2010 and 2014.^{4,5}



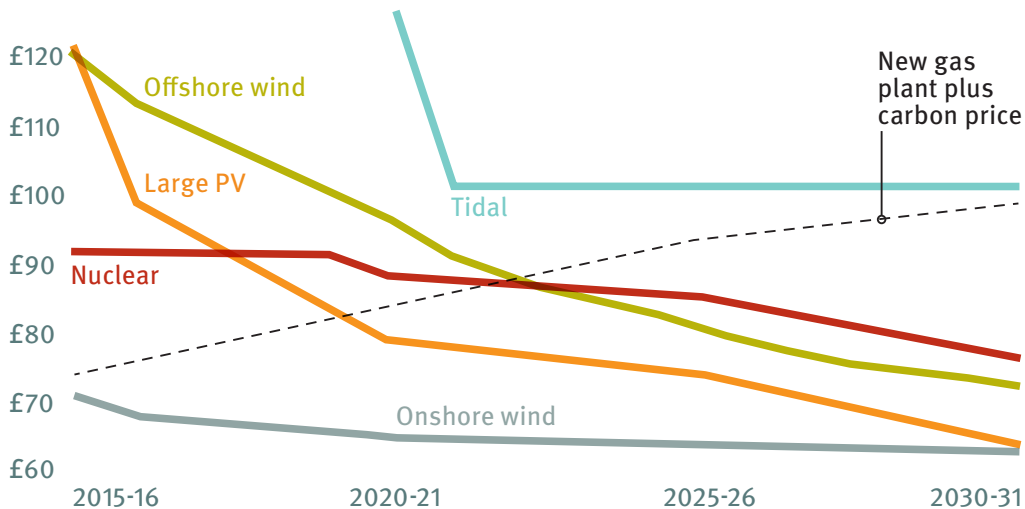
...and is a source of
new jobs

There are now more than 77,000 direct jobs in the renewable industry, with many in former industrial areas.⁶



The costs are coming down: many technologies are likely to be cheaper than gas by the mid 2020s

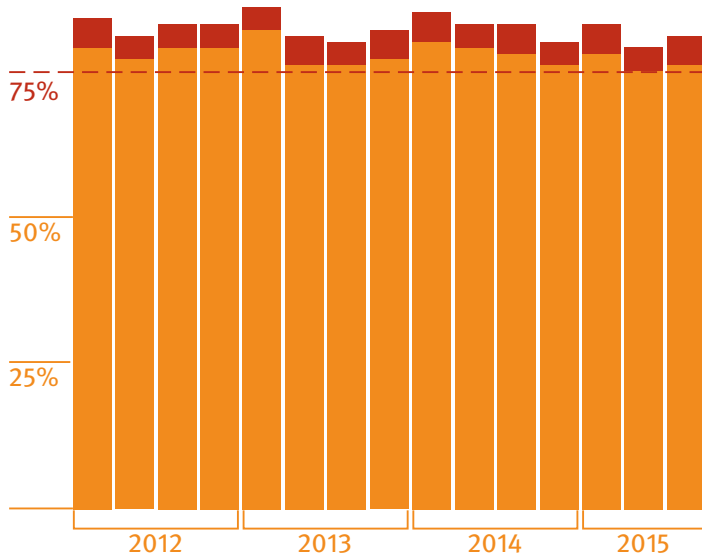
“Wind is now the cheapest technology in the UK and this means that old rules of thumb, such as ‘renewables are expensive’ or ‘unreliable’, need to be updated.”
Seb Henbest, head of Europe for BNEF^{7,8}



Opinion polls show a steady, high level of public support for renewables

Support has remained above 75 per cent, despite extensive negative media coverage.⁹

■ Oppose
■ Support



But the climate for investment in all forms of power generation is uncertain

“In the latest EY quarterly Renewable Energy Attractiveness Index, which ranks 40 countries as a destination for green investment, the UK has fallen out of the top 10 for the first time in 13 years. It now sits behind countries including China, Chile and Brazil.”

Nicholas Megaw, *Financial Times*,
October 2015¹⁰



“To unlock investment, we need a clear long term framework – so companies can plan for construction projects that will last into the next decade. To ensure we are delivering new low carbon capacity at an affordable cost for consumers, we need to make sure the market is open to all technologies, including new onshore wind developments, where they have local support.”

Open letter from Carolyn Fairbairn,
director-general of the CBI, co-signed by
18 major companies, January 2016¹¹

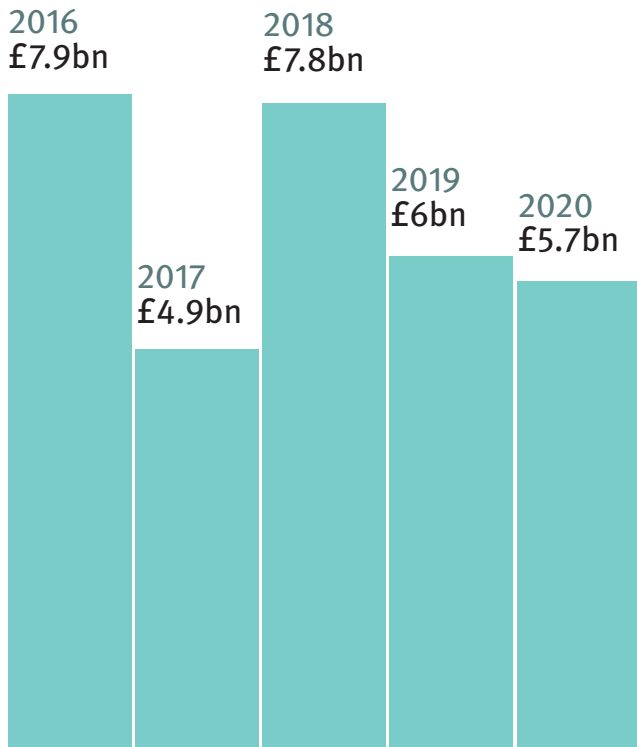
“We cannot rely on CCGTs [gas] alone to plug this gap ... Currently there are insufficient incentives for companies to invest in any sort of electricity infrastructure or innovation.”

Dr Jenifer Baxter, head of energy and environment, Institution of Mechanical Engineers, January 2016¹²



It is forecast that UK investment in renewable electricity will fall

By September 2015, 23 large scale projects, representing around 2.7GW of energy, had been abandoned.^{5,13}



The 2016 Budget needs
to confirm support for
renewables into the next
decade

Why?

- Renewables boost energy security because they are quick to deploy, have a proven track delivery record, and do not rely on fossil fuel imports.
- They can leverage billions of pounds worth of investment in cleantech and vital infrastructure. Danish developer DONG announced in January 2016 it would spend an additional £6 billion in the UK by 2020, following the government's commitment to 10GW of new offshore wind in the 2020s.¹⁴
- A broader technology mix and steady deployment will bring costs down and improve competition.

How?

- Determine the level of support available beyond 2020, and set expectations for private sector investment during this parliament.
- Provide £2.7 billion extra investment to upgrade and decarbonise the UK's electricity system. (Of this, the subsidy for low carbon generation compared to new gas plants would be only £0.53 billion).¹⁵
- Give the most competitive renewables (onshore wind and large scale solar) subsidy free contracts, so they can be built where communities support them.

Endnotes

1. *BusinessGreen*, 2015, 'Renewables overtake coal in UK power mix', <http://www.businessgreen.com/bg/news/2427394/record-breaking-renewables-surge-over-takes-coal-in-uk-power-mix>
2. DECC, 2015, *Special feature: renewable energy in 2014*, p58, www.gov.uk/government/uploads/system/uploads/attachment_data/file/437953/Renewable_energy_in_2014.pdf
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7. *The Guardian*, 2015, 'Onshore windfarms cheapest form of UK electricity, report shows', www.theguardian.com/environment/2015/oct/07/onshore-wind-farms-cheapest-form-of-uk-electricity-report-shows
8. Graph cost estimates based on forthcoming Green Alliance analysis of levelised costs of generation in the 2020s. All projections are subject to significant uncertainty, but published trajectories show zero carbon being cheaper than gas. These costs exclude system reinforcement costs for all technologies, and decommissioning and accident and storage liability for nuclear and CCS. These costs are well studied but depend heavily on context and system choices, so there will be different views about what constitutes the cheapest technology.
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12. IME, 2016, 'Engineering the UK electricity gap', quote from press release. www.imeche.org/docs/default-source/position-statements-energy/imeche-ps-electricity-gap.pdf?sfvrsn=0
13. *BusinessGreen*, 2015, 'UK's attractiveness to renewables investors has plummeted, warns influential report', www.businessgreen.com/bg/news/2426095/uks-attractiveness-to-renewables-investors-has-plummeted-warns-influential-report
14. *The Guardian*, 2016, 'Major offshore wind operator plans £6bn UK investment by 2020', www.theguardian.com/business/2016/jan/03/major-offshore-wind-operator-plans-6bn-uk-pound-investment-202015
15. Cost estimates refer to the size of the levy control framework (LCF) for the financial year 2025-26, above the LCF's 2020-21 baseline.

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By Amy Mount

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Green Alliance

Green Alliance is a charity and independent think tank focused on ambitious leadership for the environment. We have a track record of 35 years, working with the most influential leaders from the NGO, business, and political communities. Our work generates new thinking and dialogue, and has increased political action and support for environmental solutions in the UK.

Green Alliance
36 Buckingham Palace Road,
London, SW1W 0RE
020 7233 7433
ga@green-alliance.org.uk
www.green-alliance.org.uk

blog: greenallianceblog.org.uk
twitter: @GreenAllianceUK

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