

Science, climate and politics: the path to decarbonisation

Bristol Distinguished Address Series

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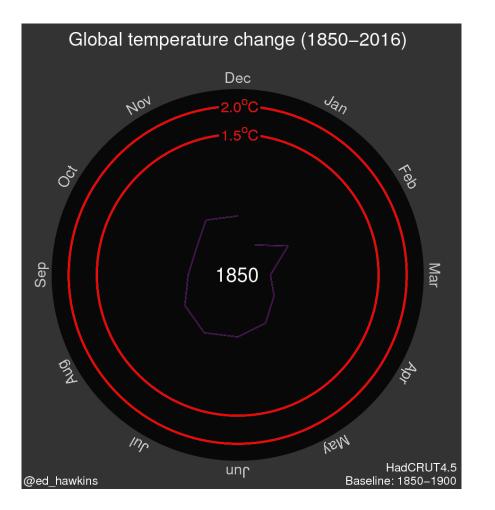
"Saving our planet, lifting people out of poverty, advancing economic growth... these are one and the same fight.

We must connect the dots between climate change, water scarcity, energy shortages, global health, food security and women's empowerment. Solutions to one problem must be solutions for all"

Ban Ki-moon. Former-UN Secretary General









How average global land temperatures have changed in the last 160 years.

Notice the dramatic increase in the last 15 years

NASA





Good Energy's Story

- Once upon a time there was a company that wanted to change the world by changing the way we supplied energy to homes and businesses
- We wanted to work with customers to become part of the solution – not the problem
- We wanted the customer to be at the heart of our world – a world that is build from the bottom up and not the top down

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We didn't want us to spend our time here!





We wanted to spend our time here





Why we think business is useful



- Richie Norton



Challenger business make change



Our challenges fundamentally shaped the future of Good Energy and changed our market

- a) The funders
- b) The regulators
- c) Your supporters
- d) Everyone else!

And our purpose – "to power a greener, cleaner future together"



How can business play its role in the energy transformation ?

Future – Science is set and technology ready

Climate Science

- Accepted among the scientific community:
 - Intergovernmental Panel on Climate Change (IPCC) Working Group 1 on the Physical Science Basis

Technology

- Innovation and research is showing rapid change and improvements in technologies to solve climate problems
 - e.g. Storage, Solar PV and SMART
- Costs falling so previously uneconomic technology becomes the obvious choice







Policy is challenging

- 2015 Paris Climate Conference:
 - An agreement with targets but compromises, eg Finance flows
- Short-termism and underlying principles
 - Government's Clean Growth Plan
 - Brexit impact
- Ongoing issues is that it is a global problem with distributed local impacts
- Difficult to translate global risk into local reality into personal action







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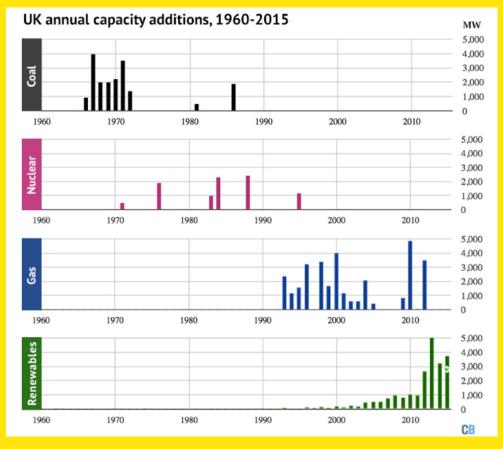
Challenges for Low Carbon policies

- Early closure of ROC for onshore Wind and Solar
- FIT reduction and closure for Solar
- No new announcements on FIT CFD
- Ring-fenced budgets for Offshore Wind
- Changes in planning guidance for Onshore Wind
- Targets for Zero Carbon Homes scrapped
- Ending tax breaks for community renewables projects
- Tidal Lagoon pushed into review
- £1bn trial for CCS abandoned
- Hinkley Point C: expensive and cost overruns already

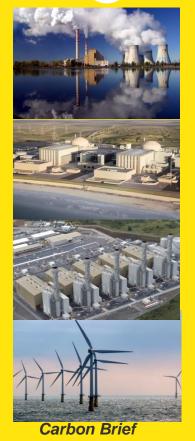


Department for Business, Energy & Industrial Strategy

UK Energy Evolution is happening







... and it looks really different



Sensors



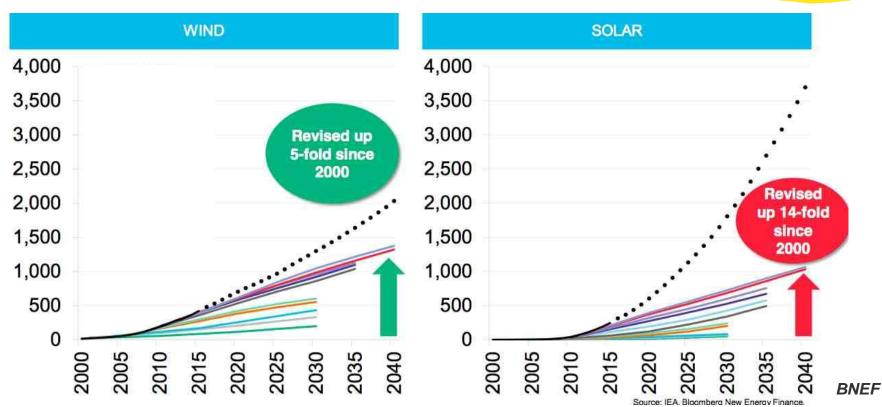
Software

Semiconductors





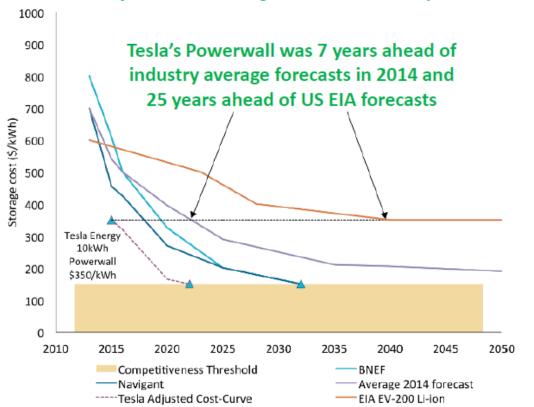
Renewable Projections



go<mark>od energy</mark>

Battery Projections

Battery costs are coming down faster than expected



Carbon Tracker

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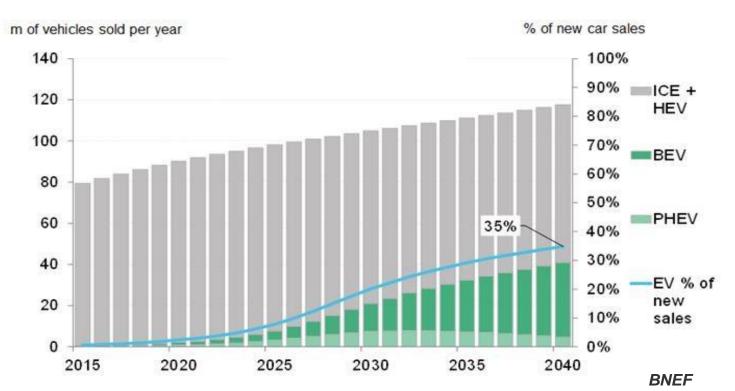


So is policy relevant?



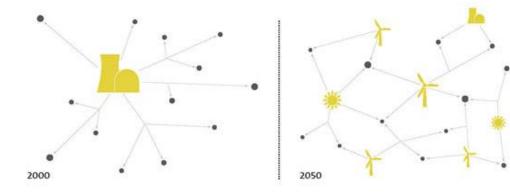
Global EV Projections – chicken or egg







A future world – driven by policy or technology?







Selectricity – a vision of future power generation and demand







OUR Purpose Powering the choice for a cleaner, greener future together

Embraces a future where the customer is at the heart of our energy market, literally, and the work is powered by greener, cleaner technology

Ambition for the future



- Growth challenges businesses to keep their values and the early entrepreneurial innovation
- At Good Energy, we hope we are bucking that trend
- With Selectricity, we hope this is the first of many launches of products that demonstrate a new set of business models in the energy market
- And to never lose our values that run through all we do:

Fair, Inclusive, Determined, Straightforward



Thank you for listening



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