LOW CARBON INFRASTRUCTURE AT NO EXTRA COST

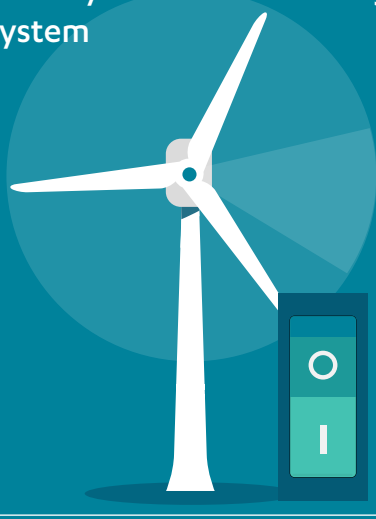
Reducing emissions has often appeared costly and difficult, but this is no longer the case, if the right decisions are taken now

Today, consumers pay an average of

£1,850

per year for electricity, heating, hot water and petrol or diesel

The same services could be delivered at the same cost in 2050 by a low carbon energy system



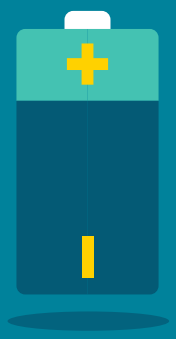
The Commission estimates that an electricity system powered mainly by renewables would cost no more than relying on new nuclear power plants

Renewables need more flexibility to balance variations in weather, but are cheaper to build

Sources of flexibility are getting cheaper: battery prices have fallen

80%

since 2010



Burning natural gas for heating and hot water is not a long-term option:

22%

of UK's greenhouse gas emissions come from heating

THE COMMISSION RECOMMENDS:

- At least 50% renewable electricity generation by 2030
- No more than 1 more contract for new nuclear before 2025
- Pilots to test hydrogen and heat pumps as low carbon heating options
- Buildings which require less energy to heat

Sources: BEIS, DfT, ESC, ONS, Commission calculations, Aurora Energy Research, McKinsey, Element Energy and E4tech

INCINERATING LESS, RECYCLING MORE

England needs to do as well as Wales – a world leader – at recycling

PEOPLE ARE WILLING TO DO THEIR BIT:

50%

would pay £30 a year for more recyclable packaging

79%

of people would be willing to separate their food waste

BUT THEY FIND THE CURRENT SYSTEM TOO COMPLICATED

Higher recycling, especially of plastics, could:

Save £6.2 billion from 2020 to 2050

Avoid the need to build 20 additional incinerators

Reduce greenhouse gas emissions

THE COMMISSION RECOMMENDS:

- Recycling targets: 65% of all waste, 75% of plastic packaging, by 2030
- Clearer labelling: recyclable or not recyclable
- Restricting use of hard to recycle plastics, by 2025
- Separate food waste collection, by 2025

Sources: Anthesis, Ipsos MORI