

05 Bringing benefits to the public

Great Britain's energy networks are helping to build a smarter, more efficient and cleaner energy system. Through the Open Networks Project, they are bringing benefits to the public, existing and new businesses, the UK and the world.



Electricity networks continue to deliver secure, reliable electricity to homes and businesses.

The networks will be able to match more varied and less predictable patterns of supply and demand, despite increasing amounts of intermittent, low-carbon energy.

Approximately **30%** renewable energy is powering the UK, yet customers continue to have 59% fewer power cuts than before privatisation.¹

30%



A smarter electricity system is keeping network costs down for the public.

The networks will be able to replace or supplement traditional network investment such as upgrades or reinforcements with more cost efficient ways of investing and operating the grid.

Research led by Imperial College London and The Carbon Trust shows a smart grid could deliver **£17 to 40bn** in benefits for the public by 2050.²

£40_{bn}

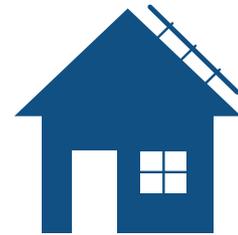


The public is gaining more control and choice over how they use electricity.

People can increasingly generate their own distributed energy and sell it to provide flexibility services to the networks or participate in peer-to-peer energy trading within their community.

More than **30GW** of generation is now connected to lower voltage electricity networks in Great Britain, including large volumes of small scale solar and wind power.¹

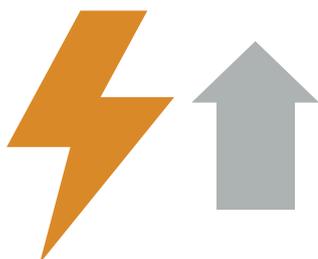
30_{GW}



It will be easier for customers, including local city councils, community energy schemes and commercial businesses, to connect to the grid.

The networks are simplifying and standardising the connections process and information available to businesses providing distributed energy resources and flexibility services.

In 2018, the Open Networks Project published five good practice guides for network operators, and existing and new customers.



There will be more competitive market opportunities for businesses as flexibility services markets grow.

A growing number of businesses are providing services to the market, whether it be for sustainability reasons, generating a profit or reducing operating costs.

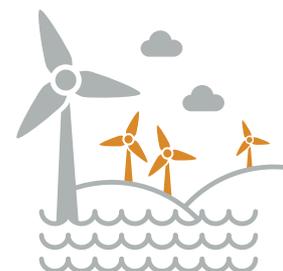
ENA estimated that more than **320MW** of flexibility services was contracted by local network operators by the end of 2018, equivalent to **10%** of the capacity of Hinkley Point C nuclear power station.



Electricity networks are delivering Government policy to decarbonise the energy system.

The networks are contributing to the UK's Climate Change Act 2008 targets, as well as global efforts to transition to a low-carbon economy.

Electricity network companies have reduced the carbon footprint of their networks by **850,000** of carbon dioxide equivalent in the past few years.³



¹ Government's digest of UK energy statistics, 2018

² The Carbon Trust's An Analysis of Electricity System Flexibility for Great Britain report, November 2016.

³ Ofgem's Network Price Controls and You: Fast Facts, March 2018.