

Tomorrow, today.



Realising the value of energy flexibility

Britain needs more flexibility in its power system

To balance future demand against available supply, Britain's power system needs to

double

its level of flexibility between 2016 and 2030.

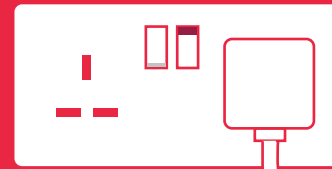
2016



2030



Flexibility means savings



A flexible electricity network could save consumers as much as

£3.5 billion

a year by 2030*.

Industry leaders champion transformation

Industry leaders believe the strategic significance of flexibility to their businesses will grow by 30% between 2016 and 2030.

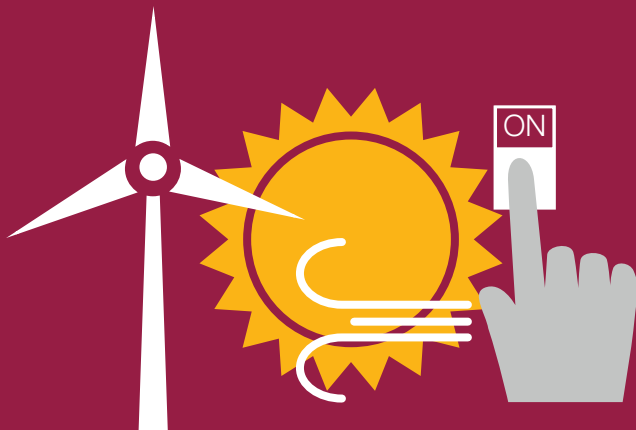


30%

The industry has the opportunity to create advantage from new and growing sources of flexibility.

Demand side flexibility

Consumers take control of when they use power — using less at peak times, and more when there is excess supply. This balances the system and is cost-efficient for consumers.



National Grid expects to rely on demand-side measures to balance the grid for "well over 50% of the time" by 2030.

Storage

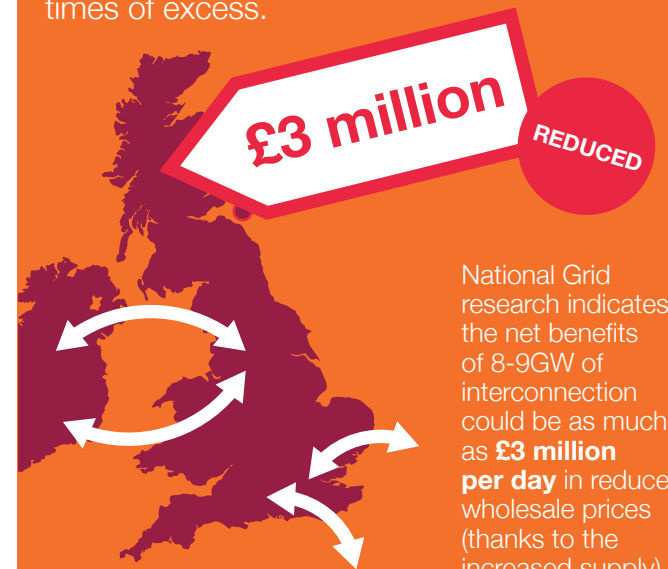
When production is high, excess energy can be stored and saved for use at peak times.



Costs for the most common storage technology — lithium ion — have fallen by 93% since 1990.

Interconnection

Transmitted through interconnectors, energy is purchased from neighbouring markets at times of shortage, and sold to those markets in times of excess.



National Grid research indicates the net benefits of 8-9GW of interconnection could be as much as **£3 million per day** in reduced wholesale prices (thanks to the increased supply).

CGI has been at the heart of change within the energy sector since its privatisation, delivering solutions to the most complex business challenges in this ever-evolving market.

Get in touch to find out why CGI is your perfect partner for tackling the energy-flexibility challenge. www.cgi-group.co.uk/energyflexibility

*Based on the committed climate change target of reducing emissions to below 100gCO2/kWh. Source: CGI and Utility Week (2016). Energy Flexibility: Transforming the Power System by 2030. Available: www.cgi-group.co.uk/energyflexibility2030.