

Making our energy smarter

Our energy network is built to deal with peaks in demand



This means that depending on the time of day between 30%-40% of the UK's energy infrastructure is under used.

To meet our carbon targets and decarbonise the grid our energy system needs to become more efficient and more flexible.

Technology is the catalyst

The Internet of Things is connecting devices all around us, making our world smarter.



By 2020 it is estimated that there will be over 50 billion smart devices connected to the internet. ¹

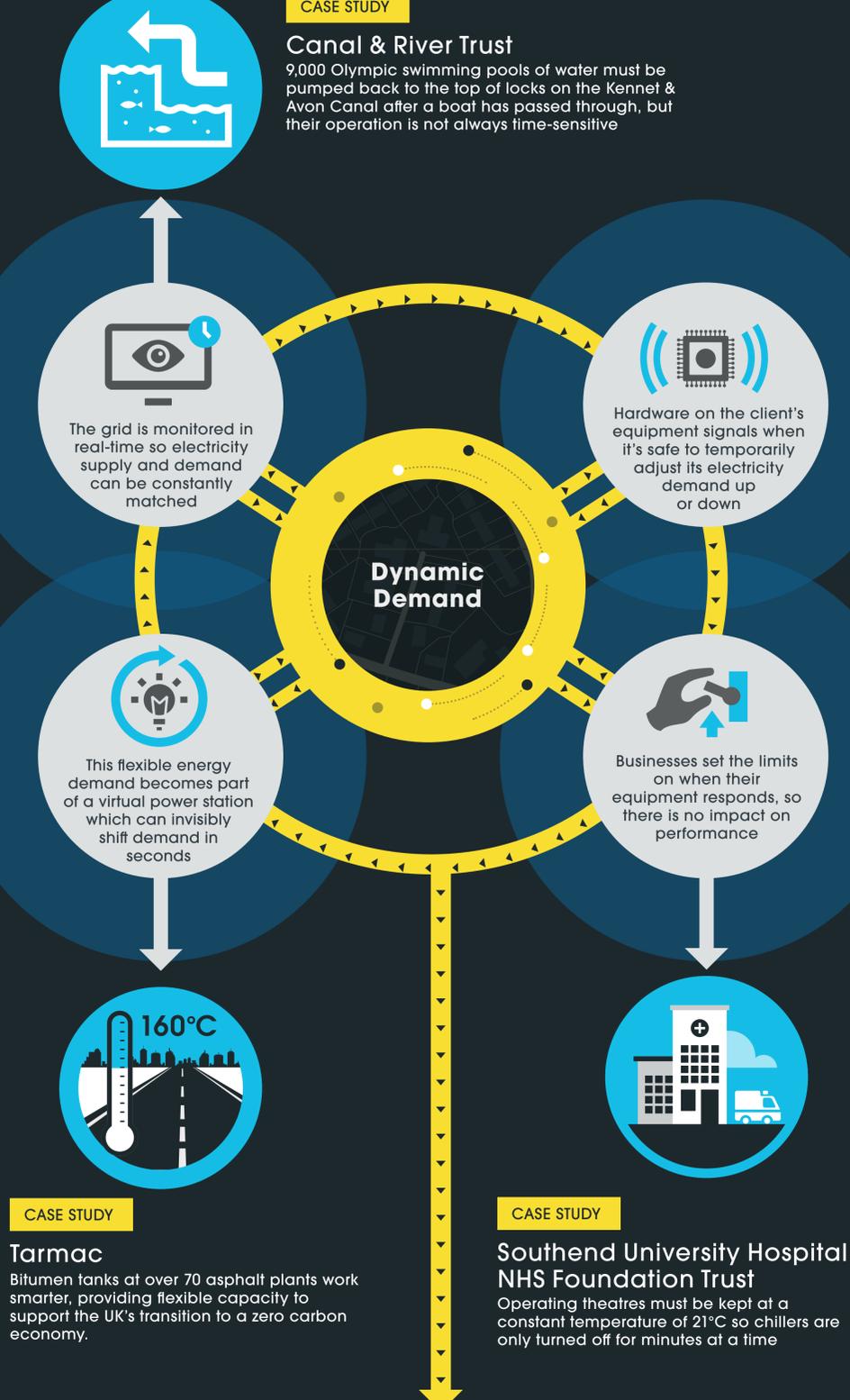
Using this connectivity to help devices respond smartly to the needs of the electricity grid could shift up to 10% of energy demand without affecting the user.

Dynamic Demand creates a virtual power station

CASE STUDY

Canal & River Trust

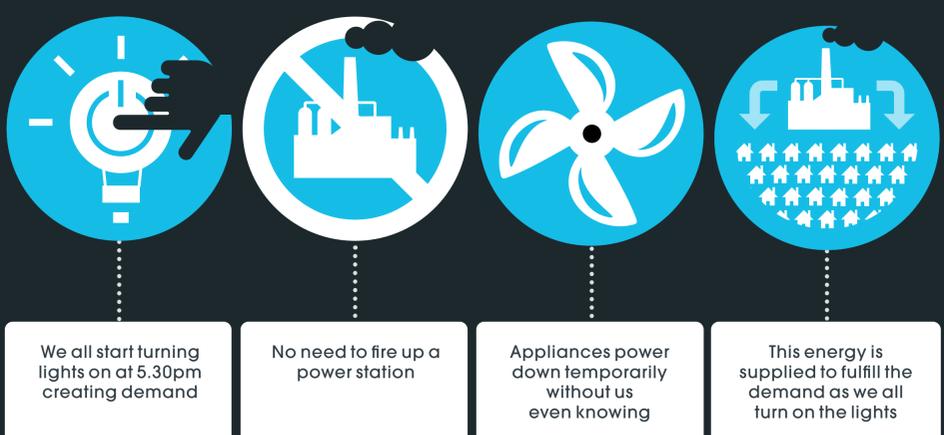
9,000 Olympic swimming pools of water must be pumped back to the top of locks on the Kennet & Avon Canal after a boat has passed through, but their operation is not always time-sensitive



CASE STUDY
Tarmac
Bitumen tanks at over 70 asphalt plants work smarter, providing flexible capacity to support the UK's transition to a zero carbon economy.

CASE STUDY
Southend University Hospital NHS Foundation Trust
Operating theatres must be kept at a constant temperature of 21°C so chillers are only turned off for minutes at a time

So, how does it work?



Savings & benefits

Building a virtual power station is a quicker, cleaner and more affordable approach to meeting our demand for energy

<p>The cost of building a new peaking power station</p> <p>£5m per MW</p>	<p>The cost of pumped storage hydro</p> <p>£2m per MW</p>	<p>The cost of battery systems</p> <p>£0.5-1.8m per MW</p>	<p>Dynamic Demand per MW is much cheaper</p> <p>£200,000 per MW</p>
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The future is bright

Dynamic Demand is helping develop the smart cities of the future where connected devices in our businesses and homes work together to help our demand for energy matches available supply. It is empowering energy users to become active participants in the industry; rewarding positive action and helping to create a circular economy where productivity and sustainability go hand in hand. It is enabling us to make better use of existing infrastructure and deliver massive savings for bill payers.



Dynamic Demand creates a smarter energy system. Cleaner, cheaper, more secure, more efficient. All without building a single thing.

Do you want to become part of a virtual power station?
www.openenergi.com



¹ <http://media.ofcom.gov.uk/news/2015/oi-next-steps/>