

Introduction



The UK is embracing a **net zero carbon future**, and the way energy is generated, stored and consumed is changing rapidly

The uptake in Low Carbon Technologies (LCTs) such as electric vehicles and heat pumps has led to more demand being placed on our network

As we move towards more local network management, Flexibility Services can balance supply and demand—helping to decarbonise our electricity supply while ensuring that our network remains resilient and reliable



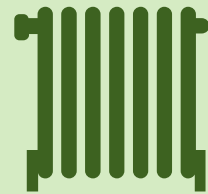
What are Flexibility Services?



When the demand for electricity in an area is greater than the amount that we can provide, we can utilise companies or individual customers known as Distributed Energy Resources (DERs) to alleviate constraints

This ensures a safe and reliable supply of energy

There are lots of things that can cause an increase in the demand for electricity, leading to network constraints



Electric heating in Winter



Air conditioning in the Summer



Big televised events



The uptake of LCTs

These DERs can be generators, consumers, and electricity storage connected to our networks that can increase exports (generate more) or reduce imports (consume less) when instructed

In return for providing Flexibility Services, DERs will receive payment








Internal Use

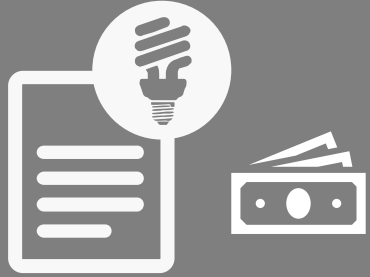


So why now?



Increase in Low Carbon Technologies	More demand on the network	Reinforcement required	Increased cost to customers	Disruption
				
<p>For the UK to meet its decarbonisation targets, we expect to see a huge uptake in low carbon technologies</p>	<p>This uptake will result in an increased demand on the network, which wasn't originally designed to cope with low carbon technologies</p>	<p>To be able to meet this demand, we will need to invest millions of pounds in reinforcing the network</p>	<p>These costs are ultimately passed down to our customers through their electricity bills</p>	<p>In addition, these reinforcement works have the potential to cause a lot of disruption in terms of road closures and supply interruptions</p>

What are the benefits?



Cheaper bills for customers



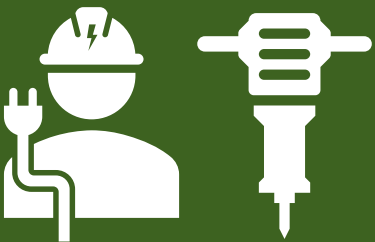
Reduces CO₂ emissions



Reduction in supply interruptions



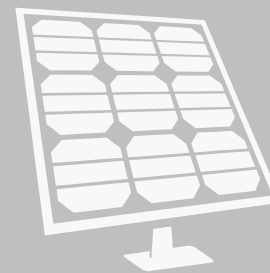
Supports community energy groups



Less disruption



Supports local businesses



Encourages Low Carbon Technologies



Utilises existing assets

How we identify a Flexibility Service requirement



On an annual basis, we forecast what we expect the demand to be on our network in both the near and distant future



We then look at each of our substations, and compare the firm capacity with the forecasted demand



Where a constraint is identified which can be alleviated by Flexibility Services, we publish an Invitation to Tender

Who can take part?



To participate in our tenders and receive payment in return for providing flexible services to our network, you need to:

- ✓ Have an asset in one of our requirement areas
- ✓ Be capable of adjusting how much electricity you consume or generate
- ✓ Provide a minimum of 10kW either individually or via an aggregator
- ✓ Complete the following steps on [ElectronConnect](#)

1

Create an account and complete Commercial Qualification

2

Sign our standard framework agreement

3

Register and upload your assets

4

Complete the technical qualification questionnaire

5

Submit a bid