



Why enabling more local energy markets will lower barriers to Local Power Plan success

Benefits of local energy markets

A local energy market is an arrangement that allows for trading between local electricity generators and local people.

It provides a mechanism for them to agree a price for locally generated renewable power, benefitting both.

This can also be used to incentivise more flexible and efficient use of local networks, freeing up capacity for more clean energy.

Without improved grid flexibility, the UK government's 8GW Local Power Plan will be severely hindered by inadequate connection capacity.

'Local energy markets' provide the following potential benefits:

- Lower bills for households and local businesses
- A greater incentive for household smart meter adoption
- Improved financial viability for more small-scale renewable generation
- The creation of a mechanism for shifting demand away from peak times and better 'balancing', meaning local generation and demand are matched in real-time. This helps manage limited network capacity.

What action the UK government can take

The UK Government can enable more local energy markets by:

- **supporting the P441 modification (see below) and giving a direction to Ofgem to support local energy markets.**
- **in future, mandating the involvement of licensed suppliers in local energy markets.**

Key explanations

How local energy markets work

All members of the arrangement must be connected under the same primary substation, and, under current rules, at the same voltage. A licensed supplier is needed to provide extra electricity and billing.

It is possible to create local energy markets under current regulations, but the **P441 modification** (see below) will make it much easier for more communities to benefit.

The bigger picture

There is not enough time to adequately upgrade electricity infrastructure to enable the renewable generation the country needs to decarbonise by 2030. Large-scale upgrades, such as pylons, will not provide enough network capacity on their own. An expansion of local energy markets would deliver better local grid management on a shorter time scale.

P441 modification to Balancing and Settlement Code

The P441 modification is being considered by a working group for Elexon, which oversees electricity trading arrangements and is regulated by Ofgem.

P441 has been in development for two years and would put a concept of local energy markets, also known as complex sites, on a more robust regulatory footing. It would also simplify the process of setting up a local energy market and enable local generators connected at a different voltage to the consumers to enter these arrangements. This would allow more communities to benefit.

P441 would also give regulatory certainty to licensed suppliers so they are more confident about investing to provide services to enable local energy.

What is the role of supply companies?

Licensed suppliers are needed as part of local energy market arrangements to provide extra electricity (on top of what is generated locally) and billing.

They can also benefit because arrangements that shift electricity demand away from peak times can reduce the risk and costs of mismatched electricity supply and demand. However, it is probable legislation will subsequently be needed to mandate the involvement of suppliers.

Example of local energy markets

The social enterprise Energy Local supports the development of Energy Local Clubs, which are a form of local energy market. These have included one urban club and multiple rural communities – the links provide more detail.

These clubs are established as a cooperative, with renewable generators and households and/or local businesses as members.