



# Conversation with Octopus Energy on locational pricing

## Who is Octopus Energy?

Octopus Energy is a global energy technology pioneer, launched in 2016, which uses technology to unlock a customer-focused and affordable green energy revolution. Octopus has invested heavily in developing a number of smart tariffs that can save consumers money, drastically cut carbon impacts and help the world ditch fossil fuels faster.

We spoke with Madelaine Brooks, Energy Markets and Regulation Lead at Octopus Energy, to find out more about locational pricing and its importance in future innovation.

## Why are reforms to unlocking locational signals in the wholesale market important?

*Flexibility is going to be very important in the shift to a decarbonised power system, particularly to ensure wider system savings that can lead to cheaper consumer bills. Ofgem's locational wholesale pricing work shows that in 2035 under national pricing, flexible EV load could charge in ways that exacerbate system constraints up to 28% of the time. Therefore, getting more accurate and granular price signals is essential to maximise the system value that flexible assets - and notably flexible demand - can provide in our future electricity system.*

*Currently the value for flexibility is hampered as there are too many fragmented markets with different eligibility requirements, adding complexity and limiting value. Just one example is the ESO's new Local Constraint Market (LCM) which prohibits entry if you're registered as a Balancing Mechanism Unit or participating in the ESO's Demand Flexibility Service. Piecing lots and lots of markets together to generate value will make it difficult for new entrants to come in and increase competition and may result in suboptimal system-wide dispatch. Locational Marginal Pricing (LMP) should allow a wider pool of flexible assets to operate in ways which support the wider system - and may encourage actions which might never be incentivised or provided through current opt-in ancillary service and balancing markets.*

*Shifting to a market design with more granular wholesale locational signals, such as LMP, would force market actors to respond to price signals that include congestion and*



*make better usage of assets in line with the physics of the system, as opposed to piecing together fragmented value across multiple disjointed markets. This will ultimately lead to more efficient dispatch across the whole market, which should reduce the overall costs of managing the system.*

*Beyond the value for flexible assets that comes with more locationally granular price signals, we see a major benefit of LMP being the total system savings it is forecast to deliver, which means savings for all consumers - even for those who can't yet provide flexibility.*

### **What are some of the new innovations that can come forward with more granular wholesale locational prices?**

*There is exciting potential for new tariffs to come into the market which are much more specific to a local area, so consumers can better match with local supply, reducing the need for additional network infrastructure. This could greatly enhance the innovations we're already beginning to roll out such as the Fan Club which gives customers local to one of our wind turbines a reduced rate to use electricity whenever our turbine is spinning.*

*There's also interesting possibilities for new innovations in EV fleet charging where locational pricing would encourage different charging profiles in different parts of the country, particularly the ability to better respond to a locational price signal that can be seen at day-ahead with LMP, rather than waiting until an hour ahead of delivery when the Balancing Mechanism kicks in. This has the potential for greater cost savings and efficiencies, as waiting to do everything at the last minute as under the current arrangements with the BM is often very costly.*

*Ultimately, we see greater locational pricing as having opportunities for other players and innovators to come into the market and create new exciting propositions, leading to better outcomes for the system and consumers.*

### **Where can people find out more about innovations from Octopus Energy?**

*To find out more information on some of our products such as our Fan Club or EV tariffs, check out the following link: <https://octopus.energy/octopus-smart-tariffs/>*

