



Sustainable Energy Futures Ltd

Dear Doug,

08/05/2023

Response to Ofgem's call for input on the future of distributed flexibility.

Sustainable Energy Futures Ltd is a consultancy that provides advice, analysis and challenge for zero-carbon energy transformation to clients globally. SEF Director Dr Jeff Hardy drafted this response.

Due to time constraints, I am unable to provide a complete response. However, I want to make the following high-level points about this critical area. I support your desire to unlock CER and DER and encourage you to move quickly.

- 1) The call for input makes a good case for the vital role of CER and DER energy system flexibility. It also recognises that neither can fully participate. This is similar to the findings in our report on "[Enabling Decentralised Energy Innovation](#)". We found that DER and CER face five main barriers:
 - a. **Limitations in realising the value of decentralised energy** - Decentralised energy has significant value to local and national energy systems, as well as wider priorities, but is prevented from discovering and fully realising it.
 - b. **Market rules and governance** - The current regime for licensing energy suppliers and the self-governance of industry codes and technical standards stifles decentralised energy from realising its potential.
 - c. **Limitations in innovation support processes** - Innovation processes are not sufficiently flexible or integrated.
 - d. **Limited attention on the demand side** - Energy efficiency and demand-side approaches have been undervalued in the UK for decades and are inherently local and aligned with decentralised energy resources.
 - e. **Regulatory uncertainty and lack of multi-level coordination** - There is a national lack of vision and a holistic plan for the future zero-carbon energy system, particularly on the role of decentralised energy.
- 2) You rightly recognise that CER has an important role but that access to CER is limited to those able to pay. You also recognise that CER could have positive or negative implications for the wider energy system. These issues are beautifully described in Gareth Powells' and Michael Fell's [flexibility capital framework](#), and I think Ofgem would benefit from adopting this framework in their thinking.
- 3) The call for input does not emphasise the need for retail market reform. There are two missing elements:
 - a. CER will likely need to be automated to maximise the certainty and impact of its flexibility. Third parties, including energy suppliers and aggregators, will likely deliver this automation. Innovation by energy suppliers is currently

limited, and having multiple suppliers at the same meter point is impossible. These factors will continue limiting progress until Ofgem carries out the work it started in 2018 on retail market reform. On aggregators, the BEIS/DESNEZ/Ofgem work on interoperability seems reasonable, but as with many other reforms, the pace at which it is applied could be faster.

- b. CER and DER are place-based, and the approach to unlocking the benefits of these assets may vary from place to place. It is currently impossible to undertake place-based innovation, including in retail markets. Our “Enabling Decentralised Energy Innovation” report recommends an Energy Innovation Zone approach to enable place-based energy innovation. Perhaps this could be a way to trial a flexibility exchange.
- 4) The call for input makes a clear case for a ‘medium exchange’. My challenge to you and the industry is testing this and learning something useful as quickly as possible without going through a multi-year consultation cycle. As you state, there is a significant imperative to act. Also, as I understand it, Ofgem can steer and compel the industry to act quickly, for example, through licence conditions.
- 5) As I have stated in my response to your consultation on the future of local energy institutions and governance, there is a growing temptation in Ofgem to put numerous duties on the FSO, an institution that does not yet exist. The same is valid here. My challenge is whether you can use standards, rules and powers to move much quicker to trial an exchange soon and learn. For example, in this call for input and the governance consultation, you state that the ENA Open Networks is not quite working – but do not recognise that it is within your gift to address this.

I am happy to discuss any of the points above with the team.

Yours sincerely,

A handwritten signature in grey ink, appearing to read 'J. Hardy', with a stylized flourish at the end.

DR JEFFREY HARDY
Director