

Consultation Response to DESNZ: Assessing the Case for Community Batteries

Who we are

Energy Capital is the West Midlands' smart energy partnership, bringing public, private and third-sector partners together to deliver an energy transition that is timely, just, and grounded in local expertise. Based in the West Midlands Combined Authority (WMCA), a body that represents the seven local authorities that constitute the West Midlands conurbation, we provide a single point of contact for government, regulators, funders, investors and partners across the West Midlands. Our aim is to make the West Midlands one of the most attractive locations to develop and deliver innovative clean energy systems and associated businesses in the world.

What we do

Working with local authorities, regulators, energy companies and national government, we're responsible for delivering against our Regional Energy Strategy and securing the investment and devolved powers necessary to do it justice. We have an extensive work programme, from delivering innovation projects to support smart energy planning, to building a pipeline of investment-ready local net zero projects to attract the financial weight of the private sector, to retrofitting up to 14,000 of our region's oldest and coldest homes.

Access the consultation

<https://www.gov.uk/government/calls-for-evidence/assessing-the-case-for-community-batteries>

Consultation response

1. Do you agree with the government's proposed definition of community batteries in section 1.2.1? If not, why not?

Energy Capital broadly supports the proposed definition of community batteries as batteries serving multiple homes with benefits distributed across participating households. However, we would encourage the definition to recognise the wider system and societal benefits that community batteries can provide beyond direct bill savings. Community batteries can contribute to local energy system resilience and, in some circumstances, enhanced security of supply. While these benefits may vary depending on the specific model and configuration deployed, they form an important part of the overall value proposition. It is important to stress that community batteries should not just be considered a 'fallback option' for cases where individual batteries are not feasible. They bring distinct benefits in their own right.

We also recommend considering whether the requirement for "direct" bill savings may unintentionally exclude certain community ownership or benefit-sharing models. In some arrangements, financial benefits may be distributed through community funds, dividends, service charge reductions or other mechanisms rather than appearing directly on household electricity bills. A broader definition could help ensure innovative delivery models are not inadvertently constrained.

2. Do you agree with our categorisation of community batteries into: shared behind-the-meter, microgrid, and virtual private network?

Ultimately, the distinction levied between front-of-meter and behind-the-meter community batteries should not factor into an assessment of the case for them. If the aim of instituting community batteries includes exploring models of community ownership and increasing bill savings, both categorisations are necessary to consider.

16. Do you see community batteries as particularly suited to any type of tenure? If so, which, and how?

Community batteries are particularly well suited to housing tenures where individual battery installation is less practical, less affordable or less attractive. This includes both social and private rented accommodation, where residents may have limited authority to undertake property modifications or may be unwilling to invest in technologies that remain with the property. Community battery models can provide access to the benefits of energy storage without requiring direct household investment.

Community batteries may also be beneficial for households that lack the financial resources, technical confidence or interest required to install and manage individual battery systems. By aggregating demand and management responsibilities at community level, these solutions can increase accessibility and support a more inclusive energy transition.

17. Do you see community batteries as particularly suited to any type of property? If so, which, and how?

Community batteries are particularly well suited to property types where individual battery deployment faces practical constraints.

This includes blocks of flats, apartment developments and densely populated urban housing where space for individual battery installation may be limited, or where there are perceived fire or other security risk. They are also likely to be beneficial for terraced housing and other properties with restricted internal or external space.

In these settings, community batteries can enable residents to access many of the benefits of energy storage while avoiding the challenges associated with installing separate systems in every dwelling.

25. Are there any barriers in addition to those listed in section 3? If so, what are they?

Energy Capital broadly agrees with the barriers identified within the consultation. However, an additional consideration is the governance of community battery projects. Establishing arrangements that ensure the battery is managed in the best interests of the community, including ownership structures, decision-making processes, operational responsibilities and the fair distribution of benefits, can be complex. Clear governance arrangements will be important to maintaining stakeholder confidence and supporting the successful delivery of community battery schemes.

26. How would you rank the technical, financial and other barriers in section 3 in order of importance?

We rank the barriers as follows:

1. Other barriers (awareness, governance, business models and delivery complexity, etc)
2. Financial barriers
3. Technical barriers

While technical challenges remain, most of the fundamental technologies required to deploy community batteries are already proven and commercially available. Technical risks are generally manageable through appropriate system design and project development.

The most significant challenges currently relate to awareness and market demand. Public understanding of community batteries remains relatively low, resulting in limited market demand. In turn, this restricts investment across supply chains and limits opportunities to achieve economies of scale.

Furthermore, coordinating multiple technologies and stakeholders is inherently more complex than more established community energy projects, such as rooftop solar PV schemes. The development of trusted business models and clearer routes to market will therefore be critical to wider deployment.

There are additional barriers around planning consents and permissions for installing community batteries, as well as potential legal barriers around access rights and maintenance that should be reflected. Clarity around whether there are currently common contract forms for community batteries to manage these barriers will be important.

Finally, there are potential barriers around community acceptance of community batteries owing to their design, aesthetics, and general impact on a local environment.

27. What policy or regulatory changes would make community batteries more attractive to install? How would they make community batteries more attractive?

Support from Great British Energy could help make community battery projects more attractive to develop and install. In particular, measures that reduce upfront financial risk and support community ownership models could encourage greater deployment.

28. What sort of guidance would be useful for prospective or current owners of community batteries? Which organisation is best placed to provide it?

Prospective and current owners would benefit from clear, end-to-end guidance covering the development, installation and operation of community battery projects, similar to the guidance currently available through Net Zero Go for solar PV installations. Given their existing roles in supporting local energy projects, Net Zero Hubs, Combined Authorities and local authorities are well placed to help develop and disseminate this guidance, working alongside government, industry and community energy organisations.

29. In addition to these barriers and the safety risks highlighted in the following chapter, are you aware of any negative consequences to the rollout of community batteries? If so, what are they?

If operated primarily to maximise commercial returns or bill savings, community batteries could in some circumstances contribute to local network constraints rather than alleviating them. This highlights the importance of ensuring that community battery operation is appropriately aligned with local network conditions and wider energy system objectives.

35. What actions could the government take that would most effectively support the rollout of community batteries?

Easy to understand resources on how batteries can be deployed would be useful. This could include case studies or a simple online scenario modeller which would allow community groups to enter and change data to better understand the possibilities and trade-offs.