



Bath & West Community Energy

Generating local energy

A Smart, Flexible Energy System: A BEIS & Ofgem Call for Evidence

A Response from Bath & West Community Energy

Bath & West Community Energy

Bath & West Community Energy (BWCE) is a Community Benefit Society set up in 2010. BWCE has raised over £12 million through community share and bond offers, plus debt, to finance the construction of over 12 MW of community owned solar PV and one small hydro. BWCE has distributed over £100,00 of its surplus cash reserves, via its independent community fund, back into local community projects. To date BWCE has paid 7% interest to its members, the majority of whom live in the local area. A recent survey of BWCE members suggested that over 50% of members are doing more to reduce their carbon footprint as a result of membership of BWCE and 60-70% are talking more to friends, family and colleagues about climate change and community energy.

Following its early success, BWCE spun out its development business as a separate majority community owned business, Mongoose Energy, to support community enterprises all over the country to develop and manage their own projects. Mongoose Energy has now raised £70 million of capital through debt and community share and bond offers and helped bring 57MW of renewable energy into community ownership.

Mongoose Energy is now also developing energy supply and other innovation services together with its partner community enterprises, including BWCE.

Overview

We strongly welcome this call for evidence on a Smart Flexible Energy System. We believe the direction of travel sketched out in the introduction to the call is in general terms both sound and essential if the UK is to continue to de-carbonise and embed greater security within its energy system.

We believe that as generation on the energy system becomes increasingly distributed, it will be vital for the system to move towards balancing of supply and demand at a more local level in order to be able to operate efficiently. Whilst the call for evidence makes passing mention of this within section 5, more work needs to be done to really understand what this means for the energy system and how best it might be achieved alongside national balancing.

We hope that this call for evidence, and the government and regulator response to it, will be the start of an increased coherence in the developing policy and regulatory framework necessary to deliver a smart and flexible energy system.

We also welcome the brief acknowledgements within the document that community energy projects and groups can add value within this more decentralised and active energy system. However, we feel that a lot more work needs to be done to utilise the trust and credibility of local groups in creating the conditions within which complex changes can be communicated and embraced.

Community energy groups have already implemented over 150MW of community owned renewable energy projects against the odds, creating an estimated 60-70,000 community investors with a new focus on local energy and establishing conversations and debate with 4-5 times this number through local events and newsletters. Many of these organisations have also been involved in demand side projects and are increasingly looking to get involved in innovation projects around aggregation and storage.

This is still a growing sector with the potential to do so much more. Community energy groups are unique in their ability to provide access to local networks, help identify vulnerable consumers, provide advice and support and build peer recognition. They can also help to increase the local profile for new technologies and behaviours as well as offer local ownership of new infrastructure, such as storage and charging facilities. They create opportunities for aggregating solutions to build scale whilst promoting local networks, retaining local buy-in and drawing in much needed social investment.

Increased local balancing of supply and demand brings the potential of community energy into sharp focus. More local ownership of energy assets and infrastructure brings more awareness of and local accountability for supply side projects and lays the foundation for more active involvement in demand side action as a stronger link is made in people's minds between supply and demand.

We believe much more could be done to utilise the opportunity for embedding community action, local knowledge and trusted local intermediaries within the shift toward a smart and flexible energy system.

Response

In particular we would like to comment on four major themes of relevance to community energy:

- Utilising local networks to help prepare the market for the introduction of half hourly settlement.
- Creating the conditions within which a greater focus on local balancing can gain traction within the market.
- Creating the conditions within which community energy groups can access the market.
- Embedding community energy within innovation trials.

Utilising local networks to help prepare the market for the introduction of half hourly settlement. In answer to one of the questions, the priority for engaging domestic and SME consumers about the transition to a smarter energy system will become a top priority in terms of implementation following the introduction of half hourly settlement. However, this will be a complex change for consumers that could potentially introduce scope for abuse

and certainly misunderstanding. As a result, we should be prioritising now the priming of the market for the change to come through active engagement at a local level. We should also now be starting to test the potential for, and the best routes to, utilising trusted local intermediaries and local networks in order to support the targeting of vulnerable customers and embedding of DSR within the domestic/SME sector.

Creating the conditions within which a greater focus on local balancing can gain traction within the market. Whilst section 5 outlines three different models for developing the roles of key stakeholders, we agree that the likely actual outcome will be a combination of all three. However, we think the introduction of 'Local Units' deserves special consideration. If we leave it all to the market then we are placing great responsibility on market signals to deliver complex outcomes, which introduces significant risk of unintended consequences. We would expect Local Units to provide a mechanism for more closely matching supply and demand at a local level whilst also feeding into an overall national balancing mechanism. Local Units could also provide a focal point for drawing in local interests within a procurement process that could more effectively meet the needs of new entrants. More work needs to be done to research and test options and the potential scope for Local Units and if they can play a role in managing the emerging energy system.

Creating the conditions within which community energy groups can access the market. Community energy groups have specific needs and backgrounds that influence their ability to engage with the energy market. They do not have extensive working capital nor are they able to draw on significant administrative resource. Whilst they have demonstrated an ability to move up learning curves with speed and efficiency, they don't respond easily within highly complex technical and financial contexts. They do however have a range of key characteristics, as outlined above, that offer significant value to an emerging smart and flexible energy system.

As a result, creating a system that has a more localised focus, perhaps through some form of Local Unit, provides scope for integrating more localised knowledge and adapting procurement processes, demands and outcomes to better enable new entrants that are not so well entrenched as the current dominant incumbents. There is a need to work with sector bodies, government and funders to build capacity and skills within the community energy sector through training, pump priming grants/seed funding so that the sector is more able to respond to the emerging opportunities.

Embedding community energy within innovation trials. Community energy groups have been involved in innovation trials both through Innovate UK and the LCNF. However, the focus has tended towards addressing the technical barriers and constraints. The softer human interactions that underpin change are not often investigated or reported on to the same degree. Our experience for example in working on the community interactions within an Innovate UK project, has been that it has been very difficult to raise up some of the issues we have been uncovering within the reporting process, including the final report. This is in part due to project specific issues, but it is also in part due to the way the project was framed and tasked within the wider programme.

It is vital we test and learn about how best to engage, enthuse and support householder and small businesses in particular to embrace change in how they interact with the emerging

energy system. We believe community energy and community energy groups can play a key role in this, but we need to integrate the need for a community dimension into innovation programmes. Both by setting up a specific local and community energy innovation fund, as well as integrating a clear and reportable local and community energy dimension into existing mainstream innovation programmes, including the FPSA programme let by IET and the Energy Systems Catapult, referred to in the call for evidence.

The FPSA programme offers an important opportunity for designing and implementing key trials, with the policy and regulatory derogations necessary to be able to test innovation within the real world current system. Full engagement from senior civil servants with political oversight during the next phase of the programme would add significant weight to the outcomes and increase the chances of coherence and a developing consensus around change amongst key stakeholders.