

## **ECONOMY, ENERGY AND FAIR WORK COMMITTEE**

### **PUBLICLY OWNED ENERGY COMPANY INQUIRY**

#### **SUBMISSION FROM Community Energy Scotland**

#### **Scottish Publicly Owned Energy Company (POEC)**

*Community Energy Scotland is a registered Scottish charity. Its mission is to strengthen and empower local communities by helping them to own, control and benefit from their local renewable energy resources, control and reduce their energy costs, regenerate their communities and play their part in the low carbon transition.*

#### **What are your general views on the idea of a Scottish publicly owned energy company (POEC)?**

*Community Energy Scotland welcomes the proposal and the motivation behind it i.e most notably the alleviation of fuel poverty. We believe it is correct to focus on the 'supply side' of the fuel poverty equation – not just the 'demand' side, to ensure a fully balanced approach to the issue. The main supply side approach to date (i.e encouraging switching) has not yet had the desired impact and so it is correct to consider complementary and additional measures.*

*However, it is clear that energy supply is a complex and challenging business especially for small companies wrestling with wholesale market price fluctuation and this may mean the POEC may struggle to become profitable whilst undermining the fledgling non-profit energy supply company, Our Power. It would be perverse for a Scottish Government initiative to have this impact on a supply company developed with strong Scottish Government support and encouragement.*

*It is therefore important to consider how the POEC could intervene in the sector in a way which meets the general objective of addressing fuel poverty without undermining existing Scottish Government investment in Our Power and the significant efforts made to make this sustainable.*

#### **What role should it fulfil and how?**

*As Scotland's Community Energy charity, our focus is on how the POEC could assist community energy initiatives to address fuel poverty and generate local benefit. In meeting its objectives of widening supplier choice and controlling energy costs, the POEC could help facilitate greater community energy development in Scotland*

*which, in turn, could help the POEC meet its objectives. In particular, the POEC could:*

- Help control energy supply costs by investing in new (or existing) community energy generation as a means of generating local benefits and securing its own stable long term energy supplies;*
- Widen supplier choice by supporting the development of local supply arrangements in the evolving distribution-level market; and*
- Promote consumer awareness and influence by leveraging the local role of community groups and local civic institutions*

### **What are the key challenges that the POEC should address?**

*Over the last 15 years there has been an active community and local energy sector in Scotland which has resulted in new distributed renewable energy generation and wider public engagement in the energy system. The demonstrable success of community energy projects has generated enthusiasm and a strong foundation for further community-owned generation. Community energy projects recycle value from energy sales in their local economies and some have been piloting innovative new ways of directly linking local generation and local heating loads as well as undertaking local fuel poverty alleviation schemes. A great deal of this is based on voluntary action. More recently, the policy and support environment has become increasingly difficult with the drive to ‘subsidy free’ renewable. Also, access to the National Grid has become very limited or entirely constrained across significant parts of Scotland. This is very frustrating for many community groups and innovative measures are needed to help rekindle enthusiasm and ensure the significant foundation for the democratisation of our energy system is not lost. In the meantime, the ‘smart energy’ revolution is underway and is driving reform in established markets in electricity supply, opening new ways to link local renewable energy generation with heating<sup>1</sup> and transport<sup>2</sup> and enabling technical measures which allow new or additional generation on distribution networks without breaching constrain levels or requiring expensive grid reinforcement. The way the electricity grid is managed is also changing, from the current ‘passive’ approach to a much more active approach, creating new opportunities for local grid services and direct linking of local generation with local demand through new supply arrangements. This is particularly relevant to those which are transmission constrained – typically rural and off the gas grid. We believe that the potential of this smart energy transition to reduce costs will only be met if there is active engagement by informed citizens and that local community energy groups are well placed to facilitate this process.*

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<sup>1</sup> See, for example, the ACCESS project [here](#) - real-time matching of local generation to local heating demand from a constrained community hydro, behind the Grid Supply Point <sup>2</sup> Through, for example, EV charging and Hydrogen generation

## How might a Scottish energy supply company work best to support the growth of local and community projects, and fuel poverty reduction?

*Energy suppliers will typically forward purchase energy from the wholesale market and / or their own generation assets, or through PPAs with other generators. Could the POEC assist with, or undertake itself, the forward purchase of the output of existing community generators, for, say, a 15-20 year period, through combining an upfront capital payment combined with an ongoing revenue payment (perhaps on a 50:50 basis?) It is possible to envisage a model whereby a well-financed supply company could purchase power at a discount in return for the security it would provide to its own wholesale purchase costs and the ability it would provide for community generators to pay off some or all of the debt on their project – thereby lowering their debt cost and improving their margins. A radical transition in the way our electricity networks will be managed is underway – from a ‘passive’ to an ‘active’ or dynamic approach - which will create new distribution level markets for grid services. From our experience on the ENA<sup>2</sup> Advisory Group tasked with planning this transition, we can see that it will create new opportunities for communities and their consumers to influence and benefit from new or localised value streams if suppliers are willing to:*

- Invest in this emerging market area by the purchase of power from existing or new ‘non-firm’ distributed generation;*
- Aggregate and control demand from distribution level customers to provide grid services in balancing the network;*
- Recycle the value of grid services and more efficient use of system benefits back to customers through Time of Use and flexible local tariffs reflecting local circumstances.*

*As this process involves new market development as well as the alleviation of existing market failure (i.e in grid constrained areas) there are good reasons why the POEC could act to help open this market up by reducing the risks to suppliers willing to invest in it.*

*Local distribution connected projects have the potential to supply electricity behind the national grid supply point or even directly to significant local loads on a ‘virtual private wire’ basis – the potential of which will be significantly increased with the advent of local energy storage capability. This concept aligns closely with the development of the Distribution System Operator (DSO) model allowing real-time matching of local generation and demand and also local ‘peer to peer’ trading.*

*The value of this approach will be magnified in grid constrained areas, where no new generation projects are possible and existing projects may be curtailed. These off gas grid areas typically also have a high level of renewable energy resource but also high levels of fuel poverty and high transport costs. In areas which are unable to benefit from grid*

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<sup>2</sup> Electricity Networks Association

*reinforcements allowing greater energy export, the development of a distribution-level market will be a particularly significant new opportunity.*

**How can the POEC be best designed to align with wider Scottish energy policy objectives, and to avoid potential policy conflicts?**

*N/C*

- **Should a new Scottish POEC be more than solely a licensed energy supply company? Should it have a direct role in energy generation?**

*Yes – see above for our comments on its potential role in energy generation. We also believe that it would have a key role in promoting consumer awareness, engagement and influence on the energy system - i.e, its ‘democratisation’.*

*OFGEM, in a recent ‘State of the Energy Market’ report<sup>3</sup> states:*

*There are two major challenges to ensure that a transformed energy market works for all consumers.*

- *Vulnerable consumers must be protected, and able to engage in the market more effectively □ Innovation must be harnessed in ways that bring benefits to all consumers.*

*In relation to innovation, it goes on to say:*

*‘Many consumers already generate their own electricity, and can monitor and control their consumption using smart meters. In future, the traditional ‘supplier hub’ model, whereby suppliers manage most interactions with consumers and the wider market, may break down. Peer-to-peer energy trading and greater customer ownership of their data should allow different ways of engaging with the energy system.’*

*The Helm Review notes<sup>4</sup> the energy market is not a level playing field, not least owing to the level of complexity of the current system. This complexity:*

*‘..makes it much easier to protect specific interests, while at the same time reducing the ability of households and industrial users to defend their general interests in general efficiency.’*

*A simple illustration of this is linked to the roll-out of smart meters. Smart meters are promoted as a means by which consumers can ‘take control of their energy use’. But only one supplier<sup>6</sup> has, so far, offer a time of use tariff linked to the installation of smart meters –*

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<sup>3</sup> OFGEM, October 2017

<sup>4</sup> Dieter Helm, 25<sup>th</sup> October 2017, **Cost of Energy Review**, p.35 <sup>6</sup> Green Energy UK – see [here](#)

*actually giving their customers the opportunity to adjust their demand in relation to actual price. Most consumers will simply (and unwittingly?) be supplying much more detail personal profile data to their supplier which will allow them to much more accurately buy and sell energy. It is a moot point as to whether the benefits of this will trickle down to the customer.*

*Although the smart energy transition could provide the opportunity for consumers to benefit from new supply arrangements, from the recycling of new value streams, and by greater control over when they use energy, the potential of this will not automatically be realised if consumers are not well informed of what they are buying, where it comes from and how they can manage their demand effectively. As with other market areas (cf food), informed consumers can have a significant role in how a market develops, although this has never really been the case with energy. And, as with other markets, this does not mean that consumers have to engage in the intricate detail of energy management in their homes, because new tech should be able to automate most requirements. But the provision of independent, objective and trusted advice is central to consumers 'buying into' the new systems. Currently, this sort of advice is not a characteristic of the energy market. The POEC therefore could play a vital role in ensuring this is available.*

*One way it could do this would be to 'lever' the role of community and civic institutions in supporting 'their' consumers to understand and exploit opportunities. It could also provide assistance to community organisations (including local authorities) to engage in the system and market in a way that draws in value to local communities, thereby helping to widen choice. Clearly, in doing this, it would need to avoid anti-competitive behaviour although this is less of an issue where there is currently market failure.*

- How might the POEC be designed to promote objectives and functions beyond the retail of gas and electricity (e.g. supporting investment and innovation in new technologies and infrastructure)? What benefits are there to having wider objectives?*

*Developing local opportunities referred to above could directly contribute to the POEC achieving its objectives. But along-side widening the choice of supply and controlling energy costs, they also present an opportunity for added benefit by addressing fuel poverty, decarbonising the electricity system, and facilitating a route to market for new renewable energy generation. All whilst strengthening local economies and consumer awareness and understanding of the market (and their ability to benefit from it).*

*How a POEC effectively acts on these opportunities will depend on the balance struck between addressing market failure and avoiding anti-competitive activity, and the need to secure economies of scale and help strengthen, rather than undercut, existing initiatives which are already some*

*way down the line in building local and / or nonprofit solutions to energy cost and retention of local value (such as in the case of Our Power).*

*In conclusion, wider objectives could include:*

- *Developing a new model for the forward purchase of power from community generators that would pay upfront for a proportion of a generator's output;*
- *Development and operation of a standard or kite mark type system for communityowned generation, which could then be used by energy suppliers who are prepared to purchase and sell power from local community generators. This could help to incentivise suppliers to enter into PPAs with community generators and help provide a route to market for new generation without directly intervening in it.*
- *Facilitation of collective investment vehicles for the development of new communityowned generation, to enable projects of scale to come forward.*
- *Facilitation of collective investment vehicles for development of new communityowned load to enable projects of scale (eg large-scale storage heating installations) to come forward.*
- *A dedicated programme of support to community institutions to raise awareness and build capability at the local level to engage in and take advantage of new opportunities, along with helping local consumers understand and benefit from the smart energy revolution.*

**What governance arrangements should a Scottish POEC have? Who should it be accountable to e.g. Parliament?**

*We believe that the central requirement is transparency so as to gain the confidence of customers and citizens more widely. This doesn't necessarily mean accountability to Parliament.*

**Should legislation be required to underpin the creation of a POEC?**

*N/C*

**Community Energy Scotland 13/09/18**