

Community Energy Scotland – Response to RSE Energy Enquiry

Community Energy Scotland welcomed the opportunity to feed into the RSE’s enquiry both in written form and in giving roundtable evidence.

Who we are:

Community Energy Scotland (CES) is a registered charity and membership organisation with nearly 400 non-profit community group members across Scotland.

Our **vision** is of strong, well informed and capable communities across Scotland, able to take advantage of their renewable energy resources and address their energy issues in a way that builds a more localised, democratic and sustainable energy system. Our **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. We aim to work in partnership with community groups and any others who share these aims and wish to build their understanding and capacity to create a more democratic energy system.

Our community engagement, project management and support work over the last 10 years with over 1000 communities has resulted in the development of over 500 projects enabling community owned generation assets totalling 37MW. Over the last 4 years we have worked with communities, technical partners, DNOs, energy suppliers and local authorities on local energy projects including [ARC](#), [SurfnTurf](#), [SMILE](#), [Heat Smart Orkney](#) and [Big Hit](#) on Orkney, [ACCESS](#) on Mull and [OHLEH](#) on Lewis, linking local supply and demand through use of smart technology to enable local balancing, hydrogen production using curtailed renewables, local waste to energy, mini-grid development, private wire arrangements and aggregated demand options. CES has been a key player as the bridging, community engagement partner enabling effective liaison and communication between community, technical, academic, municipal and commercial partners in these local energy systems initiatives

Response to the enquiry:

Our response focuses on the following questions which we feel are most pertinent to the achievement of the

Energy Landscape

1 What are the most significant challenges to, and influences on, the energy landscape that any future energy strategy needs to take into account?

Scotland’s energy strategy needs to deliver on reducing climate change related emissions, increasing energy security, enabling local and community regeneration benefit from local added value from energy resources, delivering energy equality and tackling fuel poverty.

It is crucial therefore that the energy strategy focuses on a full transition to renewable energy, whilst enabling communities that want to, to have control over their own local energy resources, giving opportunities for communities and consumers to act collectively to secure opportunities from the coming smarter and more localised energy system.

Currently, UK legislation and UK Government frame key controlling factors for the energy system in terms of the energy market, subsidies, national energy infrastructure and regulation. However, it is crucial that the Scottish Government strongly represents the interests of Scottish communities, businesses, councils and consumers in the UK's transition to a smarter more localised energy system, including maintaining a focus and support for community-owned energy and fighting fuel poverty.

Ethics, Social Issues and Impact on Communities

9 What account should be taken of the environmental and social impacts on those living elsewhere in the world, of the international energy supply chains on which we may choose to rely?

Our organisation agrees with the principle of climate justice, which links human rights and development, provides a progressive policy platform for a sustainable climate agenda which shares the benefits of equitable global development and the burdens of climate change fairly in relation to historic and current climate change impacts and contributions, and builds trust between countries and between communities within Scotland.

We therefore propose that significant account should be taken of these impacts on those living in climate change affected areas, by helping to clarify the impacts of energy choices, and where there are limited technical and financial resources for adapting to these changes. Those on a low income and vulnerable people in countries around the world are the first to be affected by climate change, and will suffer disproportionately from climate change impacts, yet they have done little or nothing to cause the problem. The negative impact of climate change is felt the most by those who are already vulnerable because of geography, poverty, gender, age, indigenous or minority status, and disability – both abroad and in Scotland.

Both for climate justice in Scotland and wider, Scottish energy policy should focus on delivering:

- A cut in climate change emissions by moving our energy use away from fossil fuels (both from domestic supplies and those secured from other countries) and maintain a moratorium on development of fracking.
- Make financial and technical contributions to climate adaption initiatives in low income countries which are already and will be significantly affected by climate change. We support the Scottish Government's Climate Justice Innovation Fund and would recommend that it is maintained and grown in financial value and impact.
- Support low income countries and communities which are fossil fuel exporting to transition from a fossil-fuel economy to a renewable energy economy through contributing financially to bilateral and multilateral mitigation programmes supporting low income countries and share Scottish expertise (strategy and technical, including expertise in community energy development) through such programmes. We support

initiatives such as the [MREAP programme](#) funded by the Scottish Government in Malawi in which CES was the Community Renewable Energy lead partner

- Ensure climate justice is also secured in Scotland for those communities disproportionately affected by energy related pollution from fossil-fuel related industrial developments, major road transport routes etc.

However, in addition to this the government should drive high environmental and social/economic standards for fossil-fuel extraction in other parts of the world from which we secure energy supplies in the short term, by having stringent environmental and socio/economic procurement criteria for fossil-fuel energy for Scottish use.

10 What actions can be taken, and by whom, to ensure that energy is accessible to all at an affordable cost for those on low incomes; and that any changes in energy provisions and associated tariffs are understandable and acceptable?

With 31% of Scottish households in [fuel poverty](#) and much higher levels of fuel poverty than this in some inner cities and in remote rural and island communities, affordable energy for all is a crucial consideration.

Energy bills are determined both by volume of energy used (demand side) and the cost of such energy (supply side) and actions need to be taken on both fronts.

To date much focus on tackling fuel poverty has been on the demand side – by improving the energy efficiency of homes through insulation programmes, low energy lighting schemes and by enabling low income householders to access funding to enable these improvements. These schemes are important and should continue, with a focus on supporting low income families. Knowledge of and uptake of these schemes are improved when delivered through well-known and trusted local agencies.

However much less has been done on the supply side of enabling sustained cheaper or stabilised prices for energy and there is a large variation in price for energy between different parts of Scotland, with much higher energy prices in remote rural and island communities owing to higher use of system and distribution costs. Recently the UK government has introduced a price cap and brought in schemes to encourage switching of energy suppliers to secure a better price. Switching of energy suppliers can help reduce costs but have not been universally successful and for prepayment customers in particular, the opportunity to save by switching is very limited as prepayment tariffs are the same or very similar between all the major suppliers.

We feel there are other ways of driving down energy costs and delivering on this supply side which have not yet been fully explored but offer 'win win' potential. Community-led energy initiatives that enable consumers to collectively buy energy, including from local renewable energy suppliers in their area, develop access to their own renewable energy supplies and to engage in new opportunities that will arise to earn an income through offering to switch their energy use on and off at different times of day in response to the needs of the grid (i.e..by offering flexibility in energy use for which they would be paid or incentivised).

A simple illustration of the need for this is the ~ 10p per kWh difference between the wholesale price and retail price of electricity. Almost all local renewable energy generators have to sell their output to the grid on wholesale terms (about 5p/kWh), while consumers will buy energy on retail prices (about 15p/kWh). If local supply arrangements can be developed it would herald a 'win-win' scenario for local generators (who could sell power at a higher rate than they currently do to the grid – e.g. 8 or 9 p/kWh) and consumers (who could buy energy at a below-retail price e.g. 12p/kWh) whilst also creating opportunity for circulation of value locally. This is particularly relevant for the alleviation of fuel poverty while acknowledging that the current use of system charge context also needs to be addressed.

In addition, the rapidly developing 'smart energy' agenda will create further opportunities to retain local value through offering local grid services to the grid operators (such as through local demand management, helping to balance the local grid). If taken forward in an integrated way which enables full community participation, these measures will help retain and add local value.

Community Energy Scotland (CES) has over the last 4 years been working with communities, technical partners, Distribution Network Operators, energy suppliers and local authorities on innovative smart local energy initiatives, testing how communities could benefit. These projects such as [ARC](#), [SurfnTurf](#), [SMILE](#), [Heat Smart Orkney](#) and [Big Hit](#) on Orkney, [ACCESS](#) in Mull and [OHLEH](#) in Lewis, have been linking local supply and demand through the use of smart technology to enable local balancing, hydrogen production using curtailed renewables, local waste to energy, mini-grid development, private wire arrangements and aggregated demand options. CES has been a key player as the bridging, community engagement partner enabling effective liaison and communication between community, technical, academic, municipal and commercial partners in these local energy systems initiatives.

However, these opportunities for increasing access to affordable energy and reducing energy costs among those suffering fuel poverty will not be more widely achieved unless resources are committed to raising awareness among consumers and community organisations of these opportunities and how to engage in the smart energy system to secure the benefits.

One way of doing this is to inform consumers individually about smart meters and the coming smart energy system, particularly through trusted consumer advice agencies such as Citizens Advice Scotland, Home Energy Scotland rather than through energy suppliers who have some conflicting interests in the issue.

We note the recent select committee critical report on smart meters. In our view potential is not being realised in part because suppliers are not offering time of use tariffs in conjunction with smart meter roll out.

However, some of the coming smart energy opportunities such as those mentioned above will only be secured through collective action by consumers and through local supply arrangements. These cannot be secured individually by customers and so new approaches need to be taken with government funding (both at a UK and Scottish level) and investment going into supporting and enabling collective consumer awareness raising and collective consumer and community action. This can most effectively be done through partnership

between well trusted community agencies and organisations such as Community Energy Scotland that have been trialling such innovative approaches to improving access to affordable energy. The community agencies might be community development trusts or other similar bodies which are already enabling local community regeneration and energy initiatives, who have established contact with the local community and through whom such capacity building programmes can be delivered.

The Scottish Government and others should commit funds and provide support for such a community capacity building programme to bring community groups and consumers up to speed and able to secure these benefits.

11 What are the particular advantages enjoyed, and challenges faced, regarding energy; and what lessons can be learned on a national scale from community energy schemes undertaken by: a) Rural and remote communities b) Urban Communities

Advantages enjoyed in Scotland:

- Scottish Government policy which is supportive and invests in renewable energy development / policy to drive decarbonisation and to create local energy systems
- Abundant renewable energy resources
- Strong engineering tradition and skills
- Active communities particularly in rural and remote/island communities

Challenges faced in Scotland:

- Energy not fully devolved to Scotland so legislative and regulatory framework set by UK government which is less committed to renewables than in Scotland (for example removing renewable energy subsidies) and which currently has regulation that does not enable local energy supply, collective buying of energy by consumers, peer trading though some innovative approaches in relation to these are being tested
- Significant grid constraints in many areas which means new renewable energy generation can only be connected either at significant cost or through very limited connections
- High levels of fuel and other poverty in Scotland
- Shifting focus in Scottish energy team away from investment in community owned assets towards shared ownership and the achievement of 'local energy' targets rather than 'community energy' targets – this includes how funding is spent, with a greater focus now on larger scale initiatives and shared ownership initiatives.

Lessons which can be learnt from community energy schemes:

The over-riding lesson is that with committed resources given to briefing communities about the opportunities and to enabling them to access technical and legal/regulatory advice, communities can develop and manage locally owned renewable energy assets which can bring significant local benefits as outlined below. The approach that Highlands and Islands Enterprise and some Island Councils have taken over the last decade or so of supporting communities to develop renewables, financially and with staff resource, in a sustained way has been vital. So has the contribution of agencies such as Community Energy Scotland

which had the vision and expertise (technical and in terms of community engagement) to provide hands on support to communities and work with them.

Alongside this, it has been crucial to have Scottish Government support through the CARES programme, with dedicated funding and advice for supporting community energy initiatives to develop. It has been crucial that at least at the start of the CARES programme there were substantial funds within CARES to pay for community engagement, staffing resource within community organisations developing these assets and for partnership between community organisations and agencies dedicated to supporting community energy development.

Why has and is community energy been more widely useful?

These assets being owned locally means significant revenue comes into communities over the life of the asset (say 20 years). This has and can contribute to local regeneration in a sustained way as it does not only contribute to renewable energy target achievement but also contributes to community empowerment, local economic investment and in providing a sustained resource for local regeneration. Examples such as Eigg, Gigha, communities in Western Isles and in Orkney show how renewable energy owned by the community has been a vital part of achieving regeneration, retaining and increasing the population, bringing new jobs, improving services such as improved housing etc. to these areas.

Although there has been some success in community energy in urban areas, experience has shown that remote rural and island areas have achieved community energy assets to a greater extent.

There may be a number of contributing factors at play in rural /island areas:

- Land is cheaper and community buy-outs were allowed earlier in these areas
- There is a stronger imperative to solve energy problems in rural and island communities where energy is much more expensive (for example communities are off grid, may rely on diesel or oil which is more expensive, energy tariffs are higher in these areas, fuel poverty rates are extremely high)
- Communities are more distinct and have to be more self-sufficient as many services are restricted or more expensive and a higher proportion of community members are involved in local service delivery
- Many of these communities were losing population and needed to regenerate themselves urgently

In urban areas:

- Land has often been difficult to secure and expensive
- Communities in urban areas are much more complex and community organisations may often be of communities of interest as well as communities of location
- There is more reliance on local authorities for service delivery and services are more available (though not always affordable to low income families) either from councils, commercial or community agencies
- Buildings such as flats and tower blocks are in multiple ownership and so it is legally more complex to install rooftop solar for example

However, with falling and now disappearing Feed-in-Tariffs and increasing grid connection costs due to the distribution grid being at capacity in many areas, community renewable energy asset development, as with commercial development, has slowed everywhere. The business model now needs to be developed with a focus on how energy could be used/sold for creating higher value products or local storage, being sold locally at a better price than being sold to the grid.

As mentioned under Q10 above, we believe that with investment in briefing and capacity building community organisations about the coming smart energy system, community energy initiatives could benefit and make a significant contribution again. This could be through setting up renewable energy generation assets and / or enabling local consumers to act collectively to meet the requirements of a local energy system and to gain value from this.

As outlined in Citizens Advice Scotland's submission to this evidence, issues of equality and fairness must be fundamentally considered across all new government policies including the energy policy. Increasing low income community engagement in the energy market can play a key role in reducing energy costs. At present in the UK, around 70% of consumers with the six largest energy suppliers are on the most expensive Standard Variable Tariff. Trust in the energy market and suppliers remains very low among consumers which represents a major barrier to engagement in the market.

A new energy strategy should consider greater support for services that enable consumers to engage in the energy market more actively to reduce their energy costs. As individuals this could be through switching tariff or supplier, but even greater benefit could be achieved if they were enabled to act collectively to purchase energy more cheaply, share renewable energy resources and earn income / reduce their tariff through engaging in the flexibility market.

As mentioned above we believe this type of support could effectively be channelled through existing community agencies such as community trusts or community energy initiatives.

Opportunities may arise for the better design of fuel poverty and energy efficiency schemes that are currently supplier-led, as powers over Warm Home Discount and the Energy Company Obligation are devolved to the Scottish Government. As part of this, community regeneration agencies and community trusts may be vital channels through which such initiatives could be delivered and the 'supply side' of the fuel poverty question could be addressed by supporting community-led or engaged local energy systems where the price of energy can be determined more locally.