

Submission by the Energy Policy Group and Environment and Sustainability Research Group of the University of Exeter to the Call for Evidence concerning a Community Energy Strategy

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31 July 2013**

Summary of main points

- i A more robust definition of community energy is needed to properly reflect how the potential costs and benefits of energy decisions are shared among those affected. We suggest the following phrase: Community energy projects are diverse but those which combine a local, participatory and collective approach tend to have the most legitimacy and credibility.*
- ii The benefits of community energy are highly dependant on who is involved, their drivers, and the process though which changes are made.*
- iii Principal goals will vary from project to project, and the Government should support and encourage diversity in community energy initiatives, and consider their impact across a range of dimensions rather than focusing solely on increasing RE capacity.*
- iv Community energy can fail to achieve maximum benefits, and indeed can divide communities, if not carried out correctly.*
- v A key role for Government is to provide support while acknowledging the importance of bottom-up motivations and local knowledge in tailoring approaches to local challenges.*
- vi Increasing knowledge of, and participation in localising the benefits of medium and large-scale renewables may go some way in encouraging local support towards such schemes.*
- vii If people and communities are to be helped to fulfil their potential in the energy system, the current regulatory framework will need considerable reform.*
- viii There are significant financial barriers to community energy, specifically in relation to early, at risk stages of project development.*
- ix There is a clear and urgent need for standardised methods to identify and assess the realise economic, social and environmental benefits from community energy projects.*
- x A narrow approach to evidence and evaluation (e.g. purely focusing upon emissions reductions, or the use of a cost-benefit analytic framework) is unlikely to capture all of the objective and subjective outcomes of a community energy project.*
- xi National Government could be doing more to identify and communicate best practice in building and fostering relationships between local authorities, communities and the private sector.*
- xii Better policy that takes specific account of community approaches could considerably de-risk activity within this sector.*

1. *What is your name?*

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3. *What is your organisation?*

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4. *We would like to hear your views about the definition of ‘community energy projects’ outlined in this section.*

A more robust definition of community energy is needed to properly reflect how the potential costs and benefits of energy decisions are shared among those affected. We suggest the following phrase: Community energy projects are diverse but those which combine a local, participatory and collective approach tend to have the most legitimacy and credibility.

The Call for evidence takes a broad view of ‘community energy’ to include “community projects or initiatives focused on reducing, managing, generating or purchasing energy”. While this breadth reflects the wide range of geographies, interests and strategies found in community energy groups, it is perhaps useful to reflect on a) how ‘community’ itself is defined for this purpose, and b) what this definition means for achieving sustainable energy objectives.

Walker et al (2007) emphasise that definitions of ‘community energy’ are diverse and there is not a consensual set of meanings about what or who they should involve. The range of possible actors involved and the range of outcomes that can be achieved, highlight the multidimensional and multifunctional nature of community energy (Rogers et al 2008) and help to explain why they are difficult to define. Communities themselves are hard to define because society is increasingly made up of numerous and diverse communities that often overlap with each other, but which may also exist in isolation (Peters et al 2010). This descriptive difficulty has been usefully addressed by Houghton (2010:9), who describes them as “self-defining groups of individuals or organisations brought together through geography, identity or interest”.

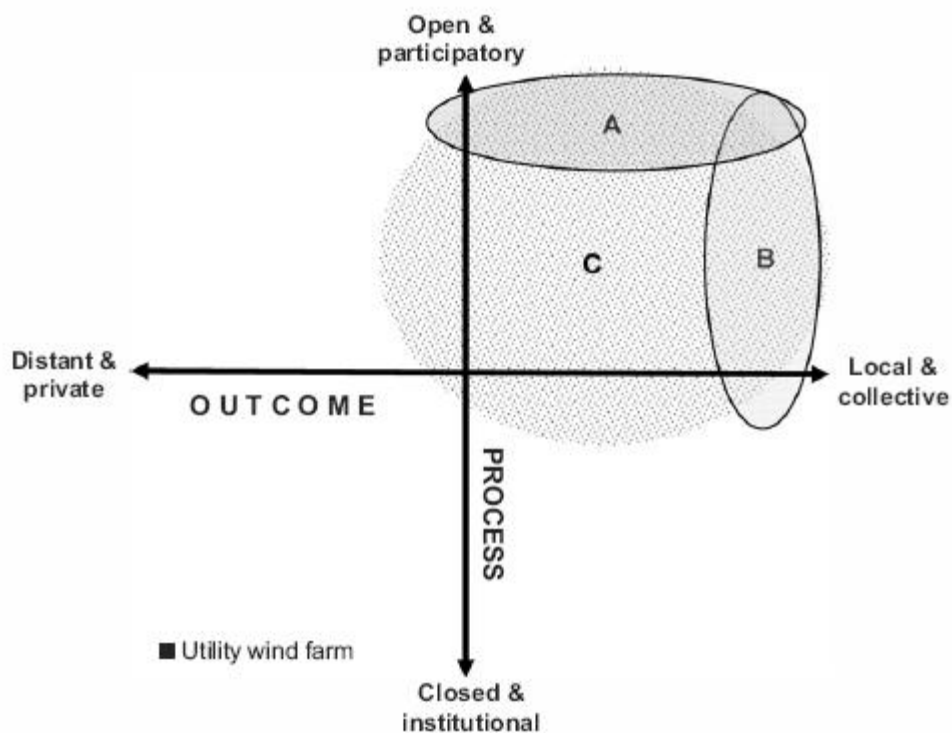
While communities of geography may be best suited to address local issues, the potential impact of communities of interest should not be overlooked, not least because they benefit from having ready-made social capital which could be harnessed. These communities may include those already interested in energy system transitions (e.g. the Transition network), and others, such as the owners or managers of community buildings (such as faith groups and workplaces). It is clear when looking at the various case studies that exist, that community energy can be based around all of the community types outlined here, even though by their nature they are placed within a particular locality (Hoggett 2010; CES 2009; Adams 2008; Walker et al 2006).

These forms are not mutually exclusive. Community energy cooperatives (e.g. Westmill wind farm in Oxfordshire) are good examples of projects where multiple forms of community interact and overlap within the same initiative, in that share purchase can be made open to both local actors (i.e. the communities of geography or place referred to above) and non-local actors (i.e. the community of interest).

It should also be noted that communities, in whichever way they are defined, should not be considered static, but rather are “complex and changing, as made and remade through practices which unite people through interests, actions, place, perceived identity or combinations of these elements” (Butler et al, 2013). The shifting nature of communities highlights the importance of

developing and strengthening the fundamental relationship between the people and the energy system and efforts should be made to avoid marginalizing those members of society not directly involved in formal community groups.

The benefits of community energy are of course influenced not only by *who* is involved, but also by how they are involved, and where benefits accrue. Walker and Devine-Wright (2008) identify that community renewable energy projects differs from other (renewable energy) projects in terms of two dimensions: process and outcome. 'Process' is described in terms of who a project is developed and run by, covering issues such as involvement, decision-making and influence. The 'outcome' of a project is concerned with who the project is for, and who benefits from it in both economic and social terms. This is summarised in Figure 1, which superimposes three different viewpoints of what these projects are.



Source: Walker & Devine-Wright (2008:498)

The authors suggest that an 'ideal' community project that is driven by local people for the benefit of local people would appear in the top right of the diagram; contrasting to a completely commercial approach bereft of local involvement or local benefit, which appears in the bottom left. Whilst they highlight that these dimensions oversimplify the complexities involved and that many different combinations would be possible for any given project; it is useful in trying to consider what the core components of a community energy projects are (Walker & Devine-Wright 2008: 498-499).

While community energy projects may inhabit any region of this diagram, this research suggests that more direct and substantial involvement of local people in a project also contributes to greater project acceptance and support, and there was evidence that this involvement could have a positive impact on local peoples' understanding of and support for renewable energy more generally (leading for example to their own installation of microgeneration technology in the home). This is particularly important, as part of the justification for public investment in grassroots community projects is that, above and beyond their impact in reducing greenhouse gas emissions, such projects will work on the 'hearts and minds' of local people and have wider catalytic effects in promoting positive beliefs and actions about renewable energy.

Conversely, actors will use the 'community' label for a variety of reasons, sometimes strategic or instrumentally, and it may be that points of conflict arise when the label is contested by some actors on the grounds of its legitimacy and credibility. This was discussed in the paper by Walker et al. (2010)

on trust when referring to the Moel Moelogan wind farm case study in which some local residents challenged whether the project was, in fact, a truly 'community energy' project. While a loose definition of community energy is worthwhile, a tighter definition may permit a more nuanced understanding of the likely benefits of different groups, and it is suggested that efforts should be made to support those initiatives in the top-right quadrant of the diagram. We therefore suggest the following phrase: Community energy projects are diverse but those which combine a local, participatory and collective approach tend to have the most legitimacy and credibility.

5. *We would like to hear what evidence you have of the current and potential scale of community energy projects.*

Evidence of the scope of UK community energy projects has recently been published by Gill Seyfang and colleagues (Seyfang et al 2013) as part of the Grassroots Innovation project.

The society-centric nature of community energy means that the scalability of these approaches is highly dependent on the degree to which people can engage with the energy system, at both national and local levels and that much work is needed to address the barriers to scaling up (discussed in Q9).

6. *We would like evidence or examples of the benefits of community energy approaches*

The benefits of community energy are highly dependant on who is involved, their drivers, and the process though which changes are made. It should be reiterated that the impacts of a specific community energy project will depend very much on who is involved, and why (as discussed in Q4). While community energy projects across the board may have some elements in common, it is apparent within the literature that a wide range of different benefits or outcomes can result from these sorts of projects, sitting across the environmental, economic and social spectrum. These themes are likely to be very project specific, changing with the interests and desires of those that are involved as well as local constraints, whether physical, social or technical (Walker & Devine-Wright 2008). A summary of the main themes that emerge are set out below

Theme	Sources
Local income and regeneration: Projects can provide independent, self-sustaining, income streams to support further projects within a community.	Walker (2008); Hain et al (2005); TLT (2007); CES (2009); Warren & McFadyen (2010)
Local control: Community approaches can deliver a high level of participation, control and democracy, further increasing acceptability. When this is missing, projects can become more divisive and controversial.	Walker (2008); Walker & Devine-Wright (2008); CES (2009)
Lower energy costs and reliable supply: Projects can enable communities to meet their energy requirements at lower cost and with higher reliability. This can help address wider issues such as rural and/or fuel poverty.	Walker (2008); Evans (2006); Adams (2008)
Ethical and/or environmental commitments: Projects can help communities to meet their desire to act on a wide range of concerns such as climate change, peak oil and sustainability.	Walker (2008); Adams (2008); Houghton (2009)
Behaviour and social change: Engagement in a local project can help to change attitudes and behaviour towards renewables, energy demand and climate change.	Walker & Devine-Wright (2008); Houghton (2009 & 2010); Roberts (2009)
Trust: Community approaches can increase trust within	Walker et al (2010); Wustenhagen et al (2007)

communities, an important dynamic that can help make projects successful	
Wider community development: Community renewables can act as a catalyst for further projects and more sustainable communities.	Evans (2006); Adams (2008); Houghton (2010)
Local approval and planning permission: The involvement of local people in renewable energy projects generally increases acceptability and support, potentially helping to overcome planning problems.	Walker & Devine-Wright (2008); Hain et al (2005); CSE et al (2009); Warren & McFadyen (2010)
Delivering targets: Community projects can play an important role in meeting national, regional and local targets, across a range of issues from carbon to employment.	Houghton (2010); Warren & McFadyen (2010); Roberts (2009)

it should be noted that the ‘effectiveness’ of a specific community project is thus dependent on the criteria used to define effectiveness (and indeed the principal goals), and care should be taken to avoid relying on a limited set of metrics which may disregard the importance of more intangible elements, for example social capital, trust, and behaviour change. **Principal goals will vary from project to project, and the Government should support and encourage community energy initiatives to consider their impact across a range of dimensions rather than focusing solely on increasing RE capacity.**

7. *Do you have evidence or examples of any potential drawbacks or negative consequences of community energy?*

Community energy can fail to achieve maximum benefits, and indeed can divide communities, if not carried out correctly. It should be restated that negative consequences of community energy (as with the benefits discussed above) will be subject to the project-specific context, and particularly how process and outcome dimensions are manifested. Just as any single community energy project may lead to increased trust, a sense of empowerment, environmental commitments and action (see table above), it is also important to emphasise that only some, or none of these potential outcomes could arise, depending upon local circumstances. As Walker et al. (2010) point out in relation to trust, energy projects will occur within communities that will have pre-existing fault-lines and tensions as part of their social-historical context. Initiating an energy project could serve to make the residents of an area feel more cohesive but it could easily have little impact or even produce a negative outcome if the project does not manage to bring people together. The Walker et al. (2010) paper discusses in depth two illustrative cases where community energy seemed to increase social cohesion and empowerment (the Gamblesby case) and where the opposite seemed to have occurred (the Moel Moelogan case). The Moel Moelogan case therefore is a good example of a potential drawback or negative consequence of community energy. A conclusion would be that energy projects are very context dependant, whether led by a community group, local authority or private developer. This is why we suggest that community energy projects which combine local, participatory and collective approaches (ie those in the top right hand quadrant) tend to have the most legitimacy and credibility.

The importance of building community cohesion can be reiterated by considering the varying levels to which community energy participants are able to engage with the geographical community in which change is taking place. Community groups, both formal and informal, are typically self-selecting, and considerable knowledge and expertise is needed to navigate technologies, markets etc, to digest and respond to DECC and other funding streams. This means that those driving community energy projects need to be self-motivated, time-rich, organised and technically adept. This raises the possibility that the needs and opinions of more disengaged members within the locality are not fully accounted for unless processes are put in place to ensure decisions are as inclusive as possible. This is

especially important where there is an apparent disconnect between local challenges (such as fuel poverty) and opportunities (such as renewable energy deployment and income generation).

8. *What evidence or examples do you have of the barriers faced by community energy projects and the ways in which they have been overcome, or could be overcome?*

Despite all of the activity that is taking place there are a number of known barriers that hinder the development of these sorts of projects. Some of these relate to communities themselves, such as their skills and capacity and some are wider, including planning, regulations and finance (Walker 2008). They all interact.

i Community capacity and support

It is clear that the process of developing community energy projects is time consuming, resource intensive and complex (CES 2009). CES suggest that any group considering it will need a high level of commitment from a number of people, over a long time period. A number of capabilities are required to address a number of issues such as: legal structures; ownership of physical infrastructure; organisation; business and financial planning skills; and networking (Houghton 2010). This requirement for a range of skills and capacity can act as a barrier to development of these projects and often require key individuals or entrepreneurs, and trusted local champions (Martiskainen & Watson 2009), from within the community as well as from supportive local institutions (Walker 2008). When there is no single or ambitious steering group in place, projects are more likely to fail (Evans 2006). It is also clear that the availability and willingness of people to undertake these sorts of projects cannot be assumed, with one study showing that even within communities interested and willing to participate in a local project, people did not feel able to take a lead within it (Rogers et al 2008). There may also be issues for the long-term capacity of organisations to operate and maintain an asset (Walker 2008).

To overcome the differing capabilities and skills within communities, support and access to expertise is needed; Letcher et al (2007) suggest that this will increase the likelihood of a project successfully happening and that access to trusted and expert support is needed to help co-ordinate and direct a project. This is evident by the success within Scotland, where support (and funding) have been available for many years, something that used to be available elsewhere through the Community Renewables Initiative (CRI), which provided expert advice and funding to enable successful projects to develop (Walker & Devine Wright 2008). **A key role for Government then is to provide support while acknowledging the importance of bottom-up motivations and local knowledge in tailoring approaches to local challenges.**

ii Planning

Gaining planning consent can impact any development, but it has been recognised to be a major barrier for renewables in the UK (Hain et al 2005). This relates to the time, costs and uncertainty of gaining consent and can be an issue for those developing schemes (Woodman & Baker, 2008), possibly more so for communities, given the one off or single site nature of most community renewable projects (Roberts 2010). The risk with gaining consent is likely to reflect a number of issues relating to technology, scale and site specific aspects, which are played out at a local level within the planning application process (Roberts 2009a). This local process can create inconsistencies for gaining consent, reflecting both the local planning authority's attitude to different technologies and whether they take account of the wider benefits such schemes could in meeting national targets for energy and climate change (Woodman & Baker, 2008; Roberts 2009a).

The process can also be highly political, which is why many suggest that community-led schemes are important in reducing the risk associated with gaining planning consent (e.g. Hain et al 2005; Walker & Devine-Wright 2008; CSE et al 2009; Warren & McFadyen 2010). However, this cannot be assumed, with Walker (2008) highlighting a case in Wales that failed to secure planning, despite being initiated by a local organisation for the benefit of the local area.

A number of measures were taken by the previous Government to try and reduce planning risk, but these tended to focus on large scale barriers above 50MW and on the barriers affecting microgeneration, effectively leaving a big gap in the middle (Woodman & Baker, 2008). It is in this middle area that many community scale schemes sit, so these initiatives may not have helped address the problem.

Increasing knowledge of, and participation in localising the benefits of medium and large-scale renewables may go some way in encouraging local support towards such schemes. Recent moves to encourage more favourable benefit flows from onshore wind developers is welcome, but more is needed to demonstrate that benefits are commensurate with the size and impact of the specific development rather than a one size fits all approach.

iii Regulatory framework

There are also barriers to market entry and connection to the grid that have been identified as issues for community energy projects (Walker 2008). This includes the trading arrangements that are in place which favour large centralised generation in respect to both the transaction costs involved in engaging with the market and a structure that rewards predictable generation (Woodman & Baker, 2008). In relation to grid connections, issues include the cost and technical detail needed before requesting a connection and in some areas, including much of Scotland, there are also grid capacity issues meaning it can take a long time to get connected (CES 2009). These issues all in turn come back to the wider system lock-in that exists, including institutions, rules and regulations that all favour a centralised approach (Mitchell 2008; Woodman & Baker 2008).

Issues have also been apparent in the various finance incentives that have been in place to support renewables in the UK, which have also predominantly been aimed at large scale generators (Hain et al 2005), including the Renewables Obligation and the Non-Fossil Fuel Obligation before it (Mitchell 2008). They have not encouraged more decentralised generation and have been difficult for community and smaller scale generators to negotiate their way through (Woodman & Baker, 2008). This partly explains the range of capital funding programmes that have come and gone which have tried to overcome the higher risks and longer returns that are faced by some technologies and scales (Walker 2008).

While the recent Energy and Climate Change Committee inquiry into Local Energy demonstrates some acknowledgement of the shortcomings of policy on medium-scale technologies, this highlights a more fundamental dismissal to date of the importance of engaging people - and the communities in which they live and work - with energy issues. **If people and communities are to be helped to fulfil their potential in the energy system, the current regulatory framework will need considerable reform.**

iv Access to funding and finance

There is a distinction between the types of money available to support for example community renewables, with CES (2009) highlighting: funding which they describe in terms of grants; and finance which they relate more to loans and other forms of investment, such as share based schemes. CES suggest that the choice of these routes in part comes back to the type of scheme, with only those that generate sufficient revenue being able to go down a financing route as they need to provide a surplus to service any debt or provide dividends to shareholders or other equity providers. It is in this area the revenue-generating renewable schemes face some specific barriers.

The first relates to the availability of grants, which can include public and other sources such as charitable trusts, National Lottery or company schemes (CES 2009). Whilst there are still a number of these sources of funding that could support community renewables, the on-going availability of public sector grants have become much more questionable in light of the squeeze on money within this sector.

The alternative way to secure money is through more commercial financial routes. In simple terms, there are two ways for a project to this, debt from a bank, which will look to get the debt paid back with interest, and/or through securing equity within a project, which generally demands a higher level of return (Justice 2009). This equity could come from a number of routes, which could include grants,

or through giving up a percentage of a project to shareholders via a local share issue or via social and other investors. One of the issues with equity provision is that those providers need to recoup their funding plus a profit to account for the level of risk that they bear in providing the money (BRE 2010). This may require communities to give up not only some of their income, but also some of their ownership and control within a project.

Generally it is recognised that for community renewables to go ahead a combination of both debt and equity will be needed (CES 2009). Whichever mix of funding is used, communities will need to take a more commercial approach than in the past, in order to make themselves and their project more 'investment ready' or 'bankable' (Houghton 2010). However, even then there are specific issues facing communities for accessing finance, **particularly in relation to the early, at-risk, stages of project development** (TLT 2007; Houghton 2010; BRE 2010).

v Gathering evidence of the benefits of community energy and evaluating projects

There is a lack of standardised methodologies and processes meaning community groups have so far been unable to understand their own contribution to goals. CISE (2011) conducted a document review to assess the use of indicators within several grant funding programmes for community energy or community climate change projects. There were found to be particular problems around ascertaining baseline data for community groups at the appropriate spatial scale, a barrier not helped by utility bill data being unavailable. There were also found to be problems in quantifying the effect of behavioural change within communities, with assumptions taking the place of standardised methodologies.

There is a clear and urgent need for standardised methods to identify and assess realised economic, social and environmental benefits from community energy projects. Such information is typically collected in response to audience needs (ie to help attract funding), but can require considerable resources to build robust evidence bases¹.

The value of evidence on groups themselves should also be considered. For example, Community Energy Scotland have made public a register of benefits obtained from renewables in projects across Scotland (<http://www.communityenergyscotland.org.uk/register>). This demonstrates the range of ways through which benefits have been negotiated, administered and distributed, and helps to equip communities to ensure they can maximise local benefits. More can be done on a national scale to record and disseminate best practice in this area.

9. We would like to hear your views about sources of information and advice for community energy projects.

A series of interviews with those involved in community renewable projects (Hoggett 2010) suggested that support was a key element in reducing risk within community renewables, across the sample; helping to address some of the capacity, skills and knowledge issues identified. It was felt necessary because the development of renewable energy projects entails a wide range of different skills and expertise. Some expressed a doubt over the ability of communities to cover all the skills needed themselves and it was suggested that most projects to date have only been possible through the provision of at least some outside expert advice and help along the development process.

A range of different resources and tools were mentioned during the interviews:

- *Resource mapping tools*
- *Templates or frameworks to follow*
- *Open source project plans*
- *Detailed guides on funding, planning, technology, etc.*
- *Detailed case studies*

¹ Research is currently being carried out by Iain Soutar within the Energy Policy Group at the University of Exeter, with WREN, based in Wadebridge, Cornwall as a case study. The research is not yet finalised but will be available in 2014.

People felt that such resources could play an important part in enabling communities to start the process of assessing the local potential for renewables and moving along the process of developing a project. Templates and frameworks showing the steps along the journey, that clearly show what needed to be done at each stage, were felt to be particularly useful by some, both as a guide to work to and as a way to maximise the time and capacity that they do have. This could help to improve project design and enable communities to focus on using their local knowledge, within a framework suitable for developers and investors.

However, it was strongly expressed that the provision of resources alone would not be sufficient to enable the development of successful projects. The consensus was that hand-holding and direct support would also be required, to bring wider dividends and increase the likelihood of success. Combined, resources and support were seen as a way to ensure better decisions and more robust approaches to developing projects in a way that reduces risk.

It was also felt that transparent and independent advice was particularly important. Some felt that there could be a tendency for consultants and installers to recommend what they knew or what they had links to, meaning the best solutions for the community would not always be offered to a community. This view of independence was recognised across the range of organisation types that were interviewed, including those offering models. It was felt that it would be difficult for communities to know about all of the various options that exist, or necessarily know which might give them the best deal and only an independent third party organisation could advise on this

10. *We are interested in your views about peer mentoring.*

No response for this section.

11. *How can we ensure that vulnerable groups, including those in fuel poverty, are able to take part in and share the benefits of community energy projects?*

Our response to question 7 highlights the importance of encouraging population-wide engagement. This is particularly important where vulnerable groups may be affected by local energy decisions, especially where such sections of a community are disengaged from community energy movements and decisions. Efforts should be made to ensure such groups are engaged from an early stage, both to help identify local issues and to maximise inclusion in local decision making processes.

12. *We are interested in your views on the potential for community groups to engage in delivering the Energy Company Obligation (ECO). In particular:*

No response for this section.

13. *If you are a community energy project, what has been your experience of accessing funding from Feed-in-Tariffs (FITs) or the Renewable Heat Incentive (RHI)?*

We are not a community energy group

14. *Do you have any other examples of, or ideas for, innovative revenue-generation models for community energy projects, particularly for projects not based on electricity generation?*

There are a number of case studies and examples of revenue generating models available in these reports, although these are mainly based on electricity based projects:

- *Hoggett, R. (2010). At-risk Finance for Community Renewables – research and policy recommendations on the barriers and opportunities for securing at-risk finance for the early stage development of revenue-generating community renewable energy assets. http://geography.exeter.ac.uk/media/universityofexeter/schoolofgeography/pdfs/epsdissertations/richard_hoggett.pdf*

- *Hoggett R (2010) Community-Owned Renewable Energy Projects: Evidence for their development, funding and sustainability*
http://www.communitypowercornwall.coop/downloads/community_renewables_-_richard_hoggett.pdf

15. *We would like to understand the different types of funding available for community energy projects at different stages of their development and the barriers to accessing these. In this question we are particularly keen to hear from potential investors in community energy projects, as well as community energy groups.*

No response for this section.

16. *If you have been involved in community energy, what legal or regulatory or planning barriers have you encountered during your project?*

We are not a community energy project.

17. *We would like to hear your views on the role of Government or others in making it easier for communities to deal with these regulations.*

No response for this section.

18. *How could it be made easier for community energy projects to sell the energy they generate and connect to the grid?*

As highlighted in Question 8c, there are significant barriers to community energy fulfilling its potential in our energy system in terms of transaction costs and competing within a market that has been set up to favour large-scale, predictable generation. While the EMR process has suggested several changes to increase market liquidity and improve new entrant market access, it is likely that these changes will be to the detriment of simultaneous efforts to support community energy. The 'off-taker of last resort' amendment offers some comfort to medium-scale generators, but more could be done to support competitive PPAs for community-owned projects such as creation of a Green Power Auction Market (GPAM). In our view, the simplest means to do this would be to provide a FIT whereby the price paid and offtake were all guaranteed for community energy generators. The recent introduction of the 10MW 'community' fit threshold goes some way in addressing transaction costs for smaller projects, though the added value potential of community involvement perhaps justifies a higher rate of tariff than is currently offered.

19. *Research published alongside this Call for Evidence (Community Energy in the UK: A review of the Evidence) has found that the evidence base for community energy is currently limited. We are interested in how community energy projects are evaluated and how better evidence could be collected.*

As highlighted in question 8, gathering robust evidence on the value of community energy can be quite resource intensive, and groups themselves are often more focused on project delivery than evaluation. Resource pressures aside, academic researchers have skills in data collection and analysis (e.g. qualitative and quantitative data collection and combination of methods) that communities are unlikely to possess – asking the right questions, using rigorous methods and systematic approaches to analysis. Therefore, enabling researchers to work with community energy actors would be useful both for the community involved and other relevant stakeholders such as DECC or RegenSW. Early involvement is also important, as some of the data required will be longitudinal, for example being

able to compare local residents' perceptions or levels of energy generation/consumption, across various time points to show that change has occurred².

The important point to make about evidence and evaluation is that a narrow approach (e.g. purely focusing upon emissions reductions, or the use of a cost-benefit analytic framework) is unlikely to capture all of the objective and subjective outcomes of a community energy project (see also Walker and Devine-Wright, 2008). Therefore, it is important to collect a variety of data, both quantitative and qualitative, when seeking to evaluate the impacts of a community energy project. More work is needed to identify an agreed and comprehensive set of outcomes or indicators over which evaluation can work. The importance of specific indicators is likely to change over time and will depend on the audience and context, but the field may benefit from a standardisation of *what* to measure as well as *how*.

Another important point to make is that when projects are very innovative or pioneering, learning about what didn't work is just as informative for policy makers and other actors as hearing success stories. But such information will be more sensitive and harder to obtain, since it may not be in the interests of the actors involved to 'come clean' about things that worked out 'particularly badly'. Anonymising evaluation studies could be one way around this.

20. *We want to hear your views about how central Government could engage communities more effectively in developing and delivering its policies.*

According to Peters *et al.* (2010), and we agree, the increased urgency of climate change and concerns relating to both the supply and demand of energy are, above all, a challenge of governance. It is clear that national targets on CO₂ emission reductions, for instance, will only be effective according to their reach into the 'place-based' actions of individuals, communities and practices. In post-war policy in the UK, energy was seen as a public good and centralized delivery was written into the decision-making architecture of the post-war political covenant. By contrast, more recent attempts to broaden a traditionally supply-oriented governing structure—by encouraging local actors and institutions to develop and initiate more bottom-up approaches to energy policy—has been characterized by an absence of this kind of debate. The *ad hoc* way in which many community energy projects have emerged during this time points to the lack of accompanying discussion as to how a low-carbon transition led from the local level, will address differences in power and organizational capacity between groups and institutions and, similarly, how/if this shift might incorporate differing perspectives on *process*.

The more recent policy landscape—particularly *The Low Carbon Transition Plan*, *The Localism Act*, and also the unfolding *Green Deal*—all suggest that local authorities can play a role in coordinating this local response at both an infrastructural and a cultural level. Potentially, this policy framework offers opportunities for local authorities to take the lead in developing technological solutions to the problem of securing a more sustainable energy system, as well as encouraging nurturing the development of local partnerships around sustainability.

However, this shift in perspective has raised numerous questions concerning both the role and influence of local government over energy matters and also issues of trust around their relationship with the wider community. The *ad hoc* way in which many community energy projects have emerged in recent times points to the lack of accompanying discussion as to how a low-carbon transition led from the local level, will address differences in power in our political system, organizational capacity between groups and institutions and, similarly, how/if this shift might incorporate differing perspectives on *process*. In much the same way as community energy projects, local authority agendas often differ in scope and in their aims and objectives. Woking Borough Council, for instance, has developed a very top down approach to its local sustainability agenda, whereas Oxford City Council have involved their local community in a more broad-ranging sustainability agenda.

² As noted in the response to Question 8, Iain Soutar of the EPG is currently carrying out research towards establishing needs and methods for project evaluation, both from a baseline and longitudinal perspective.

Because all community energy contexts are place specific, in contexts where there is lack of trust between some residents or parts of a community and a local authority, an LA-led community energy process – or one in which local authorities were presumed to act as ‘brokers’ or intermediaries - may backfire and be unsuccessful. Local Authorities as public sector organisations have certain advantages (e.g. stability, size) and disadvantages (e.g. bureaucracy, risk aversion) over civil society groups. A national policy for community energy would be wise not to presume that LA organisations are *always* the best vehicles to choose to promote local energy actions, though different initiatives are likely to have different needs, and LAs are likely to be well placed to identify needs in their areas and provide information and support. It should be remembered that community energy are often grassroots initiatives that are already making progress without LA support, so support should be set in place to nurture rather than orchestrate these efforts.

An example of government engagement working badly at the national level would be the lack of consistency in support for community energy over time. The Countryside Agency’s Community Renewables Initiative (2002-2004) was a laudable initiative but was discontinued. This led to a lack of learning and cumulative knowledge gain over time. Barely a decade later, DECC is asking similar questions – how can local community groups be enabled to devise energy initiatives? What are the benefits in them doing so? More consistency in the emphasis placed upon community actions within national energy policies would help.

21. *What could be the role for Government in helping community energy projects to build partnerships with other organisations, such as energy companies, local authorities and installers?*

As highlighted in the response to Question 20, Local authorities are well placed to identify local issues and identify strategies for moving to a sustainable energy future, within which community energy is key. The Green Cornwall programme (<http://www.cornwall.gov.uk/default.aspx?page=29833>) is demonstrating imaginative breadth in the way it is supporting a range of initiatives encompassing both supply and demand-side issues with a suite of support mechanisms. For example, the recent Green Cornwall Show held in Pool, Cornwall, in June 2013, provided presentations from community groups in the county as well as from other countries to illustrate possible community energy ideas. **National Government could be doing more to identify and communicate best practice in building and fostering relationships between local authorities, communities and the private sector.**

22. *How might several community energy projects work collectively in order to negotiate and partner with larger organisations more effectively?*

No response for this section.

23. *How might Government encourage greater community ownership of or involvement in larger energy infrastructure projects?*

Better policy that takes specific account of community approaches could considerably de-risk activity within this sector. A range of factors hinder the development of community renewables and interact with one another to create an overall risk profile for a project; which in turn impacts the ability of communities and organisations to attract commercial support for the development of projects.

One of the main elements of risk relates to gaining planning consent. Whilst it is assumed that community based projects should have a lower planning risk profile, it is also influenced by technology and scale to some degree, although the choice of these should be driven by the site and the opportunities and constraints that it has. These issues can be determined through good initial scoping and feasibility, which are a fraction of the cost of working up a full planning application. The view from practitioners is the process of planning is like a lottery, increasing risk and therefore cost. Planning policy should be more coherent and predictable and for good quality community applications, more supportive.

There is also a recognised issue with the skills and capacity of communities to take on the development of these projects. The provision of support helps to reduce risk by enabling communities to identify the most appropriate and realistic local options for renewables and to help them understand how to take these to completion. Frameworks and project plans can ensure that this is done in a way that aids the development process, by providing the right information in the right way for planners, developers, funders, etc. It can also help to ensure that communities understand how finance works and what is needed to make a project more bankable. Support needs to include both resources and on the ground help, to effectively enable communities to develop projects, including access to financial, technical and other expertise. Policy currently focuses too strongly on just the provision of information.

For community renewables, there is a real case for the development of a risk capital fund. Access to finance for the early development stages of the project is a key issue. The at-risk nature of pre-development work means that commercial finance is difficult if not impossible to secure. Those projects that have come forward have only been possible with public and other grant support, the availability of which is becoming increasingly problematic. It has been suggested that in order to overcome this problem communities need to make themselves more investment ready. However, community approaches in many respects increase risk, making it hard for them to secure money. This in part reflects the nature of communities themselves, the type and scale of projects they are seeking to develop and the risk involved in securing planning. Combined, these create a real challenge for commercial financiers, so whilst communities can and should work towards becoming more commercially minded, by developing appropriate and robust projects, this alone may not be sufficient to overcome the hurdle of securing at-risk finance. The introduction of FiTs and the RHI do not address this problem.

A number of models exist for funding community renewable projects (see Hoggett 2010). Of the models examined, only two are based on purely commercial approaches that are not using any public support. The rest are currently seeking or using public funds to help their programmes either to help them become established, or to bring in grants to help cover pre-development work and to provide equity to secure debt finance. Access to finance then, is an issue for both communities and those that are attempting to support them.

A mechanism needs to be put in place to provide communities, and those that support them, with access to a risk capital fund. This fund does not need to take a grant based approach; no or low interest loans, or project underwriting would de-risk the whole process and open up access to commercial finance, on much better terms. This could be based on a self-sustaining, revolving fund model that spreads risk across a portfolio of projects, ensuring those that are supported repay the capital they are provided with. This would make projects much more bankable and help to overcome the at-risk stages. It would also help communities with their equity share within a project, either directly, or by enabling them to develop local share issues, further increasing their bankability.

The recent provision for a heightened FiT ceiling may provide some certainty in revenue generation, though as highlighted in Question 18, community energy and the potential benefits it offers may justify higher FiT rates than are currently offered. Moreover, guaranteeing offtake for community generated electricity would derisk the provision of at-risk finance.

Such a fund could be part of the function of the Green Investment Bank. Scotland have already identified the need for a pre-development fund. A similar approach is needed for the rest of the UK, as without some sort of financial support the Government is effectively leaving it to the market to deliver. It is also clear that many commercial companies are starting to offer communities with packages based on providing 'free' power whilst taking all of the financial benefit provided by FiTs away from communities. Such approaches will do little to engage and support communities to develop their own infrastructure, despite the opportunities that this can provide, and they will miss the wider benefits that these approaches can clearly bring. There is also a risk that such approaches will result in a rebound effect, potentially increasing carbon emissions.

Added to this is the potential for DECC to do more to encourage the development of 'joint ventures' between private developers and communities of place/interest. In the past, there has been a widespread tendency to dichotomise energy projects into community/small scale and private sector/large scale – and for most energy projects to be the latter model. The JV model blurs the

distinctions between these approaches to potentially produce large-scale community/company projects (e.g. Earlsburn Wind Farm, Scotland and other projects by Falck Renewables). In signalling a different mode of engagement with communities affected by infrastructure projects, the JV business model has the potential to remove some of the risk that developers have had to deal with arising from potential public opposition to their proposals. But the JV model is under-researched and it is not altogether clear what mechanisms that institutions such as DECC could or should employ that would increase the prevalence of JV energy projects. Research is needed to fill these gaps.

24. How might 'community benefits' packages associated with large energy infrastructure projects help support community energy schemes in the area?

As Cass et al (2010) make clear, community benefits packages may not lead to an increase in social acceptability per se – they may be perceived as bribes leading to greater intransigence by residents already opposed to an energy project. To lessen the chance of this occurring, early signals should be given by the developer that a benefit package will be provided to those affected. Transparency is also important in terms of providing clarity about procedural details (e.g. who will decide how a package of financial support should be spent?) that could undermine any potential benefits of a package if not handled carefully, as recently discussed by Aitken (2010). To date, it is the committees or panels set up by the developer in collaboration with the community that have drawn up the rules about what financial benefits may be spent on. In some cases, there has been an emphasis upon spending on energy conservation schemes to alleviate fuel poverty and this is a useful way to connect projects on energy generation and fuel poverty together. Finally, the discourse of benefits can vary – Cowell et al. (2012) interprets benefits packages in terms of justice and equity dimensions and criticises those who view them instrumentally purely as a means to secure social acceptance.

See also response for question 8.

25. For some respondents we would like to follow up with additional questions. Are you happy to be contacted for further information if required?

Yes.

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