

Community Energy: co-operative solutions

Findings from Practitioners' Summit, June 2011

Co-operatives UK and the Co-operative Group have commissioned work on co-operatively owned community energy.

The aims of this project are twofold: firstly, to explore ways in which the co-operative movement can best support communities to develop energy projects; and secondly, to inform the lobbying and advocacy positions of The Co-operative Group, Co-operatives UK and the co-operative community renewable energy sector.

Through direct support, and through lobbying for change to policies and markets, the project aims to improve the prospects for co-operatively-owned energy in the UK.

Co-operatives UK brought together a small group of community energy practitioners, at a summit, to offer advice and guidance for the work.

This paper outlines the findings of the day. It covers:

- a. The starting point for the work: what all those involved would like the project to achieve
- b. The potential for community energy
- c. The issues facing community energy
- d. The research process

a. The starting point

Practitioners felt strongly that there had been a lot of research into community energy, but very few practical changes to help the sector. Practitioners want the project to result in tangible outcomes. *"We've made the same points time and time again; we are very keen that something should happen"*. They welcomed the commitment of Co-operatives UK and The Co-operative Group, as they *"have the clout to talk to government and the trust of people within the movement"*. In addition to this work, there are two sizeable academic projects (see Annex for details) and countless requests for information from government, academics, NGOs, media and others, which can place a considerable burden on community groups, few of whom have paid staff.

Justin Woolford from **The Co-operative Group** stressed the practical nature of this project: practical support for the sector and campaigning for changes in policy and legislation to help community energy projects.

Community groups involved in the summits and as case studies receive an allowance for their time.

b. The potential for community energy

Six large energy companies own over 99% of energy generation in the UK. The community sector is currently very small. However, the potential is significant. There are different ways of measuring potential impact:

1. In terms of amount of electricity or heat generated, i.e. kilowatts or megawatts – community-owned power is likely to remain a small proportion, unless there are radical changes to policy, energy markets, institutional finance and so on. However, the success of community ownership in Scandinavian countries shows that it is possible to have a significant percentage of energy assets in community ownership.
2. In terms of numbers of communities involved – could we aim for one per community (approximately 30,000 schemes, depending on definition of ‘community’)?
3. In terms of influence and engagement on climate change – the effect that a community scheme has on local people’s acceptance of and involvement in the issues. This can reduce carbon emissions indirectly, through changes to behaviour, and makes it easier to introduce other green initiatives.

It may be that the last of these is the biggest potential in the short-term – and that community schemes could then help to change the way that people think about energy, thereby creating the conditions for a more radical system change which would result in 1) above. One participant suggested that a realistic target would be communities generating their own power for their own use, with large-scale grid power being used for industry and commercial needs. Making it more straightforward to develop community schemes could bring a number of small-scale generation sites on stream relatively quickly, compared to long-term developments such as off-shore wind.

In the short term, however, the biggest contribution community schemes can make is 3) above - involving people in energy and climate issues, as well as promoting community cohesion and resilience. Investing in community energy should be seen as an effective way of achieving the behaviour change needed to reduce carbon – multiple outcomes from a single investment.

Community involvement can be measured and we need to improve how we do this. Indicators include: number of shareholders; number of hours volunteered (similar to ‘timebank’ model); number of people taking action, e.g. on home energy efficiency.

Co-operative structures mean that people can deepen their involvement, by being a member as well as a customer. Some people may not be able to afford to buy into schemes, but credit unions could help to open up investment. Different structures will suit different people.

A move to greater localism (the ambition of the Localism Bill) could help communities control their own resources, and might result in a better outcome for community energy.

Communities have control over local resources, and can have influence over renewables in their area, for example through the planning process, or because they own land or buildings that could be used as sites.

People have different motivations for involvement in community schemes. Some investors may want a financial return, whilst others are happy to contribute to a worthwhile project that reduces carbon, strengthens the community and helps people tackle climate change. There is a place for both approaches, but people's ability to invest time and money in schemes that do not offer financial return is limited. One possibility for more 'commercial' scale investment is to introduce a planning requirement for large windfarms, stipulating that a percentage of the scheme should be offered to local communities on a co-operatively owned basis. Energy 4 All have established schemes on this basis in Scotland, (e.g. Boyndie wind farm) with Falck Renewables, an Italian family-owned company. Because Falck is a small, privately-owned company it is more willing to experiment than the large, listed energy companies.

At the moment, energy co-operatives sell electricity to the National Grid. It isn't possible to buy electricity directly from co-operatively-owned or community sources. One area that could be explored is whether people could buy electricity directly from community schemes, or at least building a link between generation and supply.

There is a general sense of 'policy fatigue' as change has been hard to achieve, so the suggestion was to focus on what we can achieve now within current restraints.

c. The issues facing community energy

Practitioners stress that it is very difficult, risky and time-consuming to get community-owned schemes off the ground in the UK, compared with other European countries (Germany and Scandinavian countries). These are the issues faced by communities:

Business start-up issues: Some difficulties are common to many business start-ups – lack of investment capital, need for the right skills and people, risks and uncertainties of a new business

Specific issues with the energy sector: There is a fundamental problem (which doesn't apply to most business start-ups) that community-scale energy doesn't 'fit the system'. The market and regulatory context, and financial models, are designed for established players (i.e. large, centralised generation) and don't work well for small, decentralised generation. Often, a 1MW installation requires just as much effort as a 10MW.

Lack of investment capital: Feed-in Tariffs (FITs) are very welcome, as they do help to make smaller schemes pay. However, capital is still needed. Banks (including The Co-operative Bank) are often unable to lend to small schemes (below £1 million), which are seen as risky investments. In Germany, by contrast, banks are open to lending small sums of money to small schemes.

Staffing issues: Most community schemes have been developed by volunteers, though some have paid employees. Many paid staff are funded by grants, not revenue from energy sales. Volunteers are very valuable, not least because they are trusted by the community. But it is difficult to sustain involvement on a voluntary basis. There are often skills gaps (engineering / accountancy/ administration / legal skills are all required)

Particular hurdles: a range of specific issues were noted, including

- Uncertainty over FITs following recent review, and resulting loss of investor confidence
- No consistency on what is charged for grid surveys
- Complexity of different bodies that need to be approached (planning authority, Environment Agency for hydro projects, Distribution Network Operators, etc)
- Planning issues (though permitted development for domestic microgeneration is a good step forward)
- Ofgem requires a development to be complete before it will say whether it can claim FITs. So a community could complete a project and then discover that it is not eligible for FITs.
- Opposition from the Ministry of Defence.
- The legal decision that projects in receipt of state grant funding cannot benefit from FITs (this could be subject to legal challenge)
- Using second-hand equipment – banks might not approve loans on this basis; and FITs may not apply.
- Removal of FIT-eligible renewable energy initiatives from the Enterprise Investment Scheme (EIS).

Classification of community projects: Community energy generation is neither straightforwardly 'charitable' (as it involves people investing money and potentially getting a return) or commercial (schemes tend to be run by volunteers, for community benefit). This makes it difficult to get support. For example, grant funders want to know how the organisation will be sustained beyond the funding period, but might not be willing to fund if the business model depends on 'profits' from generation. Commercial banks only consider the commercial return and not the community benefits.

Lack of representation: There is no obvious representative body for community energy. The Renewable Energy Association tends to represent bigger players. The Low Carbon Communities Network is a useful forum but represents all climate-related community groups, not just energy generators, who face specific issues. Friends of the Earth's plan to establish a campaign on community scale energy may help.

d. The research process

Summit participants were asked for their advice on the research process and which issues to discuss with case studies.

Choosing case studies: There needs to be a range of technologies, size, status (well-established / trading / in development / encountering difficulties), urban and rural, some which have involved Energy4All and H2OPE, and some which have been run entirely by the community themselves.

Other people to talk to: Given the size of the project, there is limited scope for detailed interviews with others, but it would be useful to speak to some Local Authorities who have supported community schemes; Good Energy, who buy from small-scale producers; Friends of the Earth, and possibly Falck Renewables or other large energy companies who have worked with communities. Organisations who support community energy could also be consulted: Energy4All; Sharenergy; H2OPE; The Enterprise Hub, Carbon Leapfrog, the Community Energy Practitioners' Forum (see below).

Issues for discussion: The approach taken will not involve a formal questionnaire, but will be exploratory and qualitative. The following areas will be addressed:

- **The group's story:** How and why did the project come about? What was the journey from idea to actuality? What are the future plans/vision for the group and does this relate to the wider sector (link with questions below re identity as a co-op)?
- **Help, advice and support:** What support did the group use and how did they know about it and access it? Mention specific toolkits – Energy4All's Energy Steps website for wind; WOCCR's advice on its website. What would they have liked?
- **Profile of the group:** Who is involved? How did they get involved?

- **Skills:** what skills do the group have? How do they access specialist skills e.g. financial, legal, technical, community engagement / facilitation?
- **How does the group work,** and how does it involve people? Community meetings? Surveys / questionnaires/ Activities?
- **Institutional support:** What organisations have supported them? Local Authorities? Energy companies? Who would they want to form alliances with? Ask specifically about the Co-operative Bank – how has it been involved, and how could it help?
- **What difficulties** have been encountered?
- **What impact** has the project had on its members and the wider community?
- **Benefits of the project:** What wider benefits have there been? Financial, carbon saving, energy generated, jobs, strengthened community, greater awareness of environmental issues, etc. and are these visible, communicated and understood by the wider community?
- **How the project has changed:** did they have a clear plan / business model before they began? How have things changed? What costs were not costed originally?
- **Does the group identify as a co-operative?** What are their views on the sector collectively, and what it could contribute? What is their vision for the sector?
- **How could co-ops work collectively?** E.g. exploring shared risk; the potential for a network of investors for community schemes; joint buying of insurance; bulk selling of electricity; potential for a central repository for standard contracts, lease agreements, templates etc, which all schemes could use
- **Views on government policy & legislation:** What has been helpful and unhelpful?
- **Factfile:** we should collect the following information about each scheme (this can be done from websites / by phone, in part)
 - Location
 - Size of scheme (in kW / MW)
 - Number of members
 - Legal form e.g. IPS, CIC etc
 - Technology
 - How much is the scheme paid for its electricity?
 - Which company is electricity sold to?
 - Legal objective

Annex 1: other research into community energy

Major academic projects (ongoing):

- EVALOC (Oxford Brookes & University of Oxford) – this project is looking into the Low Carbon Communities Challenge winners.
<http://www.brookes.ac.uk/schools/be/oisd/news/evaloc.html>
- CISE, Community Innovation in Sustainable Energy, a research project at the Universities of Sussex and East Anglia, www.grassrootsinnovations.org - they have published an interim paper, *Community Innovation for Sustainable Energy*, CSERGE working paper 2011-03, CSERGE, 2011
<http://www.cserge.ac.uk/sites/default/files/2011-03.pdf>

Other recent research:

- Forthcoming research from the Community Energy Practitioners' Forum, an initiative convened by the New Economics Foundation and the National Energy Foundation: <http://www.nef.org.uk/communities/cepf.html>
- A 2005 report which showed that small-scale generation changed attitudes to climate change and energy saving: *Seeing the Light: The impact of micro-generation on the way we use energy*, Sustainable Development Commission, 2005 <http://www.sd-commission.org.uk/publications.php?id=239>
- *Power To Our Neighbourhoods: Towards integrated local sustainable energy solutions*, A report by CAG consultants to the Ashden Awards for Sustainable Energy, June 2010
http://www.ashdenawards.org/files/pdfs/reports/Full_Report_Power_to_our_neighbourhoods.pdf
- *Creating Low Carbon Communities: A report on key issues arising from the 'Communities and Climate Action' Conference*, Communities and Climate Action Alliance, January 2011 <http://lowcarboncommunities.net/2011-conference-report/>

Annex 2: relevant Government initiatives and reviews

The following Government processes are relevant to this work:

- Localism bill
- Electricity Market Reform
- Microgeneration Strategy
- Green Investment Bank
- Big Society Bank
- Carbon Plan
- Green Deal & ECO

Annex 3: summit event attendees

Name	Organisation
Practitioners	
Andrew King	Energy4All
Barbara Hammond	West Oxford Community Renewables
Mark Wells	Sheffield Renewables
Chris Rowland	Ovesco
Tim Crabtree	Bridport Energy Services Company
Duncan Kerridge	Bro Dyfi Community Renewables
Simon Tilley	Sustainable Hockerton
Simon Gilhooly	Green Energy Nayland
Stuart Hay	Edinburgh Community Energy Co-operative
Cris Tomos	Cwm Arian
Community Energy team	
Justin Woolford	The Co-operative Group
Rebecca Willis	Rebecca Willis
Jenny Willis	Jenny Willis
Ged Devlin	Co-operatives UK
Mary Rayner	Co-operatives UK