Culture and community energy

Natasha McCarthy explains how national and local cultures shape community energy ownership

Dr Natasha McCarthy is Head of Policy at the British Academy, and has a background in science, engineering and public policy and the relationships between research, technology and society.

Many debates about energy focus on the UK's 'big six' energy providers, and large-scale energy generation projects such as new nuclear generation. However, much smaller-scale projects may well play a crucial role in future energy needs and obligations to reduce carbon emissions. Community energy projects are (usually) local energy generation and supply projects, characterised by local ownership, community participation, and benefit sharing through returns on community members' investments or through supporting local community initiatives. While such projects are not going to be the sole solution to energy security, they can play a significant role in local energy systems.

According to the 'Community Energy Strategy' published in 2014 by the Department of Energy and Climate Change (DECC), 'Community-led action can often tackle challenges more effectively than government alone, developing solutions to meet local needs, and involving local people. Putting communities in control of the energy they use can help maintain energy security and tackle climate change; help people save money on their energy bills; and have wider social and economic benefits.'[1] Local energy solutions can therefore provide not only power and heat – but can bestow local pride, and have the potential to create a common purpose around affordability, social justice, and low carbon living.

However, engagement in community energy across the UK has tended to be relatively small-scale compared to countries like Germany where, as early as the end of 2010, community energy made up 40 per cent of the country's renewable energy assets.[2] To test current levels of interest in the UK, the British Academy commissioned a small-scale YouGov survey in October 2015. It suggested that not many British people would invest, and if they were to, saving money would be a major motivation. Of the 1,000 participants from Great Britain who were surveyed, only 5 per cent had ever invested in community-owned projects, and of that 5 per cent, 1 per cent stated that they would not do so again. However, 21 per cent showed some interest in investing in community schemes having not done so before. Respondents' levels of interest in community energy schemes were similar to their levels of interest in community centres or allotments, though there was more interest in libraries. Respondents were most likely to give a reduction in their bills as a motive for investing in such projects – ranking this higher than the return on their investment, and significantly higher than promoting community involvement.[3]

The British Academy sought to look at why is it that British people show what, on first reflection, seem quite low levels of engagement in such projects, and how this compares with other countries. Barriers to widespread take-up of shared energy generation in the UK may be regulatory or technical, but there may also be cultural, historic, constitutional or political barriers that need to be better understood. The British Academy report *Cultures of Community Energy*, published in May 2016, examined the cultural factors that shape the success of community energy projects

1. Community Energy Strategy: People Powering Change (Department of Energy & Climate Change, 27 January 2014), p. 4.
2. www.gov.uk/government/uploads/system/uploads/attachment_data/file/275163/20140126Community_Energy_Strategy.pdf
3. All figures, unless otherwise stated, are from YouGov Plc. Total sample size was 1,595 adults. Fieldwork was undertaken on 21–23 October 2015. The survey was carried out online. The figures have been weighted and are representative of all Great Britain adults (aged 18+).

Brixton Energy in south London. 'Obviously we were inspired by what others were doing – Brighton, and other community groups. So I think there was just a kind of general energy that was building up where community groups across the country were inspiring each other to do stuff, and it was like "They've gone ahead with it, we can do it too!" ' (project leader).
PHOTO: TIM MITCHELL.

internationally, and the cultural enablers and barriers to community energy becoming mainstream. What cultural factors encourage engagement in such projects? Are these present in UK examples, and can they be actively developed?

Understanding culture

The British Academy commissioned a team of researchers at the University of Lancaster to collate a set of international case studies of community energy projects, in order to identify what those cultural factors might be.[4] The case studies prepared by the research team were selected from three broad groups. The first was the 'community energy leaders' group, in which projects from Denmark and Germany were studied, countries with high uptake of community energy, and supportive regulatory frameworks. Four case studies were from the UK – from England, Scotland and Wales, with the Welsh case study being a project that had failed to receive planning permission. Finally, 'wild card' projects were selected from Belgium, South Korea, Brazil and Chile, to explore very different cultural and institutional settings.

Three aspects of culture were explored in the case studies. National institutional and political cultures were examined, including the assumptions governing regulatory structures. Cultures of social enterprise were also considered significant, concerning the extent to which social enterprises (businesses trading for social or environmental purposes) are recognised and valued within the economy and society of a region. Finally, local cultures very specific to individual projects were considered, looking at the cultural milieux within which community energy groups operate including the degree of trust and social cohesion.

What does community energy look like?

One of the case studies produced by the research team looked at Brixton Energy. Based in the district of Brixton in south London, Brixton Energy is a voluntary group of individuals who are enthusiastic about community-owned, renewable energy initiatives.

Since 2012, the group has led the establishment of three community solar energy projects in the area, generating renewable energy and bringing financial revenues into the local neighbourhoods where they are sited. Each project is a registered co-operative that is wholly owned by its shareholders, who were able to buy shares from £250 to be part of the collective ownership. The sale of these shares helped to finance the installation of each solar scheme.

From all these projects, electricity generated is first sold to users within the buildings, and the excess is sold on to the National Grid. To date, the first two projects have generated over 50,000kWh of energy. Alongside energy generation, as with many other community energy projects, the Brixton schemes provide financial revenues to the local community. Investors in each scheme receive interest of around 3 per cent their investment, whilst 20 per cent of the profits are spent on a variety of local initiatives focused on energy-saving in the local area.

The local culture and context of the Brixton area shaped the project in a number of ways. Most obviously, the area lacked the strong social ties and networks that can characterise some rural neighbourhoods where community energy projects are undertaken. Many local residents were also sceptical of the potential for solar energy in the UK, or were not familiar with the technology. Community involvement was secured through open, hands-on and proactive consultation, with a focus on local development, jobs and improving the prospects for young people.

For all three of the Brixton Solar schemes, a portion of the profits from the solar panels is placed into a Community Energy Efficiency Fund, which is used to improve the housing stock on some of the poorest estates in Brixton

and 'thereby taking meaningful steps to alleviate fuel poverty for some of the poorest residents.' The Brixton schemes have also focused on training and improving the skills of young people via programs such as internships.

How national institutional and political cultures shape community energy

Through the full set of case studies it was found that government policy has a significant impact on the relative success of community energy initiatives – not only through its direct effects, but also in terms of the stories that government policies tell about institutional attitudes towards community energy. These stories are as important as the outcomes of the policies themselves. Support from local authorities can also provide both financial backing and credibility to community energy projects.

The case studies suggest that the existence of incentive systems, such as Feed-in Tariffs or specific tax incentives, matter in incentivising local energy economies, not only through financial support but by lending perceived credibility to projects. However, financial incentives without other forms of political institutional support are of limited benefit. Community energy thrives where the policy environment is supportive of community energy in a broad sense.

—————

Case study:
Wiltshire Wildlife Community Energy
'Government support has driven down the cost of renewable energy significantly, enabling renewables to compete with other technologies and helping the industry stand on its own two feet.

Our priority is now to move towards a low-carbon economy whilst ensuring subsidies are used where they are needed most, to provide the best value for money for hardworking bill payers.'

—————

Market liberalisation is also important – but it appears to be the *type* of liberalisation, rather than the *degree* of liberalisation, that is a factor in the ease with which community energy initiatives are set up and are able to scale-up. For example, liberalisation can enable the entry of small-scale suppliers into the market, but it can also favour large corporations meaning that community energy groups must operate outside the system.

As for other parts of the energy sector, there is need for a national policy framework that is clear, credible and consistent. The existence of long-term stable conditions for community energy is critical to their success. Predictability is particularly important for communities because of longer development times, relatively complex partnerships, building the confidence of local investors, and the need for capacity-building to develop skills and experience. DECC's 2014 Community Energy Strategy

could form the basis of this stable framework, developing it along with the Cabinet Office, HM Treasury and Ofgem.

How cultures and community shape community energy projects

The existence of a tradition of social enterprise affects both the ease with which a community energy group can be established and its ultimate success. A familiarity with, and an acceptance of, social enterprise also matters: increased support for social enterprises in the UK could act as an enabler for social enterprise in the energy sector. Such familiarity was clear in projects based in Germany and Denmark.

—————

Case study:
Jühnde Bioenergy Village in Germany
'In Jühnde we were the first co-operative. But the people here in Germany in the rural areas, they know the construction of co-operatives. So for example the bank in the next village is a co-operative, or examples where farmers bring their products from the fields to co-operatives that buy it and sell it to the market. So they knew that this was a very fine and excellent type of company.'

—————

Installation of renewable energy is capital-intensive. Decisions about financing and ownership models can be fraught, and lead to a tension between commercial practice and community expectations. Where there is a tradition of community ownership of energy infrastructure, this tension is easily resolved.

The motivation and the stated aims of groups vary depending on the local situation, needs and priorities – they might focus on social benefits beyond energy, or they might support self-sufficiency. However, 'resistance spirit' seems to be an important galvaniser of community energy action. A number of the case studies show projects arising out of opposition to particular energy sources, such as nuclear.

But communities have different forms and can work in different ways. In a close-knit community it may be easy to engage the local community in a dialogue about an energy project. But it can also be easy for networks to join together in opposition – for example, those opposing wind energy.

However, there can also be positive influence in the other direction of travel, from energy projects to local communities. Community energy initiatives can act as a catalyst for local discussions about energy and can enable citizens to think beyond being passive consumers.

Cultures of Community Energy
Policy report

BRITISH ACADEMY

The Climate Change Collaboration
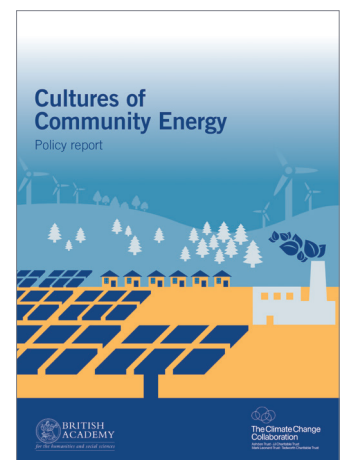
Alun Evans, Chief Executive of the British Academy, speaking at the launch of the *Cultures of Community Energy* report in Parliament on 24 May 2016.

How policy can support community energy

The working group came up with a number of suggestions for action, for all groups with an interest in promoting community and local energy – from policy-makers to community groups. This section summarises some of the key policy actions that could be taken.

Community energy is one aspect of a wider local energy 'ecosystem'. Such local energy ecosystems can be enabled by empowering local government. This could be by giving local areas some responsibility for energy generation and carbon reduction, or encouraging partnerships between local authorities, other local service providers such as housing associations, and community energy projects.

Case studies from other countries show that community approaches work not just for electricity generation, but also for energy supply, heat and energy efficiency. In the UK, complex regulatory structures prevent such integration. This system could be improved by developing a community energy supply model, allowing community generators to sell directly to customers, and testing the regulatory framework to see the extent to which more localised approaches to grid management and energy supply can work, whilst protecting consumers, fundamental grid security and security of supply.

Case study: Ecopower in Belgium
'At the beginning of the liberalisation of the electricity and gas market in Flanders in 2003 our general assembly decided to become a supplier of electricity. And we were one of the first suppliers, and it was not hard to get permits because people from the advisor of the Ministry came to our meeting and practically begged us to do it. So we did and he was one of the first to have the electricity.'

More generally, central and local government expressing clear support for community energy is seen as potentially effective. This could include encouraging partnerships between communities and commercial parties to help projects get off the ground.

How communities can support energy projects

Key to communities developing successful projects is tapping into social enterprise as a distinct model of service delivery. Encouraging the community energy sector to embrace social enterprise can potentially help the sector to scale-up. One way to achieve this is developing the necessary commercial skills within the community sector and building capacity to work with commercial partners, with community energy bodies leading the way in developing relevant training.

The idea of a 'resistance spirit' identified in this research can be a catalyst for action, overcoming the assumption that energy is the preserve of large companies.

Also important are influential individuals, levering in already active networks, building on existing successful local actions, and linking into incentives that are likely to have resonance at a local level. These can be leveraged by promoting success stories of community energy to inspire and inform communities.

The case studies surveyed for this report suggest that community energy projects allow people to engage in the energy system more actively, which may have additional benefits such as providing an incentive to reduce energy use and carbon. A member survey carried out by Bath & West Community Energy suggested that over 70 per cent of members talked more to friends, family and colleagues about community energy as a result of being a member of BWCE.[5] Provisional findings such as this could be tested through evidence gathering across a wider set of projects, to produce a more rigorous and broad evidence-base on the wider impacts of community energy projects.

Future questions to address

There are more issues to address to understand better how to encourage successful community energy schemes. These include how the British planning system, based as it is on simple statements of rights, can be reformed to help the kind of local interaction and deal-making that is important to community energy. They include better understanding of the balance between primarily voluntary community action, social enterprise and more commercial approaches to delivery. They also concern whether there is a robust link between communities and their members engaging in community generation projects and becoming more engaged in energy issues including demand reduction. These are significant questions at the heart of the relationship between community culture, national policy frameworks and the energy system. ▬

5. Figure reported in unpublished correspondence.