



Trust and community: Exploring the meanings, contexts and dynamics of community renewable energy

Gordon Walker^{a,*}, Patrick Devine-Wright^b, Sue Hunter^{a,b}, Helen High^{a,b}, Bob Evans^{a,b}

^a University of Lancaster, Department of Geography, Lancaster LA1 4YN, United Kingdom

^b University of Manchester, The School of Environment & Development, Humanities Bridgeford Street Building, Oxford Road, Manchester M13 9PL, United Kingdom

ARTICLE INFO

Available online 2 July 2009

Keywords:

Community
Renewable energy
Trust

ABSTRACT

Community renewable energy projects have recently been promoted and supported in the UK by government policy. A community approach, it is argued in the rhetoric of both government and grassroots activists will change the experience and outcomes of the energy sustainable technology implementation. In this paper, we consider how interpersonal and social trust is implicated in the different meanings given to community in RE programmes and projects, and in the qualities and outcomes that are implied or assumed by taking a community approach. We examine how these meanings play out in examples of projects on the ground, focusing on two contrasting cases in which the relationships between those involved locally have exhibited different patterns of cohesiveness and fracture. We argue that trust does have a necessary part to play in the contingencies and dynamics of community RE projects and in the outcomes they can achieve. Trust between local people and groups that take projects forward is part of the package of conditions which can help projects work. Whilst trust may therefore be functional for the development of community RE and potentially can be enhanced by the adoption of a community approach, this cannot be either assured or assumed under the wide diversity of contexts, conditions and arrangements under which community RE is being pursued and practiced.

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1. Introduction

Community renewable energy (RE) has emerged over the past decade in the UK as a new theme of government policy and a substantial focus for local activity on the ground. An infrastructure of programmes and networks for promoting and supporting a 'community approach' to technology installation has been established (Walker et al., 2007) supporting a rapid growth in the number and diversity of local projects, extending across multiple renewables energy technologies and utilizing a diversity of organisational structures and ownership models. Whilst it is not entirely clear, or agreed, what community RE does or should constitute and therefore what makes it different to other approaches, the use of the term embodies implications and assumptions about the nature and quality of relationships between people and organisations that are part of 'the community' and the social arrangements under which energy technology is to be implemented (Hinshelwood, 2001; Hoffman and High-Pippert, 2005). A community approach, it is argued in policy rhetoric and argument, will change the experience and outcomes of energy technology implementation, in ways which can, for

example, avoid the recent history of opposition to wind farm development, promote locally appropriate and beneficial technology trajectories and generate greater understanding and support for renewable energy investments.

In this paper, we consider how trust (as a multifaceted abstraction; Luhmann, 1979; Metlay, 1999; Misztal, 1996) is implicated in the different meanings given to community in RE programmes and projects, and in the qualities and outcomes that are implied or assumed by taking a community approach. We examine how these meanings play out in examples of projects on the ground, focusing on two contrasting cases in which the relationships between those involved locally have exhibited different patterns of cohesiveness and fracture. We suggest that whilst interpersonal and social trust are functional for the development of community RE and potentially can be enhanced by the adoption of a community approach, this cannot be either assured or assumed under the wide diversity of contexts, conditions and arrangements under which community RE is being pursued and practiced.

Our discussion draws on a project funded by the UK Economic and Social Research Council as part of the Sustainable Technologies Programme.¹ This has sought to evaluate the role of

* Corresponding author.

E-mail address: g.p.walker@lancaster.ac.uk (G. Walker).

¹ See programme web site <http://www.sustainabletechnologies.ac.uk/>

Table 1

Government-led initiatives supporting and funding community renewable energy in the UK (as of December 2004).

| Initiative | Purpose | Date started | Spatial coverage | Technologies |
|---|--|--------------|------------------------------------|---|
| Community Action for Energy (CAFÉ) | Advice, information, training and support | 2001 | UK | Energy efficiency with related renewable energy technologies |
| Community Renewables Initiative (CRI) | Support and project development | 2002 | 10 areas within England | Solar roofs, biomass and wood heat schemes, farm waste schemes and wind turbines |
| Clear skies | Capital funding | 2003 | England, Wales and Northern Island | Solar thermal, wind turbines, micro/small-scale hydro-turbines, ground source heat pumps, room heaters/stoves with automated wood pellet feed and wood-fuelled boiler systems |
| Scottish Community and Households Renewables Initiative (SCHRI) | Advice, support, project development and capital funding | 2002 | Scotland | Micro-hydro-electric, micro-wind, solar water and space heating, ground-source heat pumps, automated wood fuel heating systems, solar PV in dwellings not connected to the electricity grid |
| Community energy | Guidance, training, development and capital grants | 2002 | UK | Community heating scheme using; heat from power generation (CHP); boilers using conventional or renewable fuels, heat from a geothermal well or heat pumps; waste heat from industrial processes or energy from waste plant |
| Energy Saving Trust (EST) photovoltaics programme | Capital grants | 2002 | UK | Solar photovoltaics |

community initiatives in the implementation and embedding of sustainable energy technologies in the UK through an analysis of policy documentation, the construction of a database of renewable energy community projects, interviews with key actors at national and regional levels and case studies of project development in Wales and the North of England. In this paper, we draw on both the analysis of national and regional interviews and on the case study research.

We begin our discussion by briefly outlining the emergence of community-based localism as a theme of alternative technology activism and recent energy policy in the UK. We discuss the different motives and narratives of community RE that have been involved and the expectations these embody regarding interpersonal and social trust and the nature of relationships within communities. We then turn to our case study research to explore the practical experience of projects on the ground.

2. Policy development and community-based localism

Arguments for community RE are not a new feature of the sustainable energy scene, but extend back to literature on 'soft energy paths' (Lovins, 1977) small-scale development (Schumacher, 1974) and appropriate technology (Dunn, 1978) from the 1970s. Such literatures and idealistic 'manifestos' for change have provided influential guiding principles for grassroots alternative technology activists for over 30 years (Smith, 2006).

However, until recently, such approaches were alien to UK energy policy (Walker, 1997) and, where they did continue to be pursued (for example at the Centre for Alternative Technology in Wales) this was within a 'grassroots niche' outside of the mainstream energy supply system and without the support of public resources. The privatisation of the energy supply utilities and infrastructures in the late 1980s opened up opportunities for new market entrants and technological diversity supported by a policies providing for market subsidy and protected market share (Roberts et al., 1991; Mitchell et al., 2006), but these changes essentially continued to promote a private-sector led model of project development. Whilst there were some new market entrants, the established power utility companies largely continued to play the major role.

A new emphasis on the potential benefits of a more localised and distributed pattern of energy generation and on the involvement of local people and communities in renewable energy development first emerged in the discourse of government and related official and advisory bodies in the late 1990s. This manifested itself in a scattering of the words 'local' and 'community' across various parts of the 2003 Energy White Paper. This key strategy document advocated and envisaged, for the first time in official energy policy, a more local model of future energy generation:

There is much more local generation, in part from medium to small local/community power plant, fuelled by locally grown biomass, from locally generated waste, from local wind sources, or possibly from local wave and tidal generators. These will feed local distributed networks, which can sell excess capacity into the grid (DTI, 2003, p. 18)

This policy rhetoric was matched by new initiatives that had already begun to be implemented by government departments and agencies in order to actively support, promote and provide funding for community renewable energy projects (see Table 1). For example, the Community Renewables Initiative (CRI), was established in 2002 by the Countryside Agency. Its key aim was to "help groups and individuals realise the renewable energy can form part of the regeneration of their locality" with a vision that through the initiative "over the next few years, local communities ... will be supported to propose, plan for, seek funding for, develop, own and take energy from renewable energy projects" (Community Renewables Initiative, 2002). Organised through regional 'local support teams' (LSTs) for 10 areas of England, it conceived itself as having a 'brokering' role, identifying opportunities for the installation of renewable energy technologies, providing information and expertise, networking organisations together and supporting project teams through the different phases of project development. Four other national programmes with 'community' in their title, objectives or remit rapidly followed, providing capital funding grants, extending funding and support to Scotland and focusing in some cases on the promotion of particular technology types.

Alongside, these government-led programmes, there were a series of NGO-led initiatives which were also promoting a

community approach to sustainable energy. These took a number of forms—networking initiatives such as Solar Clubs and Energy 21, the latter describing itself as a grassroots, bottom up ‘club of groups’; the Ashden Awards recognising particularly successful community schemes through giving awards and prize funding; and initiatives promoting particular models of project development and ownership such as the Renewable Energy Investment Club (REIC) facilitating community-based share ownership and Energy4All, describing itself as a ‘commonwealth of cooperatives’ seeking to develop and replicate cooperative models of wind farm ownership.

Across each of these initiatives and the different organisations and actors involved, there have been a diversity of motives for promoting community RE (see Walker et al., 2007) and a range of understandings of what community RE should involve and could achieve. For some government actors running capital funding programmes, motives were fairly narrow and instrumental, concerned, for example, with using government money to stimulate the market for renewables. Their definition of what constituted a community project was legalistic and related solely to the ‘not-for-profit’ status of community groups that enabled public funding to be used without contravening EU rules on state-aid to the private-sector.

However, others have had far richer and more prosaic expectations of community RE and definitions of what it should constitute and involve. These expectations have two dimensions relating both to the process through which community projects should be developed and operated and the outcomes they should be able to achieve. For example, in a guidance document produced by the Department of Trade and Industry (2000), a set of beneficial outcomes are claimed to be derived from community projects including that “*involvement will give the community some degree of control over the scheme*” that “*a financial return should be generated, both to the community and investors*” and more prosaically that “*if successful involvement in a community venture will provide a sense of satisfaction*”. In interviews with those running various NGO-led initiatives, there was an emphasis on localism and collaboration, on people working together at a local level and through that to achieve greater cohesion, mutual respect and understanding. One interviewee, for example, likened the installation of a turbine to the American tradition of community ‘barn raising’:

we are raising a windmill, and symbolically the whole community comes and helps to raise the windmill it's a bit like American barn raising, and I think that anything that brings a community closer together is a good thing (Interview with Energy4All)

In the context of the intense local opposition to wind farms that had been experienced in various parts of the UK (Toke, 2005; Bell et al., 2005), adopting a community approach was also particularly seen as a way of securing active public consent and support—or as one interviewee put it of doing some work on ‘hearts and minds’.

3. Social relationships, trust and community renewable energy

Under such notions and narratives of the utility of community RE there are clearly expectations that local action can and will be effective, that communities can function as both the site of collective and cooperative activity and the recipients of collective benefits. Such views also embody implications and assumptions about the nature and quality of relationships between people and organisations within a ‘community’ which enables them to work

collectively, consensually and effectively towards a common goal. Here, both interpersonal (in other people) and social trust (in institutions) are implicated in a number of ways.

Much of the literature on civic engagement argues that trust is both a necessary characteristic and a potential outcome of cooperative behaviours. Putnam (1993) for example sees interpersonal trust as fundamental to civic engagement, to how people live and cooperate in close-knit communities, and a necessary basis for developing trust in broader social systems—‘trust lubricates cooperation and cooperation builds trust’ (ibid p. 171). Misztal (1996), similarly, sees trust as having an important role in building mutual respect and reciprocity, fostering collaboration and building social capital, an analysis that has been critically explored, for example, in the context of rural development policy (e.g. Bebbington and Carrol., 2000) and neighbourhood regeneration (Purdue, 2001).

In these ways, being able to draw on and enhance the reserves of ‘thick trust’ (Williams, 1988) which are seen to exist between people and between people and local institutions within communities, is part of what makes a community approach to RE distinctive, desirable and attractive for those advocating its use and development. Trusting social relationships support and enable cooperation, communication and commitment such that projects can be developed and technologies installed in ways which are locally appropriate, consensual rather than divisive, and with collective benefits to the fore. Working as and for the community through civic engagement can enhance trust between people and organisations, an outcome which both builds local capacity for future and further collective action, and, it is argued, wider societal trust in renewable energy technologies from the bottom up. As briefly outlined above themes of such form can be seen within the policy and activist narratives that have shaped the development and emergence of community RE in the UK. Cooperation, cohesiveness and trust are not just implicated as a characteristic of a community approach to renewable energy, but also as an outcome of local-level activity which will have benefits in the future at both the local and other levels of analysis.

Such narratives and claims are clearly predicated on the basis that ‘communities’ can and do exist, in an unproblematic form and within many of the positive qualities with which they are readily associated. However, in both everyday experience and academic analysis such easy assumptions are problematic. When we asked people living near to community renewable energy projects to write down what the term ‘community’ meant to them (as part of a wider questionnaire; see below) many provided definitions of a classic positive form (including expectations about trust relationships as discussed above). For example:

people who are willing to support and work for the common welfare and good

where people live together in harmony with different cultures and interests, but with a strong feeling of trust and respect for one another.

However, others expressed more jaundiced and sceptical views of community either not really existing (at least in current conditions), as fractured between those who are ‘in’ and ‘out’, or as something far less rosy and comfortable. For example,

people of the village and surrounding area who live and work in the area and are involved in things that go on in the area. Not people who buy houses and use them 1 or 2 weekends a month and keep themselves to themselves

nothing now, as most people are too self centred

bunch of nosey people slagging each other off behind their backs

These more critical takes on community, clearly reflect much of what has been written in the academic literature about the realities of community (both past and present) and what can be hidden behind discourses which enrol its benighted, rose-coloured presumptions and associations (e.g. Herbert, 2005; Dalby and Mackenzie, 1997). Whilst appearing inclusive community can also be deeply exclusionary, marginalising those who are seen as not fitting (Williams, 1976; Harvey, 1996; Young, 1990). Places and communities are not synonymous—there can rather be multiple overlapping communities in a place (Jones, 2003) and extended and constructed communities of interest that transcend physical delineations (Delanty, 2003; Willmott, 1987; Lave and Wenger, 1991). Communities can be transient and dynamic and fracture as events unfold and relationships evolve.

These perspective clearly problematise the normative sense in which community is being attached to renewable energy (rhetorically and practically) and the extent to which the implications and assumptions around trust and productive social relations are likely to exist in practice and/or be produced as outcomes of a community RE project—and, therefore, potentially in aggregation from pursuing a programme of supporting community RE through government policy.

4. Researching community case studies

We were able to explore these questions of community and social relationships through case study research on 6 renewable energy projects, represented as being in some way ‘community’ in nature. The projects were selected to include a variety of renewable resources and technologies for heat and power generation, scales of development, spatial location and institutional structure, yet were intended to be similar in having successfully installed renewable technology, and reported high levels of community involvement or beneficial outcomes in each place, as indicated by materials produced by the project organisers. The project at Moel Moelogan was distinctive in having been recognised and promoted as a ‘best practice’ example of community renewable energy (Willis, 2006). Key aspects of each project are summarised in the Table 2.

Interviews and questionnaires were used to collect data in each location. Interviews were conducted with local stakeholders and individuals involved in devising and managing the projects (56 interviews in total). Questionnaires were distributed to local residents with sections of the survey addressing socio-demographic details, project involvement; beliefs about the project; environmental beliefs and worldviews and social identification with the community. Specifically, 20 items were intended to capture project beliefs concerning issues such as enhanced awareness, trust, certainty of outcome, control over decisions taken and fairness. Of 676 surveys distributed, 208 were returned, representing an overall response rate of 31%, which varied little across the six places.

Table 2
Key aspects of the six community renewable energy case studies.

| Location | Technology and project purpose | Organisational arrangement | Funding |
|---------------|--|------------------------------|--------------|
| Llanwyddn | Biomass district heating network linking school and community centre plus 19 local houses | Public–private partnership | £375,000 |
| Moel Moelogan | 3 grid connected 1.3 MW wind turbines (phase 1), later increased to 9 (phase 2) | 3 local farmers | £2.6 million |
| Bro Dyfi | One 75 kW wind turbine, grid connected | Committee-co-operative | £83,555 |
| Kielder | Biomass district heating network linking school, youth hostel, 6 houses, workshop and castle | Public sector, local council | £630,000 |
| Falstone | Solar photovoltaic panel and biomass boiler in village shop, tea rooms and visitor centre | Public sector partnership | £250,000 |
| Gamblesby | Ground source heat pump for renovation project on village hall | Village hall committee | £42,100 |

5. Local public responses to community RE projects

In the questionnaire, we asked directly about the degree to which local residents felt they had a sense of trust in those organising the relevant local project. Overall across all of the case studies 34% agreed that they did feel a sense of trust, 40% provided a neutral or non-committal response and 26% disagreed indicating that they did not. On balance, therefore, we find only a marginally positive response to this question. Correlating responses to this question with others asked about project process and outcomes, we find that those who do feel that they trust the project organisers also tend to express support for the project and the process through which it has been developed (see Table 3). As we might expect, therefore, interpersonal trust does appear to be implicated in local people feeling positive about their local project, feeling able to get involved and potentially influence the way it has developed.

Breaking down the data by project shows how these relationships play out across the case studies. As shown in Fig. 1, there are distinct differences between the case studies in responses to the statement about feeling a sense of trust in the project organisers that are hidden by the aggregated data. Positive indicators of trust are particularly strong at Gamblesby, with nearly 80% agreeing or strongly agreeing with the statement; and to a lesser extent at Bro Dyfi where there are very few negative responses but a larger neutral category. At Kielder and Falstone there is a balanced profile, at Llanwyddn indicators of disagreement are marginally stronger, whilst at Moel Moelogan the balance is markedly negative, with 46% *disagreeing* to some degree that they feel a sense of trust in the project organisers.

This pattern of divergence across the case studies is reflected in responses to other questions about supporting the project and feeling positive about the outcomes it has achieved (see Devine-Wright et al., 2007 for a more detailed analysis). Responses to the statements ‘The project has only gone ahead because of local community support and involvement’ (Fig. 2) and ‘The project has brought the community together’ (Fig. 3) are particularly striking. In both cases the profiles are very different for Gamblesby and Moel Moelogan. At Gamblesby 92% of people agree that the project has only gone ahead because of local community support

Table 3
Correlations between trust statement and others in the questionnaire.

| |
|---|
| ‘I feel a sense of trust in the project organisers’ |
| Positive significant correlations (at the 95% level) with: |
| ‘I am in favour of the project’/‘I feel a sense of pride in the project’. |
| ‘I feel that my views about the project have been taken into account.’ |
| ‘I had the ability to influence decisions made’. |
| ‘The project has only gone ahead because of local community support and involvement’. |
| ‘I made a direct contribution to the project’. |
| ‘I think the setting up and development of the project has been carried out in a fair way’. |

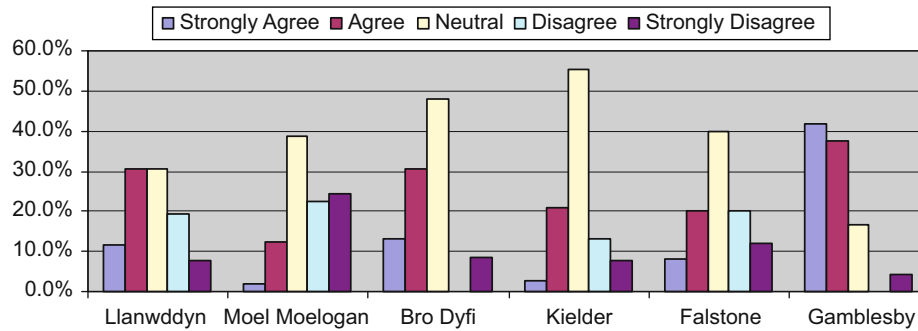


Fig. 1. Responses to the statement 'I feel a sense of trust in the project organisers' across the six case studies.

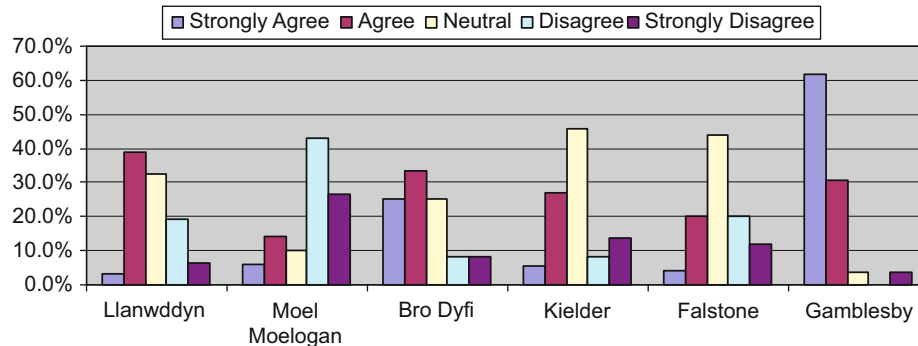


Fig. 2. Responses to the statement 'The project has only gone ahead because of local community support and involvement' across the six case studies.

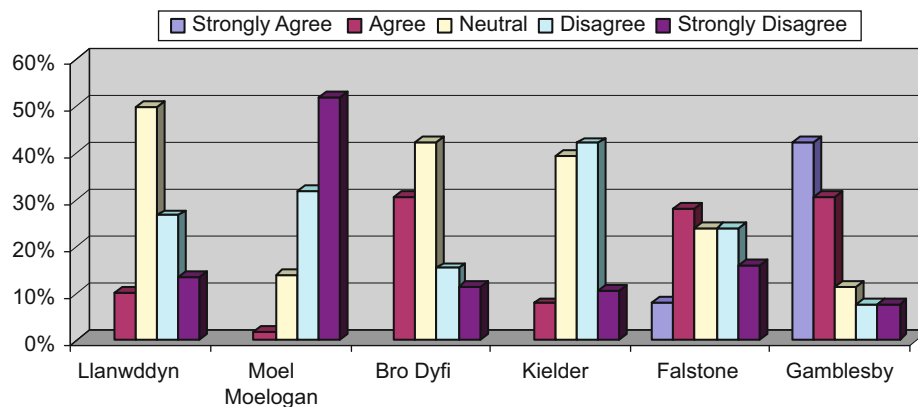


Fig. 3. Responses to the statement 'The project has brought the community together' across the six case studies.

and involvement, whereas in Moel Moelogan 70% disagree. In Gamblesby 72% agree that the project has brought the community together; whilst in Moel Moelogan 82% believe that it has not.

This contrast immediately raises the question as to why the views of local residents in these two places should be so different, to two projects that are both recognised and promoted as being 'community' in character. What is it that prompts such strongly positive responses in Gamblesby, and far more problematic and negative pattern of responses in Moel Moelogan? Over the next two sections, we discuss these two case studies in more detail in order to explain the contrasting experiences and dynamics involved.

5.1. Case study 1: Gamblesby village hall ground source heat pump

Gamblesby is a small rural village located in Cumbria in the North West of England with approximately 170 residents.

Historically based entirely around farming activities, it has more recently also become a destination for people looking to move into the countryside and retire. It has experienced a process of decline in local services in common with many other similar settlements, with the village pub, shop and one of the churches all closing down. While the village hall had come to represent one of the few places for people to get together, by 2000 it was in a state of considerable disrepair and become unuseable, not helped by an inefficient and ineffective heating system which meant that the hall stayed cold and damp for much of the year. The village hall committee had unsuccessfully applied for funding to renovate the hall and in the face of competition for funding decided to develop a distinctive 'green energy' proposal using the ground source heat pump technology—which collects low-grade solar heat stored in the ground and described by one of the interviewees as a 'only a big fridge'. The initial idea for this came from a member of the 12 strong committee who had both knowledge of pumps through

work and strong green commitments. Others in the group then brought in their own expertise and resources related to fund raising, financial management, electrical engineering, building and earth works in order to progress the proposal.

Some external advice and assistance was obtained from the local support team of the Community Renewables Initiative, but the CRI interviewee was clear that 'other than needing signposting to consultants and funding, they did it all themselves'. The committee was well organised, with jobs and responsibilities clearly allocated and little disagreement opening up between those involved. One interviewee observed that the only major dispute had been over the colour to paint the walls. Deliberate efforts were made by the committee to be open and accessible and to involve people as directly as possible in the project:

The other issue was making sure that we plugged into the local community and that they were kept informed. And got involved as well, we had half the village stripping plaster off the walls and doing the floor. The whole community was involved, planting, putting edging round the car park, pulling stuff off the wall, putting insulation in the ceiling, etc. (Member of the Village Hall Committee)

Fund raising activities also involved many members of the village—one person for example listed on their questionnaire that their involvement had been '*attended meetings, painted hall as a member of a group, donated money in lieu of silver wedding*'. A common-purpose agenda around saving the village hall was promoted through word of mouth and the close personal networks in the village and people willingly gave time and effort to the project. Community involvement was multifaceted and hands on and proved easy to achieve:

There wasn't anything problematic about community involvement really. I suppose in a sense because it is a small community, people all know each other, it wasn't an issue, I suppose you could say it might have been problematic with people worried about using weirdo technologies but that wasn't a problem (Member of the village hall committee)

All of the interviews and the questionnaire responses conveyed the impression of closely knit, cohesive community which despite the mix of those long established in the area and more recent incomers had few pre-existing divisions or splits:

It's a friendly, co-operative community of people, that was very helpful. There aren't any factions, there's me who's lived here 3 and a half years and people who've lived here all their lives. Everyone gets on really well. People are very willing to accept people on their own terms (Member of the village hall committee)

The projects costs were kept down by the in kind resources committed by local people (including, for example, local farmers digging the 2 m deep trenches in the car park for installing the heat pump pipe work) and despite some problems obtaining the up-front capital funding that was needed, the project was successfully and quickly completed. By November 2003 a warm, useable and attractive community resource was in place and the project was being promoted as an 'inspirational' example to others:

People have looked at Gamblesby and yes, we can achieve this. I think that's the good thing about Gamblesby, it's not an expensive project, it's been done by the community and I think because of that it's really inspired people (Regional CRI support team)

For those involved the outcomes of the project included having '*got to know people better*', a feeling of '*community spirit and pride*' as well as a '*greater level of green awareness*' which was leading to environmental action of other forms in the village. At the time of our fieldwork a second phase of development of the village hall was underway with plans initially for a small wind turbine to heat water and supply surplus electricity into the grid. A questionnaire survey of the village and public meetings had indicated strong local support for this further development.

5.2. Case study 2: Moel Moelogan wind farm

Moel Moelogan is in a rural hill farming area in North Wales that has been badly affected by declining incomes from farming and hit in turn by restrictions on the sale of sheep after Chernobyl, by BSE and foot and mouth crises. In this context, three local farmers (two of whom were brothers) decided in the late 1990s to look to an alternative source of income by setting up a small wind farm. Working as a small closely knit unit they investigated contractual, financial and legal issues, obtaining advice from a number of local bodies and successfully obtained both a contract to supply electricity under the Non-Fossil Fuel Obligation and planning permission to develop the site. A complex process of obtaining funding from different sources, including debt loans and personal loans from banks and an European fund regeneration grant then ensued, involving a great deal of personal investment and learning by the farmers.

In 2001, the three turbines were erected and an open day attended by 1500 people was held described by one of the farmer's family as '*like a Welsh Glastonbury*'. A further open day attended by a reported 500 people was held in 2002 when the turbines started to generate electricity. Up until this point the project appears to have been relatively uncontroversial and the project was widely represented as a successful community venture—started up by local farmers, with the income retained locally, the turbine towers constructed locally and overall an innovative response to rural decline.

However, once a second phase of development of up to 12 further turbines (later reduced to 9) was proposed, differences and divisions started to open up and very different accounts of the benefits of the wind farm, the process of development and the degree of local public support appear across the people we interviewed. In response to the phase II proposal a local protest group (CLOUT) was set up, arguing the wind farm had been misrepresented as a community project, that the benefits to the local area, rather than to the local farmers, had been greatly overplayed and that there had been very little real consultation with local people. For those involved in the group any trust in the motives and claims of the three farmers had evaporated:

When they put the first 3 up, although the families who were living very close were upset, it was at a time when farming was having a particularly difficult time...and there was a lot of sympathy for people who were diversifying and raising money and looking at different ways of sustaining themselves within the community... And it was just the three turbines and they were going to produce so much electricity and it was going to go into the local grid rather than the national grid and it was going to create jobs and the brothers were going to maintain it and then we found that one of the turbines had been sold to an electricity company ... and it became apparent that this wasn't a community project...the 3 was a Trojan horse... people were quite perturbed and I think what added fuel to their anger was that this project was sold to the community as a community project and then it became clear that it was nothing of the sort (Member of protest group)

They were local farmers 3 of them and they played on the thing that farming was going backwards, with BSE and foot and mouth. But they were the biggest farmers around here. If they were in difficulty finding enough cash to bring up their families, what about the rest that were farming on far less acreage? And people from outside seemed to swallow that idea... following that when they had planning permission to plant 3 of them they immediately sold one off to a German company. So what they told us they needed 3 for their own use to supplement farming was complete bullshit (Member of protest group)

In contrast, the farmers claimed that they had substantial local support, pointing to the attendance at their open days, and a questionnaire they had distributed at the second of these which indicated '100% support' for the phase II development. The project would return real benefits to local people they argued, far more than the wind farms set up in other parts of Wales, developed by multinationals with little concern for the local area. With the income from the expanded wind farm they would donate £50,000 a year to an Energy Savings Grant scheme to fund local energy saving measures and donate £15,000 a year to two local councils to support local initiatives. Members of the local community were also able to invest in phase II through a bond issue, which according to the farmers had 600 people responding to an initial expression of interest '90% of whom are from this valley'. They dismissed the local opposition group as a small minority, a 'noisy but unrepresentative 10%' and as outsiders to the real local community (c.f. the reference to 'people from the castle' in the quote below):

Literally everyone we spoke to, you know in the market or in the town were saying oh its just jealousy, its the people from the castle again. Quietly we were confident that we had the vast majority. But when you're subject to all this drivel and mud slinging in the local papers week in week out it did get to you. (Farmer and developer).

The theme of insiders and outsiders, linked closely to narratives of Welsh identity that have been important in other planning and resource disputes in Wales (Williams, 1999; Woods, 2003; Roberts, 2006), appears across several of the interviewees accounts. In the quote below a supporter of the project casts the protestors, 'the antis', those moving into the area and pushing up house prices, as the outsiders:

It seems that there was an unofficial meeting for the antis in one of the local pubs. They chose the wrong night for a start. They chose a Friday night when the locals go for a drink. And one of the locals was there. These antis, they are people who've made their pile elsewhere and then they've half retired into the area, hence the reason for the high prices of the properties. This chappy turns to one of the locals who's sat there with his pint and he says 'the value of our properties is going to go down to half in this area, what do you think? The local replied 'well it'll make it bloody affordable for us won't it. (Local government councillor)

In other interviews members of the protest group made exactly opposite claims emphasising their identity as primarily Welsh speaking and coming from long established local families. For example:

They are outsiders. Be careful how you word that because they came to live in this district, they weren't born and bred here, the 3 farmers. We are born and bred here (Member of protest group)

Predominantly our group is Welsh speaking and that's been a long journey for us because these people often find it difficult to converse in English and to make their feelings known. It's been a huge thing for people to stand up and say we don't want this. It's not something that they are used to doing (Member of protest group)

Other interviewees referred to the dispute opening up personal animosities and 'old feuds' between local families, to representatives on local decision-making committees being influenced by personal connections and friendships and to pressure being applied on neighbours to support or oppose the development and being afraid to 'stick their neck out'. The consequence, as reflected in the questionnaire data discussed earlier, was to open up fractures between groups of local people and to divide rather than bring together:

And that's one of the most important things that's happened... during that time when it was going through planning ... people would fall out together and stop talking together, it interrupted and done serious harm to social life in the district. Something which should never happen in a hill area like this. (Member of protest group)

5.3. Comparing case study experiences

The two case studies provide many contrasts. Gamblesby was a small project, using an uncontroversial and unobtrusive technology in which the benefits are entirely collective for the village. No one person was to particularly benefit from the successful renovation of the village hall more than any other, or to experience any specific negative impacts. Moel Moelogan was a much larger money earning project, using a technology that has been controversial in many other settings because of its environmental and aesthetic impacts, with benefits going to three local farming families far more than anyone else in the community. These contrasting characteristics alone may account for much of the difference we identified in the degrees of local community support and opposition and the extent to which the projects were able to promote and achieve local cohesion.

The social conditions within each setting and the processes that were used to develop each of the projects are also though important. In Gamblesby, a highly collective and participatory process was possible, in part because of the scale and nature of the project, but also because the village, by everyone's account, does function as one coherent and cooperative community—at least when a common purpose is presented to focus collective activity—despite the scope there might be for rifts between long-term residents and more recent incomers. In this setting, a high degree of interpersonal trust was functional and necessary for the project to be conceived and realised in a collective and effective manner; and was also an outcome of the experience of project development leading to a further phase of collective activity. An identical project (in technical terms) in another place might not be as successful if either the competencies and cohesiveness of the leading group are weaker, or the degree of trust between this group and local people is less strong. Indeed in commenting on the Gamblesby experience, the regional representative of the CRI noted the distinctive qualities of the lead group and community in this case:

In Gamblesby they are so capable that they are the reason the projects happened. Loads of projects that I've met at the same time have gone nowhere, not because they are never going to go nowhere but because the committee is still arguing what to do and whose going to do what .. a village hall we are working

on, their committee is only 4 people and they have no faith in the fact that people will come in and do anything (Regional CRI support team)

In Moel Moelogan interpersonal trust was also functional within the leading group of three farmers, who worked closely together and collaborated as close relatives and friends; and between this leading group and some *parts* of 'the community' who identified with the project, with the plight of the farming industry and were happy with the benefits it would bring as an income-generating project rooted in the local area. However for others, forming a distinct and oppositional collective entity, there was a marked *distrust* which evolved and became expressed more vocally as the project grew in size. Claims made about the projects impacts were re-evaluated, motives questioned and existing fractures between different groups and families in the area were opened up—with the strategically used discourse of 'insiders' and 'outsiders' becoming particularly powerful as debate unfolded. What was a legitimate and successful community project to some—including to the judges of the Ashen Awards that awarded a prize to the farmers in a national competition for community energy projects—was an entirely illegitimate and misrepresented notion of community to others, a misrepresentation which itself provoked distrust and opposition and had done more harm than good to local community cohesion.

Whether the Moel Moelogan case could have evolved any differently is open to conjecture. Some might argue that if the project had been more fully collective, had been instigated and run by a local committee rather than the three farmers and had been fully community owned through share ownership (as some other examples of wind farms in the UK have been, drawing on experience elsewhere in Europe; DTI, 2004) then the dynamics of the case might have been quite different. An interviewee in a regional advisory body suggested as much in commenting that:

I think if there were more partnerships (like Moel Moelogan) between private project by people within the community and community organisations I think that's probably where the future is going to lie. The problem is that it does raise these issues of local jealousies, rivalries, whereas the community projects perhaps as the text book lays it out is meant to take care of that through consultation and people being involved in it in the true sense of ownership. (Regional advisory body)

On the other hand, others reflecting on the process, argued that a large-scale project of this form would be impossible to progress through a voluntary, committee-based process:

any major project which is run by a committee becomes hard work. And the 3 men had a financial gain. The amount of work they put into it I don't think it would be viable to expect people to do it voluntarily. And in don't think it would be the sort of thing that a large committee would be able to share the work out. (Local government councillor)

One of the farmers involved makes a similar sceptical point about the realities of community working compared to the effectiveness of a close knit family-based unit:

You need a small group of people who can work together through thick and thin. That is a big hurdle for true community groups.... The perception of a community group is a village coming together. Then you're problem starts. The Welsh co-op centre told me that the problem with cooperatives is that you involve people—bang on! (Farmer/developer)

6. Conclusion

Our research shows that trust does have a necessary part to play in the contingencies and dynamics of community RE projects and in the outcomes they can achieve. Trust between local people and groups that take projects forward is part of the package of conditions which can help projects work and for local people to feel positive about getting involved and about process of project development. As the Gamblesby case study demonstrates (almost to perfection) 'ideal' cohesive communities with reservoirs of 'thick trust' (Williams, 1988) do exist and can be enroled into a strongly participatory, cooperative and consensual process of project development and realisation. In this case, there is also evidence that the process adopted was able to contribute to the further building of social capital, developing capacity and enabling experiential learning so that future cooperative activities involving sustainable energy could be pursued.

However, we have also emphasised the particular character and conditions of the Gamblesby project which limit the legitimacy of generalisation to other places and types of project and the too easy confirmation of the rhetorical claims of activist and policy narratives. Moel Moelogan—and to a lesser degree our other case studies which we have not had the space to explore in detail—demonstrates that community cohesion and trust between local people and lead groups is not universally ensured just because a project is given a community label—and that cohesion and trust can, in circumstances such as Moel Moelogan, become severely eroded and problematic. This case clearly demonstrates that the rosy rhetorical image of close-knit rural communities must be subject to the realities of the fractures and disputes that can open up when people feel, legitimately or otherwise, that they have been misled, that projects have been misrepresented in some way and that some people in the locality are either benefiting or being harmed in some way more than others (attitudes that typically characterise many cases of siting dispute; Boholm and Lofstedt, 2005).

What underlies our comparison of the two case studies and understanding of the processes and outcomes involved is a debate as to what community RE does and should constitute. All were clearly happy and agreed that the Gamblesby was a community project and it would be very hard to argue otherwise. On the other hand, a key part of the complaint of the protestors at Moel Moelogan was that this was not a project led by or for the community in a collective sense—rather an entrepreneurial money-making initiative that was little different in substance to a standard wind farm development. The vagueness and ambiguity of the community RE label we have argued elsewhere (Walker et al., 2007), is to some degree its strength, enabling multiple interests to associate with it and for different types of projects that are appropriate to particular circumstances to be taken forward—and there has been an enormous heterogeneity to activity under the community RE label over recent years (Walker et al., 2006). However, in circumstances such as Moel Moelogan, the malleability of meaning of community and the different ways it can be strategically deployed also becomes problematic when politicised into public debate.

For policy and practice our analysis suggests the need to guard against simplistic prescriptions of 'what works' and the notion that community projects can simply be replicated from place to place. What is possible in one context, may not be elsewhere and in this sense understanding the social context of innovation and technology diffusion is just as important as its technical dimensions (Berkhout, 2002). Our analysis also indicates though, that purposefully supporting projects that seek to involve local people actively and directly and that are focused on achieving a rich set of collective outcomes may return good dividends. If part of the

purpose of community RE—when it is successful—is to work on ‘hearts and minds’, to encourage people to feel more positive about renewable energy, to feel able to take action towards sustainability and become involved in energy production and consumption decisions (Hoffman and High-Pippert, 2005) then the accumulative outcomes of supporting more intensively participatory projects may be to create a far more positive social context for larger-scale transition towards a distributed and sustainable energy system.

Acknowledgements

We would like to acknowledge the support of the Economic and Social Research Council in funding the research and the assistance provided and willingness to give time by the wide range of organisations and people that were interviewed for the research.

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