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Community Assets

At the edge: community ownership, climate change and energy in Scotland

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This paper:

- examines community ownership of renewable energy infrastructure in Scotland;
- discusses the historical, cultural and political background to this; and
- explains how community ownership contributes to sustainable development and meets the challenge of climate change.

The Joseph Rowntree Foundation (JRF) commissioned this paper as part of its seminar on 'Community resilience to climate change', one of a series of seminars on Community Assets. These explore community ownership and management of assets, and their importance for a thriving society.

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This paper was commissioned by Joseph Rowntree Foundation as part of its programme on Community Assets which explores community ownership and management of assets and the importance of this for society today.

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Introduction

A number of communities in the Highlands and Islands of Scotland have bought the land on which they live, often transferring very large private estates into community ownership. Many of these communities have also invested in renewable energy projects. This paper explores how community ownership and management of land and renewable energy can help to deal with the challenge of climate change and encourage more sustainable development. In 2006 I completed a 1500km walk along the west coasts of Ireland and Scotland, linking Gaelic-speaking communities from Kerry to Lewis (Murphy 2009). This paper draws on this research and writing. I would like to thank Sarah Parry for her advice and Katharine Knox for supporting this work at the Joseph Rowntree Foundation.

Key points

- Often following years of decline, uncertainty and underinvestment, buying the land on which they live gives communities more control over their futures.

- Specific projects, such as installing renewable energy technologies, help to build community capacity and confidence in different ways.

- In this context renewable energy technologies are often part of – and in some cases underpin – a vision of sustainable development which is defined locally.

- This helps to explain why renewable energy projects which are proposed by these communities have support at the local level whilst other types of projects are resisted.

- Decision-makers should build on this experience as they implement strategies to achieve greenhouse gas emissions targets at the national level.

Energy, climate and community

As part of its efforts to deal with the threat of climate change, the UK Government passed the Climate Change Act in 2008. This includes a legally binding commitment to reduce greenhouse gas emissions by 34 per cent by 2020 (relative to the 1990 level) and by 80 per cent by 2050 (DECC, 2009a). Similarly, politicians in Scotland passed the Climate Change (Scotland) Act in 2009. This includes the same long-term target and a more ambitious interim target of 42 per cent by 2020 (Scottish Government, 2009). Such legislative activity indicates that the challenge of climate change is now being taken seriously in the UK and Scotland.

At present there is considerable uncertainty over how these targets will be met but increasing the amount of energy generated from renewable sources is central. For example, *The UK Low Carbon Transition Plan* envisages a substantial increase in wind power from 6 per cent to 31 per cent by 2020 (DECC, 2009a) and Scotland's *Climate Change Delivery Plan* (Scottish Government, 2009) includes a similar target. Across the UK, officials and business people are planning the changes necessary to accommodate this increase. For example, a recent report compiled by the electricity generation and transmission industry sets out the changes to the national grid needed to export a substantial increase in wind energy from the Highlands and Islands of Scotland to the Central Belt of Scotland and into England. As this report emphasises, 'The predominant power flow on the GB transmission system is from the North towards the South' (DECC, 2009b: 8).

A question which arises, therefore, is how will the benefits and burdens of action to deal with climate change be distributed across society? Will sparsely populated peripheral areas be exploited as places where 'clean energy' is generated and from which it is exported? The debate which surrounds community reactions to wind energy projects in rural areas illustrates the need to ask questions like this. It is often simplistic and intolerant, with community resistance being dismissed out-of-hand as 'NIMBYism', even when communities are trying to make reasonable arguments about scale, place, ownership, demand reduction and so on (Devine-Wright, 2009 and 2010). That said, there is also growing interest in exploring the opportunities for communities to benefit from action on climate change.

This paper aims to contribute to this debate by exploring how community ownership and management of renewable energy infrastructure can help to address the challenge of climate change and encourage more sustainable development. It focuses on communities in the Highlands and Islands of Scotland which have bought the land on which they live, often transferring very large private estates into community ownership. Many of these communities are currently proposing, building or operating renewable energy infrastructure. This infrastructure is (or will be) making a valuable contribution to the goal of reducing greenhouse gas emissions but it is also part of a broader vision and effort to pursue sustainable development at the local level.

Historical, cultural and political context

To understand communities in the Highlands and Islands of Scotland which have bought the land on which they live, it is important to place them in their historical, cultural and political context. For hundreds of years the control of land and resources in the Highlands and Islands of Scotland has been associated with conflict. Much of this can be traced back to the sixteenth and seventeenth centuries when land tenure changed slowly but radically; territory which had been held by clans became private property in the form of highland estates. From the late 18th century onwards this had profound implications as people (now tenants) and communities were cleared off the land to make way for sheep in a process which became known as The Clearances – or 'improvement' from the perspective of landowners.

The most notable attempt to resist landlords in the Highlands and Islands and Scotland was the 'crofters war' which flared in the 1880s – related to the 'land war' in Ireland which was ongoing at the same time. This conflict focused attention on unfair rents, insecure tenancies and removal of grazing rights, and involved direct action and sporadic violence. In March 1883 the UK Government established the Napier Commission to examine land rights as part of an attempt to manage the discontent and to prevent it from spreading. This in turn led to The Crofters' Holdings (Scotland) Act of 1886 which gave crofting communities basic rights in relation to their land and homes (Thompson, 1984/2003).

The more recent history of community ownership of land can be traced back to the 1970s when concern over the control of resources in Scotland resurfaced, including issues of equity and justice in related political and commercial relationships. An example from the 1990s is the proposal for a coastal superquarry at Lingerbay on the island of Harris, which was submitted by the landowner and resisted by many people in local communities. At this time UK Government policy stated that mining aggregates in England and Wales resulted in 'unacceptable damage to the environment' and identified 'remote coastal superquarries' as an acceptable alternative. After many years of controversy, this proposal was turned down (MacKenzie, 1998).

A landmark moment was reached in 1993 when the communities of the North Lochinver Estate in Assynt bought the land on which they were tenants (MacAskill, 1999). This was the first modern example of a community buying an estate from a landlord, transferring it from private to collective ownership in the process. Many other communities followed, including the islands of Gigha and Eigg. In 2003 the re-established Scottish Parliament responded to events on the ground and passed the Land Reform (Scotland) Act in 2003, establishing a legal right to buy for crofting communities, and at the same time allocated funds to assist communities that decided to follow this route.

The history, culture and politics of the Highlands and Islands are important not least because they shape the way that some people respond to challenges around land, resources and environment today (Hunter, 1995). This has implications particularly because the region is attracting attention as somewhere to generate very large amounts of renewable energy – wind, wave and tide.

An example which illustrates the point is the recent controversy over a wind farm which was proposed for the island of Lewis. In October 2004 a company called Lewis Windpower, a consortium of energy and engineering companies including AMEC and British Energy, submitted a proposal to erect 234 turbines on an area of bog and moorland known as 'the west side'. As the largest onshore wind farm in Europe, this would have transformed the local area. Following numerous objections the number of turbines was reduced to 181 – still impacting on 25,000 hectares – and a revised proposal was submitted in December 2006.

Relatively familiar arguments over jobs, visual impact and conservation played an important role in this conflict but some local people also made arguments about history, culture and politics. For example, Anne Campbell, a local resident, said the following:

> *'Although most of Lewis belongs legally to landlords, the people who live here and who have been here for countless generations believe the land is morally theirs. Since the Crofters Act of 1886, the rights of the people to the land have not been challenged (at least in this area) – until now.'*
> (http://www.mwtlewis.org.uk/)

Similarly, Dina Murray emphasised a relationship with the land which stretches across generations and which she felt would be compromised by the wind farm project:

> *'I came back home that evening [after learning about the proposal], greatly distressed by what I had seen... Memories flooded back of my mother, in failing health, making her annual pilgrimage to Allt an t-Sulaire, where her native (Port of Ness) village had their shielings. Here she would lay another stone upon a cairn, which she'd started building many years previously, on the ruins of her family shieling. Both my parents died in 1979, and our family continues this tradition every year since then. This is one of AMEC's chosen sites.'* (http://www.mwtlewis.org.uk/)

A shieling is a small house or hut where families lived with their animals during the summer months when working the land. On the 'west side' of Lewis most of these have Gaelic names, derived from events, family, location and so on. The tradition of going to the shieling has almost died out but the places are still important from a cultural and community perspective.

For largely ecological or conservation reasons, the Scottish Government rejected the Lewis Windpower proposal in April 2008 – there were 98 letters of support and 10,924 objections.

This case is valuable not simply because it illustrates how history, culture and politics influence the way that people can react to renewable energy proposals but because of subsequent developments. Some 56,000 acres of the 'west side', including land that would have been affected by the project outlined above, is now owned and managed by Galson Estate Trust for the community. Soon after the large scheme was rejected this organisation proposed a different wind power project – much

smaller, in a different location and community owned – which received planning permission in August 2009.

This illustrates the point that people living on ‘the west side’ of Lewis are not ‘NIMBYist’, ‘Luddite’ or ‘anti-wind’. It also raises the problem of why the second scheme had more support at the local level. The list of reasons undoubtedly includes scale and location. More subtly, when judged against criteria which have their origins in history and culture, such as fairness, tradition, lifestyle and community, many local people concluded that the large scheme was inappropriate. Many more people found the smaller scheme acceptable, perhaps because these criteria informed the design of the scheme (for similar in Ireland see Garavan, 2007).

Owning energy infrastructure

A number of communities which own the land also own and operate renewable energy infrastructure and their experiences are an opportunity to learn about the deployment of related technologies in unconventional ways and settings. In this section I focus on two of the most interesting examples – the islands of Gigha and Eigg. Although both of these islands lie off the west coast of Scotland they are very different from the perspective of renewable energy. Gigha is connected to the mainland electricity grid and can export power and earn an income whereas Eigg does not have a grid connection and must be self-sufficient. To a significant extent the presence or absence of a connection to the national grid explains why renewable energy technologies have been deployed differently in each case.

The **island of Gigha** lies 3 kilometres off the west coast of Kintyre. After passing out of clan ownership in the 1860s it was bought and sold by a series of often absentee landlords until the early 2000s. As Hunter (2010) emphasises, 'ownership of this sort... is inherently unstable'. The example which illustrates the point is Malcolm Potier who bought Gigha for £5.4 million in 1989. He owned it for 36 months before going bankrupt and being jailed in Australia at which point the island became the property of banks (Farquharson, 2006). Such ownership can also be associated by outdated ideas. For example, Hunter (2010) reports that when Potier bought the island he said 'For years, I dreamed of owning the place much as a child yearns for a train set'.

By the early 2000s Gigha's population had dropped below 100, having once been over 400. Falling population is perhaps the most obvious illustration of the problems which can accompany ownership of an estate by an absentee landlord, but it is a symptom rather than a cause. Reasons for decline include the decay of building stock and general lack of investment and opportunities for younger people. On Gigha all the land and houses were owned by the landlord and a survey in 2002 revealed that three-quarters of the 42 estate-owned homes were in sub-standard condition.

When Gigha was put up for sale in 2001 the community decided to buy it. This was not easy or straightforward. It meant the community taking on obligations and responsibilities, and, more practically, raising considerable funds. In March 2002 the island was bought by the Isle of Gigha Heritage Trust – with the help of Highlands and Islands Enterprise, the Scottish Land Fund and others – and a lot has changed since. One of the most significant developments is renewable energy. The Trust now owns three wind turbines, each producing 225kW, and generating between £75,000 and £100,000 annually for the island. This income is being used across Gigha in a variety of ways including (Hogget, 2010):

- saving into a capital 'sinking' fund;
- repaying the project loan and buying back equity;
- investing in affordable housing and energy efficiency;
- contributing to the salary of a development officer.

Like Gigha, the **island of Eigg** is owned by the community. They are similar in other ways too – a long history of decline preceding the purchase, and served by ferries which can be unreliable in winter, affecting connections to the island. From the perspective of energy, however, Eigg is quite different. A relatively small population and greater distance from the mainland mean that connection to the national grid has been judged too expensive. In this context Eigg has implemented one of the most innovative renewable energy schemes in the country.

The scheme implemented by the Eigg islanders is an island micro-grid which draws on different renewable energy technologies including: a 10kW solar photovoltaic array; a 100kW hydropower installation; and four 6kW wind turbines. A battery system has also been installed and can supply stored power for 24 hours, but if this runs out there are two 80kW diesel generators. The total cost of the scheme was £1.664 million which was raised with the help of various public and charitable organisations (HICEC, 2008).

The network has transformed life on Eigg in different ways. It provides clean power to 37 households and five commercial properties and is a major improvement on the mode of provision which it replaced – diesel generators. The power is not unlimited, however. To deal with the potential problem of inappropriate use or abuse, supply is capped at 5kW for domestic properties and 10kW for larger properties. If these limits are exceeded, meters lock-out the user and must be reset, with customers incurring a penalty of £25. Every property on Eigg has been supplied with a smart meter which helps residents to avoid lock-out. The wider significance of this is that it illustrates how the practices and lifestyles of people in a community can evolve in relation to energy which is available locally and through collective decisions about how it should be used.

The scheme is also changing the island in ways which go beyond the production and consumption of energy. For example, the island's isolation (particularly in winter) means that some residents have been trained and employed as operators. Running the scheme has also meant creating new institutions and planning for the long term. Eigg Electrical Limited, a subsidiary of the Isle of Eigg Heritage Trust, operate the system, and money from the unit price and standard charge is put into a sinking fund from where it can be reinvested in the future. According to the islanders the overall benefits from the scheme include (HICEC, 2008):

- reduction of the Carbon/Ecological footprint of Eigg;
- an increase in living standards and quality of life;
- electrical energy security and self-sufficiency;
- more of the money associated with buying energy staying on the island;
- increased skills, capacity and related new opportunities.

Perhaps not surprisingly, given the transformational nature of this scheme, Eigg was awarded joint first prize in the Big Green Challenge competition run by NESTA

(National Endowment for Science, Technology and the Arts) in January 2010 – the £300,000 will be invested in the island.

Why does community control matter? Drawing on the discussion and examples so far, some observations are possible at this point. People living in communities across the Highlands and Islands and those who are familiar with them, regularly use phrases like ‘malaise’, ‘demoralised’ and ‘in decline’. In many cases, lack of control over key aspects of community life acts as a break on initiative and enterprise. Although community ownership is associated with significant risks and challenges and is not unproblematic, it also places responsibility and possibility into the hands of communities, creating a context in which ‘confidence’ and ‘self-belief’ can return. More practically, new jobs and investment opportunities emerge and the capacities of residents are built up as they take on projects. Renewable energy is particularly interesting because it can become the focus for activity after communities have taken ownership of the land. It also illustrates how communities can shape projects so that they come into line with (and in some way express) goals and desires at the local level.

Climate change and sustainable futures

The discussion so far has shown that some communities in the Highlands and Islands of Scotland which own the land on which they live are moving ahead with projects which have significant and perhaps profound implications for debates around energy, climate and sustainability. However, particularly as 'the fight against climate change' gathers momentum and is used to justify more conventional renewable energy projects, there is a risk that places like Eigg and Gigha will be treated as anomalies and not as a starting point. In this section I focus on some of the wider issues and emphasise that such places are important because they engage with climate change *and* the broader challenge of sustainable development.

A starting point is the contemporary debate around energy and climate change and how a country like Scotland can and should achieve greenhouse gas emissions reductions targets. Much of this is dominated by the concept of 'eco-efficiency' which directs attention towards reducing energy demand by improving the efficiency with which it is used in industrial processes and consumer products. At the same time there is a vibrant debate around new and clean sources of energy and growing interest in scrubbing CO_2 from the air and storing it underground.

Although such ideas and strategies are valuable they are also problematic. For example, increasingly the wider debate about sustainable development is being reduced to a narrower discussion of climate change. This in turn is being reduced to the problem of energy and the technological solutions which might be implemented to solve it. As this happens the broader questions and opportunities which sustainable development opens up are being closed down – such as those around justice and the nature of a good life and society.

Communities which own the land on which they live and are recasting themselves through renewable energy technologies are important not simply because they illustrate how communities might contribute to reducing greenhouse gas emissions but also because they reintroduce wider debates about sustainable development. At the local level they illustrate how the multiple dimensions of sustainable development – social, economic and ecological – can be integrated and pursued simultaneously through a place-based strategy which is shaped by nature, history, culture and politics in a particular location. In relation to the Highlands and Islands as a whole they provoke questions about the ownership arrangements which will accompany renewable energy technologies and the opportunities for sustainable development which will be realised or missed as a result.

Conclusion

Climate change is widely regarded as one of the most pressing problems facing society and there is a growing consensus around the need to reduce greenhouse gas emissions. At the same time, it is now widely accepted that a long-term transition to a low-carbon and sustainable society means changing many aspects of society in radical ways (Murphy, 2007; Foxon et al., 2008; Smith et al., 2010). In this paper I have emphasised that Scotland has arrived at an important moment. Statutory greenhouse gas emissions reductions targets will lead to the installation of large amounts of renewable energy generating capacity across the Highlands and Islands. Most of the energy generated will be exported to the Central Belt and on into England. This raises difficult questions about the characteristics of specific schemes and the roles of different providers including communities. At the same time the communities discussed in this paper highlight the importance of history and culture in the region, particularly in relation to land and resources, and illustrate the way that renewable energy technologies can underpin place-based visions of sustainable development.

Not surprisingly a vibrant debate is emerging around these issues. Some people are raising the spectre of Highlands and Islands becoming a new ‘resource frontier’ as renewable energy is exploited to deliver central government targets and profits for global businesses while avoiding the difficult task of asking or requiring people who live in urban areas to change lifestyles so that they consume less energy. Although this description simplifies and exaggerates a scenario, it also draws attention to the risk that ‘the fight against climate change’ is used unfairly to marginalise criticism and silence debate, whilst at the same time legitimising the deployment of renewable energy infrastructure in a particular way.

That said, more positive and transformational visions are also available. This involves building on the success of pioneering communities by encouraging much more community ownership and facilitating community visions of sustainable development. Renewable energy could also be at the centre of this strategy. For example, Professor James Hunter, the well-known historian of the Highlands and Islands and commentator on politics in the region, has recently argued in favour of a renewable energy fund created by a levy on renewable energy which would support communities across the Highlands and Islands (Hunter, 2010). The fund could provide financial assistance with buying estates and building community-owned renewable energy infrastructure. This proposal accepts that a lot of new renewable energy generating capacity will be installed across the region and much of it will be embedded with orthodox property owning relationships. At the same time it suggests that it might be used to give momentum to a transition to sustainability.

In practice the relationship between communities and renewable energy projects can be negative or positive. Much depends on how technologies are deployed, what the ownership arrangements are and how the benefits are shared. Whilst it has become routine for politicians of different political persuasions to emphasise the importance of community participation and empowerment (DCLG, 2008), not least as a way of managing protests against wind farms, enthusiasm for the most transformational alternative of community ownership is still more often than not on the margins of public and political debate (Aiken et al., 2008). The examples presented here from

the Highlands and Islands of Scotland are valuable because they illustrate what community ownership of land *and* renewable energy infrastructure can deliver.

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