

**Bangor University**

## **DOCTOR OF PHILOSOPHY**

**The winds of change?**

**A comparative study of community energy developments in Scotland and Wales**

Haf, Sioned

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THE WINDS OF CHANGE?  
A COMPARATIVE STUDY OF COMMUNITY ENERGY  
DEVELOPMENTS IN SCOTLAND AND WALES

Sioned Haf

2016



## SUMMARY

Renewable energy is a growing sector as nation states aim to curtail their carbon emissions and establish a more sustainable strategy to generate energy. However, there are disputes that large scale renewable energy developments replicate corporate and centralist traditions of energy generation and fail to contribute towards community sustainability and local economies. Community Energy projects – renewable energy projects that are part or fully owned by a geographically distinct community – are seen as a means of generating energy in a way that is more sympathetic, equitable and sustainable. Unforeseen social and economic benefits accrue from community energy projects such as community cohesiveness, higher financial returns, autonomy and resilience, a sense of local pride through ownership and behavioural change through an increased understanding of sustainability issues and energy consumption. Apart from contributing to the overall production of energy from renewable sources, community energy projects also seem to have the added benefit of attaining more support within their locality. This is of crucial value when bearing in mind opposition to the development of some renewable energy projects. There are also disparities in how such projects are diffused and supported, particularly within the UK. Focusing on the sub-state nations of Scotland and Wales, this thesis looks in depth at the experiences of developing community energy in peripheral and rural Welsh and Scottish Gaelic speaking areas of both devolved countries. Through a series of in-depth, semi-structured interviews with community energy actors in four case sites across north-west Scotland and north-west Wales alongside a Delphi method questionnaire amongst specialists working in the field at sub state level, the research draws a picture of the current state of the community energy sector in both nations.

The research shows that support structures in Scotland have contributed to a sense of confidence amongst communities to develop local energy generating projects. This is reflected in the number of successful Scottish community energy case sites currently operational. This confidence, at time of researching, was lacking in Wales. A clear case was made that more focus and support was needed for the niche sector to grow in Wales. It was also evident that communities viewed cultural sustainability as intrinsic to the development of their community energy projects – an added benefit that has not been accredited with the sector in any previous research. The thesis furthermore contributes to an understanding of the optimal conditions for the development of community energy projects in Wales and Scotland, how the relationship between incumbent actors and geographically peripheral communities currently operates and the unforeseen cultural benefits of such projects.



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**Diolch o'r galon | Taing mhór dhuibh**

## **CHAPTER 1**

### **INTRODUCTION: BACKGROUND, AIMS AND FRAMEWORK**

#### **1.1 BACKGROUND**

“Incumbent production and consumption systems fail some communities”

(Seyfang and Smith, 2007, p.591)

Community involvement in renewable energy generation and energy consumption has increased during the course of the past decade as concerns regarding climate change and energy prices intensify (Bomberg and McEwen, 2012). Although large scale, traditional power plants will continue to have a role to play in energy generation, it is becoming increasingly accepted that decentralised community owned projects will also have a place to play in the future energy mix (Harnmeijer et al, 2013). Community Energy Projects – energy projects that are part or fully owned by a recognised community of place or interest – are increasingly seen as a means of creating renewable energy in a sustainable way. Community energy is an umbrella term used for a variety of initiatives managed by communities. They would include community projects that focus on generation of renewable energy, energy conservation projects and the bulk-buying of energy for a community (DECC, 2014). The role that community energy has in the future energy generating mix of the UK has been acknowledged at governmental level, with the administration of 2011-15 pledging support for the sector through the publication of the Community Energy Strategy in 2014 (DECC, 2014). This strategy also recognises, to a degree, the connected benefits of including communities in energy generation schemes such as the creation of stronger communities, skill development, education and financial benefits (DECC, 2014, p.6). However, there remain a number of barriers that hinder the sector. These include challenges to do with grid access, planning consent and support systems (Harnmeijer et al, 2013).

Despite an apparent appetite shown through the Community Energy Strategy (and other initiatives in the devolved nations of the UK) for the development of the sector, it also seems that moving away from deep rooted energy generation norms is a challenge. Within the energy sector this has led to “the persistence of ‘socio-technical regimes’ which...are embedded in

economic processes, consumption practices, regulatory arrangements and infrastructure. These regimes sustain incumbent actors and structure the scope for change” (Strachan et al, 2015, p.97). Moving away from centralised energy generation monopolised by ‘incumbent actors’ is, in itself, a challenge if the transition towards a decentralised energy system is the genuine vision. Contributing to this conceptual challenge are more recent developments proposed by the current UK administration to cut renewable energy subsidies and set a moratorium on onshore wind farm developments (Vaughan and MacAlistair, 2015). These latest proposals could undo the goodwill and vision of the Community Energy Strategy and hinder rather than help the blossoming of community energy projects, as well as the renewable energy sector as a whole.

The generation of energy through renewable technology is a sector that is expanding within Europe and across the globe as countries attempt to reach targets of carbon emission reduction and develop more sustainable forms of energy generation. There is a recognition that the renewable energy sector could, and should, develop in a way that shows consideration towards the sustainable development model,

“Renewable energy deployment needs to continue to grow in tandem with a more socially just economy that provides opportunities for groups with little equity to share in natural resource wealth gains while simultaneously facilitating holistically sustainable development.”

(Krupa, 2013, p.85)

Sustainable development describes a means of development that respects the social, economic and environmental needs of today, without impeding the needs of future societies (World Commission on Environment and Development, 1987). It is a problematic term however where “development is seen as synonymous with growth, and therefore...sustainable development means ameliorating, but not challenging, continued economic growth (Robinson, 2004, p.370). ‘Sustainability’ however is a preferred term for academics and National Governmental Organisations (NGOs) which “focuses attention where it should be placed, on the ability of humans to continue to live within environmental constraints.” (Robinson, 2004, p.370). The term can nevertheless be useful to measure the integrity of energy projects and the processes of energy generation, and whether they are considerate of environmental, social and economic aspects. For the purpose of this thesis a more recent interpretation that includes consideration of cultural aspects will be used. This evolving sustainable development model includes factors

related to the cultural sustainability of a society – including, but not exclusive to cultural heritage, diversity, resilience, relationship to place and cultural vitality and viability (Soini and Birkeland, 2014).

If the sustainable development model is used within the context of the energy sector, the environmental call for a reduction in carbon emissions would not be the only consideration. As Krupa (2013) observes above, social wellbeing and an inclusive, equitable and just economy are sister goals that need consideration, as well as cultural contemplations (also see Soini and Birkeland, 2014).

Community energy needs to be understood within the wider context of the renewable energy sector and the goals that it has been set. The UK government has set targets for generating 10% electrical energy from renewable sources by 2010, and 20% by 2020 (Warren and McFadyen, 2010). The UK failed at reaching the first goal only generating 6.5% of electrical renewable energy by 2010 (Renewable Energy Foundation, 2012). This failure to hit set targets casts doubt on the ability of the UK to reach the target of 20% renewable energy generation by 2020. However, the ability of other European member states, such as Denmark, Germany, Hungary, Ireland, Lithuania, Poland and Portugal to reach their 2010 targets (European Commission, 2011) suggests that success or failure in delivering renewably generated electricity depends on governance and a government's ability to create the best circumstances for renewable technologies to be implemented. There are also volunteered renewable energy generation targets set by some countries – most notably Denmark's aim to be fossil fuel independent by 2050 (The Danish Government, 2015) and Scotland's aim to generate 50% renewable energy by 2020 (Warren and McFadyen, 2010). These starkly show that the objectives and targets of governments can widely vary which is “often a question of national context as shaped by different cultures and histories” (Lipp, 2007, p.5481).

There is also increasing scepticism towards the mechanisms and sustainability that lie behind the planning of renewable energy development and deployment. The renewable energy sector has the same potential to be as unsustainable and inequitable as historical energy developments (Eames and Hunt, 2013). The technology and generation of energy might be defined as being renewable, carbon-free (without considering any embodied carbon) and environmentally considerate, but do such developments address the sister goals of the sustainable development model – being economically, socially and culturally just? The decentralisation of the sector is considered a way of achieving a more equitable energy system, particularly if schemes are

community owned and run – potentially addressing the sustainable development pillars through a more localised and sympathetic approach (Johns, 2015).

Within a decentralised energy system, dispersed with a number of smaller energy generating and saving schemes, community involvement and ownership of projects could take place. There are a number of benefits that can be accrued from such involvement. Apart from contributing to the overall production of energy from renewable sources, community energy projects also have the added benefit of attaining more support within their locality (Rogers et al, 2008; Walker and Devine-Wright, 2008). They are also potentially more equitable to the communities that sustain them. Furthermore, research has shown that there are unforeseen benefits to community projects which include community cohesiveness, higher financial returns, a sense of empowerment and autonomy, and an increased sense of understanding wider sustainability issues (Walker and Devine-Wright, 2008; Warren and McFadyen, 2010).

However, there are also recognised negative factors enmeshed within the sector. For example, communities can become fragmented over inter-personal relationship issues that can arise through community engagement, community trust and the suitability of some sustainable energy technologies (Bristow et al, 2012; Seyfang et al 2012). Despite these issues, community energy purports to be more equitable in its distribution of benefits gained from community ownership of energy projects and there are higher levels of acceptance at the planning stage as well as more localised support (Rogers et al, 2008; Warren and McFadyen, 2010). Also, community energy can allow local communities to capitalise on “natural resource wealth gains while simultaneously facilitating holistically sustainable development” (Krupa, 2013, p.85).

There are however financial and technological barriers – due to the high cost of community energy schemes and the rapid and highly-technical development of renewable technology (Bomberg and McEwen, 2012). Administration demands, time issues, lack of facilitators and lack of transparency in planning procedures can also hinder community schemes (Hain et al, 2005, Munday et al, 2011, Rogers et al, 2008, Yadoo et al, 2011, Harnmeijer et al, 2013). In addition, having become accustomed to receiving energy from remote centres of power generation, communities have become detached from the issues facing the energy sector, and may not consider the need nor the possibility of generating localised renewable energy (Kellet, 2007, Warren and McFadyen, 2010).

As Figure 1.1 shows below, there are also variants in the success of the development of the community energy sector in the UK. Whether or not this stark difference in development

between the devolved nations of the UK is, as posed earlier, “a question of national context as shaped by different cultures and histories” (Lipp. 2007, p.5481) is something that this thesis will attempt to answer.

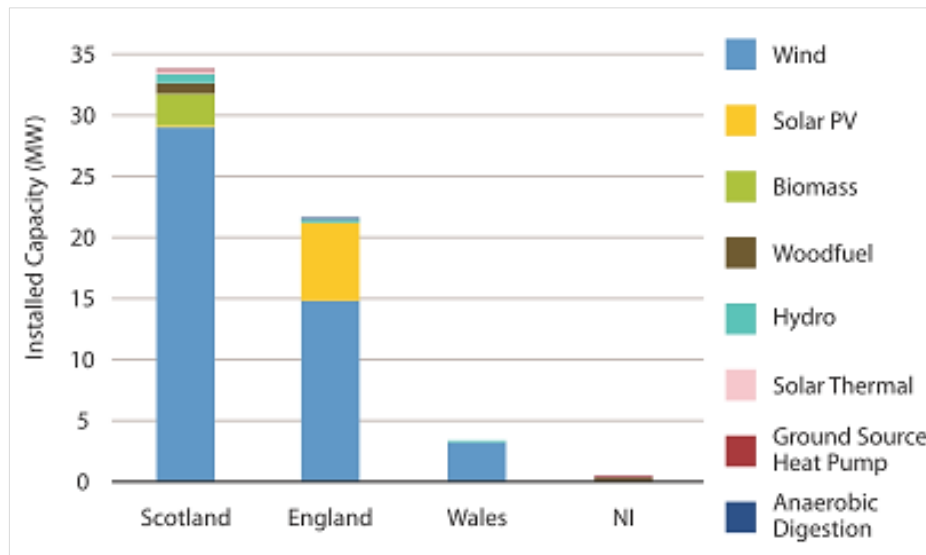


Figure 1.1: UK Community Renewables Capacity by Country and Technology (Harnmeijer et al, 2013, p.10)

The impact of devolution politics on the development (or stagnation) of community energy projects in Wales and Scotland is quite striking at first glance. Through initial research and inquiry, and from personal experiences of observing the sector (volunteering for a community wind energy project in south Wales), it seems evident that support and success of community energy projects in Scotland are far better established and advanced than those in Wales, as evidenced by the number of projects completed and in development. At time of writing, Scotland has over one hundred and thirty- six energy generation projects completed or in development (Local Energy Scotland, 2015b). This is in comparison to some fifty groups that are being supported by Ynni'r Fro (Ynni'r Fro, 2015). A more recent account shows that there are only 12 community energy groups generating energy in Wales, and these at most are small solar projects (Community Energy Wales, 2015). In fact, it seems that Scotland is advancing at an increased pace in comparison with the rest of the UK, being recognised as a European example of good practice. The difference between Scotland and Wales, in the context of sub-state, devolved nations in Europe, and the rate of community energy development has, therefore, presented itself as a clear and interesting line of enquiry worthy of further study. Additionally, both nations' relatively small populations in the UK context, their similar (though not exact) devolution settlement, and the similarities in the cultural make-up of the north-west

communities of both countries (where the case study sites were set), validate the reason for their comparison.

It is important to note that this research is also being carried out at a pivotal period of devolved political development on the British Isles. In the autumn of 2014, Scotland held an independence referendum, and the Scottish National Party won a historic 56 Westminster seats in the UK general election in 2015. At the same time, Wales has been through a process of collecting evidence for the Commission on Devolution in Wales (also known as the Silk commission) regarding whether or not the same devolution settlement arranged with the North of Ireland and Scotland is needed for the future legislative organisation of Wales. The Wales Bill draft published in autumn 2015, and the final version of the Bill (due to be realised in Spring 2016) will also play a crucial enabling role for Wales in its capacity to develop renewable energy projects at sub-state level in the future.

## **1.2 AIMS AND OBJECTIVES**

The following thesis is a comparative study of the community renewables sector in Scotland and Wales. The over-arching aim is to further understand the experiences of such projects at grassroots level in both nations as a means of explaining the reasons for the marked differences in the development of the community energy sector in both countries, as illustrated previously in Figure 1.1.

With a particular focus on the rural communities of both nations and the issues that they face developing their projects, along with inputs by facilitators and policy makers, the thesis will give a rounded insight into the experiences of the community energy sector in both nations. This thesis focuses on community energy projects that generate electrical energy through community owned wind turbines. This comparison study, which will involve rural and ‘peripheral’, Cymraeg (Welsh) and Gàidhlig (Scottish Gaelic) speaking regions of north-west Scotland and north-west Wales, could also prove valuable in realising the potential of community renewable developments further afield. An in-depth analysis of the hopes, aspirations and realities of developing such projects, will also contribute towards the further understanding of the sector, and how it can be best supported if it is to become a mainstream, or flourishing sector. The objectives adopted to achieve this aim are as follows:

- To conduct a literature review of current discourses in the community energy field that will contribute towards a conceptual framework which will better guide the research as a whole.
- To hold preliminary meetings with a number of relevant stakeholders and organise a number of scoping visits to projects in Scotland and Wales to get a sense of the challenges that the sector faces.
- To create a solid methodological approach that will allow for the views of community energy projects on the ground and facilitators views at sub-state level in Wales and Scotland to be fairly represented.
- To conduct the research plan in order to collect new empirical data.
- To analyse this data and present findings in a coherent way that can contribute towards the better understanding of the sector in both nations
- To provide suggestions as how best to develop the sector in future, and avenues of further study.

### **1.3 FRAMEWORK**

The remainder of this thesis is comprised of nine chapters. The second chapter is a comprehensive literature review that presents the current debates involving the community energy sector. This chapter also highlights gaps in literature and reiterates the research aim. The third chapter presents the methodological approach adopted and methods used for carrying out the research objective and how the methods used assist in achieving the overall aim.

Chapter Four introduces each specific case study site in both Wales and Scotland. An understanding of the economic, social and cultural background of each community will give better context to the following data chapters.

The data chapters were developed in accordance with themes derived from the research carried out through semi-structured interviews and a Delphi method questionnaire (see Methodology chapter). They will be organised following a similar structure including: introductions, a thorough discussion of issues raised within that particular theme by participants of the research, along with conclusions. As such, chapter five compares the grassroots experience of engaging with local communities and developing projects in Scotland and Wales. Chapter Six compares and discusses the difficulties that are currently facing community energy projects in their relationships with local authorities, financial institutions, sub-state and state government



policies and district network operators. Chapter Seven discusses issues of ownership and how having ownership of a project has led to or could aid community resilience. Chapter Eight examines cultural resilience issues – how community energy projects can support cultural capital, heritage and community languages, in this case Cymraeg and Gàidhlig (Welsh and Scottish Gaelic). Chapter Nine summarises the opinions of those working at facilitation and policy level, highlighting any disparities between examples in Wales and Scotland as to barriers and ways forward for the sector.

To conclude, Chapter Ten reviews and summarises the findings from the research project and examines what the new knowledge produced could mean for the development of community energy in Wales and Scotland.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 INTRODUCTION**

The over-arching aim of this research is to compare, from the perspectives of grassroots community energy groups and experts working in the field, the development of community energy in the devolved nations of Wales and Scotland. This focus has been guided by a review of academic literature, policy and other relevant sources examining the community energy sector across the UK and Europe. An understanding of the sector as a whole and the formation of a general conceptual framework is imperative in order to then focus and understand developments under devolution in Scotland and Wales.

This chapter will be divided into themes that have arisen through past research in the community energy field. The chapter begins with some background that gives an overview of the current energy sector as a whole along with some historical context. The chapter then discusses some of the concepts related to the community energy sector, the benefits and challenges that have been previously identified and how community energy ‘fits into’ the larger energy landscape. A review of policy will then be presented before finally drawing conclusions, identifying gaps in knowledge and summarising the conceptual frameworks that will guide this particular thesis.

#### **2.2 BACKGROUND**

Current methods of energy production combined with a predicted change in climate and instability of energy prices mean that an urgent yet holistic approach is required to ensure what is often referred to as a ‘sustainable’ energy future (Elliott, 2007). Simply put, the ethos of sustainable development needs consideration within the energy sector – ensuring a balanced understanding of environmental, social and economic issues. Fossil fuel use needs to be curtailed to decrease carbon emissions in order to avoid or at least mitigate the effects of climate change. However, energy supply needs to be dependable and energy prices need to be affordable to consumers. This is what is often referred to as an energy ‘trilemma’, and “given the unique role that energy plays, policymakers have neither wanted nor have they been able

to play a detached role” (Skea and Ekins, 2014, p.5). Addressing this trilemma and achieving a genuinely sustainable energy sector is of both social and political interest.

It is possible to trace the interest of many countries in sustainable energy systems back to the first oil crisis of 1973 (Lipp, 2007). The waning reserves of fossil fuels and the political instability of relationships with the countries from which these fuels were (and continue to be) imported have encouraged states to consider indigenous renewable energy systems, and a more sustainable energy infrastructure to answer future energy needs. European states in particular have been spurred by energy generating targets to curtail high carbon emitting energy use set out by the European Union (European Commission, 2011).

The combustion of fossil fuels still provides the greatest percentage of energy for UK citizens. By 2013, 82.9% of electrical energy in the UK was still being produced by fossil fuels, including low carbon nuclear produced energy (DECC, 2013). The burning of fossil fuels is the main cause of carbon emissions. Carbon emissions in the form of Carbon Dioxide (CO<sub>2</sub>), make up the greatest amount of greenhouse gases produced (MacKay, 2009). Reducing carbon emissions has therefore become a priority in the objective to cut greenhouse gases overall. Theoretically, by decreasing the amount of CO<sub>2</sub> emitted into the Earth’s atmosphere, there is a possibility of mitigating the effects of climate change.

Avoiding or mitigating climate change and its devastating effects is paramount, however, social and economic wellbeing are also factors under consideration for a sustainable energy future (Elliott, 2007). Avoiding the inequities of past energy transitions is highlighted in recent ‘energy justice’ literature - a concept that addresses the integrity of the energy sector, and the relationship between those who benefit and lose within the system (Bickerstaff et al, 2013). It has been argued that the energy sector has distributed benefits unequally through past models and whether or not the transition to a low-carbon energy system will be socially just is also contested by such literature,

“It seems reasonable to suppose that a ‘low-carbon’ transition has the potential to distribute its costs and benefits just as unequally as past transitions without governance mindful of distributional justice.”

(Eames and Hunt, 2013, p.58)

It is also argued that energy production, energy use and energy governance need a markedly different, transformational approach (Murphy and Smith, 2013). This approach would entail

that energy production is carbon neutral, energy consumption is reduced and governance reflects the overarching goal to decrease greenhouse gas emissions by incentivising low-carbon or carbon neutral energy production. Governance should also be mindful of energy justice issues – that is, who benefits from such developments.

In the late 1980s, the privatisation of energy utilities and infrastructures in the UK was a political development that favoured private-sector led energy development. Although privatization was intended to encourage competitiveness, “it didn’t take long for the market to consolidate into a few very large companies” (Johns, 2015, p.10). Established utility companies have continued to hold major influence over the energy sector (Walker et al 2010) as evidenced by the limited number of distributors - the ‘Big Six’ of the UK energy market. This monopoly has been increasingly targeted by recent policy and political discourses to encourage market diversification (Julian and Dobson, 2012). The infrastructure and generation of energy in power stations (electrical energy in particular) is also highly centralised (Johns, 2015). A highly centralised energy sector where remote power stations were the norm, ingrained the idea that large power stations were superior and desirable as they were being built far away from populated areas (Warren and MacFadyen, 2010). Criticisms have been made of this overly centralised system and the over dependence on economies of scale in the energy market and its consequent impacts upon environmental and human systems (International Institute for Industrial Environmental Economics, 2009). One such concern is how such a system perpetuates fuel poverty. The transmission and production of energy in the current system is criticised for its lack of competitiveness and its vulnerability to fluctuating prices in gas, oil and coal - prices that are passed on to consumers (Julian and Dobson, 2012) which can lead to fuel poverty. Another concern is how centralisation and estrangement of the energy system and suppliers, has resulted in “a psychological distance between people and energy generation” (Warren and McFadyen, 2010, p.205). Such a psychological distance can cause numerous obstacles for the development of a renewable energy sector amongst a society that is accustomed to there being a distance between it and its energy source. It is therefore not surprising that there is little consumer interest in the origins and infrastructure of the sector which is viewed as distant and merely a service (Kellet, 2007). Rogers et al (2012) argue that this has led to the ‘unconscious consumption’ of energy – which stands as a psychological barrier in the aim of nurturing a sustainable, low carbon energy system and society. There are mounting arguments that the centralised energy system needs to change and become distributed and networked thus engaging with communities and energy consumers (Johns, 2015).

### **2.2.1 An Energy Transition**

The very nature of renewable energy challenges the traditional centrist approach to energy generation and distribution. Natural resources harnessed for renewable energy generation tend to be scattered across wide areas, rather than concentrated in one geographically bounded space. Consequently, the technologies that can harness these natural resources also need to be dispersed within these areas. Modern wind farm developments for example are mainly established across rural areas (Munday et al, 2011). Whereas energy was previously supplied by centralised power stations, a transition to a renewable energy generated system will mean more rural land will be needed to harness the natural resources that power renewable energy. Should this be the case, rural communities will be living in much closer proximity to energy generating technology. This has led to what Kellet (2007, p.382) calls a ‘disparate nature of supply and demand’ where the needs of the highly energy consuming urban areas are catered for by geographically remote areas. This ties with another important concept emerging within some key literature – that of energy peripheries. Murphy and Smith (2013), highlight the way that energy transition research has focused more on the technologies aiding those transitions and less on ‘where’ these transitions will occur. Urban (or core areas) will not bear the brunt of the environmental impacts of these energy generating developments although peripheral, rural populations, landscapes and habitats inevitably will (Kellet, 2007). It is argued that the energy transition needs to “become more sensitive to geography” and the impact and meaning of implementation of renewable energy technologies for rural, peripheral communities (Murphy and Smith, 2013, p.692).

Support for renewable energy technologies currently appears to be positive. A national survey in 2006 showed an overwhelming support for renewable energy, with the Scottish Highlands and Islands one of the most strongly in favour (Warren and McFadyen, 2010). A more recent UK wide survey showed a staggering response in favour of renewable energy with solar being the most popular technology supported, although wind, tidal and hydro were supported by over a third of survey respondents (Demski et al, 2013). Another study by the Department of Energy and Climate Change (DECC) in 2012 found that 79% of people surveyed supported renewable energy in the UK and 78% believed that local communities should be benefiting from developments in their area (Co-operative Group and Co-operatives UK, 2012). A recent report by Bangor University showed that renewable energy had the support of 74% of the population

of Ynys Môn (Anglesey) and the surrounding area, compared with 25% support for nuclear power (PAWB, 2012). Considering this level of support, there is a great potential for the sector to develop.

However, as mentioned in the introduction – renewable energy targets are being missed. This is attributed by some to the inertia of political, technological, economic, financial and social aspects of the current organisational system (Jefferson, 2008). In other words - we are set in our ways. Another contributing factor could be the uncertainty as to how renewable energy technologies and future energy infrastructures could be made to work in economic, organisational and political situations (Möller et al 2012). There are also, inevitably, local contestations towards renewable energy developments – particularly wind technology (Devine-Wright and Devine-Wright, 2006). Furthermore, there are desperate infrastructural challenges. Giddings and Underwood (2007) believe that there exists a commitment to developing renewable energy in rural areas, but that there are distribution issues which are not adequately resolved and therefore hinder progress. Others agree. Reforms in policy and regulatory practices are needed to allow energy generators a two way interchange with the national grid (Wolfe, 2008). This would mean that the grid and the district network operators<sup>1</sup> (DNOs) would have to be flexible to what could become a distributed energy system.

### **2.2.2 Energy justice**

It is widely acknowledged that the development of renewable energy systems can address other policy goals. These include industrial, manufacturing, employment and social goals – all of which can exert a positive influence on the economy (Lipp, 2007). Technical developments are crucial to delivering energy and climate change policy goals, but are not sufficient on their own (Müller et al, 2011). The issue of community acceptance in the development of the renewable energy sector is also deemed of vital importance (Shamsuzzoha et al, 2012). The concept of energy autarky can encourage acceptance. Energy autarky is defined as “local action towards the development of a region’s viability, based on the transformation of the energy subsystem” (Müller et al, 2011, p.5801). ‘Autarkes’, from the Greek meaning economic independence and self-sufficiency differs from autonomy which describes a place’s liberty from outside control, power or influence (Müller et al, 2011). Energy autarky would mean that regions do not rely on energy imports, but would develop the capacity to rely on their own native resources for

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<sup>1</sup> Companies that distribute electrical energy across the UK.

energy services. The concept proposes that communities need to be central to energy development, not just a body that is ‘dealt with’ during the implementation of energy infrastructure:

“We need concepts that go beyond acceptance of technologies and innovations...and enable local actors to actively participate in the transformation of the energy system and pursue their interests and contribute to the good of their society”

(Müller et al, 2011, p.5801).

Acceptability and community involvement in the energy transition also aligns with the concept of energy justice. Energy justice is an emerging research topic that looks at a variety of justice issues within the energy sector – such as distribution of costs and benefits, risks and positioning of new energy infrastructural developments (Bickerstaff, 2013). Energy justice also encompasses the need for energy developments to be driven through cooperation and the delivery of collective benefits (Walker et al, 2010, p.2657). However, matters to do with ownership, justice and power can be somewhat side-lined within the energy sector (Murphy and Smith, 2013), despite mounting evidence that appears to show that the public are more receptive to community based energy projects compared to large scale top down projects (Rogers et al, 2008, Walker and Devine-Wright, 2008). There has been “relatively little explicit to say about questions of equity and justice” of the energy transition towards low carbon energy system (Eames and Hunt, 2013, p.47). Community ownership of renewable energy projects can offer an enabling role for communities and local actors to become active participants in the energy system transformation whilst also being more equitable and just. It is argued that the process of moving away from importing energy to generating energy locally through harnessing local resources should include the community energy sector at its heart (Müller et al, 2011). Including communities is, therefore a means of targeting the often side-lined issues of ownership, justice and power. Whereas renewable energy development has so far been monopolised by large developers, it is possible that this trend could change, allowing for a bigger involvement of community owned projects (Walker, 2008). Understanding the role that community energy can play as a means of delivering energy justice would be an interesting and worthy line of enquiry.

## 2.3 COMMUNITY AND COMMUNITY ENERGY

Community energy is a branch within the renewable energy sector that has seen an increasing amount of interest in political and public spheres. The growth in academic, governmental and public interest is attributed to the assumption of a range of beneficial social impacts that such groups could have in the transition towards a low carbon energy society (Rogers et al, 2012).

### 2.3.1 Community

Definitions of community vary and preconceptions of a community are diverse. Raymond Williams referred to the term itself as being “warmly persuasive” and “it seems never to be used unfavourably or given any opposing or distinguishing terms” (Williams, 1976, p.6). In other words, the term is often used in positivist ways. However, there are opposing debates concerning the actual inclusiveness of communities and the reality of community conflict, which question their effectiveness for facilitating change (DeFilippis et al, 2006). Broadly speaking, community can be defined as a group of people who are bound by common interests, identity, shared values and, or, place of residence (Gusfield, 1975). A sense of community is also “a deep *human* truth: a person belongs inasmuch as they are willing to cherish and be cherished by a place and its peoples” (McIntosh, 2004, p.4).

Communities have been viewed as being the most fitting platform through which to address many sustainability issues (DeFilippis et al, 2006) – which is reflected in the methodology used by governments to promote sustainable development (Rae and Bradley, 2012). Communities are seen as a conduit for change. Communities can also be the bedrock of social action producing “empowerment, impact or social change, and in many contexts, group and community-level actions can be more effective than individual acts” (Parkhill et al, 2015, p.61). However, for such results to occur, civic engagement - recruiting and sustaining community members’ involvement in local civic life - is crucial (Hoffman and High-Pippert, 2010). Civic engagement contributes to the social capital of a community - the skills and knowledge within a community - which in turn contributes to community resilience (Parkhill et al, 2015). Community resilience is the ability of a community to endure and acclimatise to change (Hopkins, 2008). These changes could include “environmental, ecological, social, economic and political upheaval” (Adger, 2000 in Parkill et al, 2015, p.62).



There is recognition that proponents and opposers of the notion of community end up “either romanticizing the concept and thereby elevating it to primary rank as the focal point of societal initiatives, or objecting to its regulated limits and contradictions and thereby dismissing its importance and political utility” (DeFillips et al, 2006, p.673-4). Being mindful of these opposing realities of a community is particularly important in this thesis. It is also important to avoid any generalised preconceptions of what a community is and to realise who is part of that community and who is left out (Walker et al, 2010).

### **2.3.2 Community Energy**

Definitions of community energy *projects* also vary; based on the nature and size of the initiative. These can range from projects that generate renewable energy locally, to community micro generation (on community buildings or private housing), energy conservation projects and campaigns encouraging behavioural change (Seyfang et al, 2012). A more recent definition by the Department of Energy and Climate Change describes community energy as projects that focus on generation of renewable energy, energy conservation projects and the bulk-buying of energy for a community (DECC, 2014). There is no one concise way of defining the sector as definitions of community and community projects are so varied. Being mindful of the variety of community energy projects that can exist and how much actual community involvement is exercised within each individual example is therefore important. Figure 2.1 contributes to furthering our understanding. Rather than being institutional and private (as traditional energy generating entities tend to be), community energy is an energy model that is participatory and local:

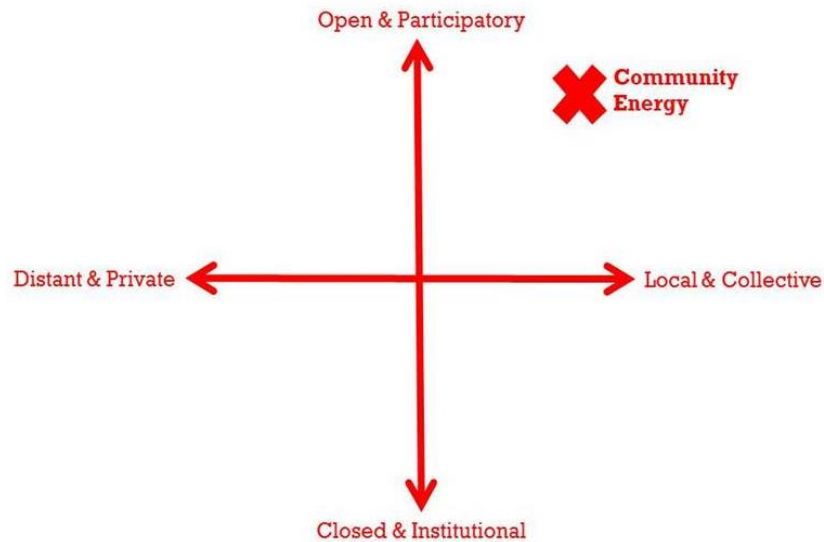


Figure 2.1: “Understanding of community renewable energy in relation to project process and outcome dimensions”. Adapted from Walker and Devine-Wright (2008, p.498)

The assumption that community energy projects are more open and participatory is suggested by other research too. Community developed schemes appear to be more inclusive of community members’ ideas and opinions of project development, while at the same time engaging these members in the wider areas of energy generation, delivery and use (St Denis and Parker, 2009). Community energy organisations are also described as being more creative and tend to set varied goals rather than focusing purely on the generation of megawatts as traditional, large power generating companies tend to do (Julian and Dobson, 2012). Another way of defining community energy is to focus on *who* benefits and *who* develops a particular energy project and “who is involved and has influence” (Mussal and Kuik, 2011, p.3253). A more recent and complete definition of ownership characteristics are given by Seyfang et al (2012, p.7):

“A wide variety of different types of community groups are involved with community energy, including local civil society groups focusing on climate change, low carbon activities and general sustainability issues, e.g. Transition Towns; renewable energy cooperatives, community interest companies and partnerships; related non-energy groups e.g. local conservation or allotment groups; local branches of national campaigns e.g. 10:10; groups or organisations

who own or manage (or build) community buildings, such as church or faith groups, schools and colleges, village halls, social clubs, social housing; Statutory and non-statutory councils below the district level e.g. parish or town councils; Community Development Trusts and Community Associations; projects set up by local authorities but mainly run by local communities e.g. Local Agenda 21 groups; and partnerships with public organisations with relatively strong community leadership.”

As well as being a varied sector as evidenced above, community energy is also a *distributed* form of generating energy as opposed to the traditional centralised form of generating energy. Energy is created locally rather than in centralised power plants, or centralised pockets of renewable energy generation by private enterprises. Being distributed and local can potentially allow for communities to have more control over a development through “community ownership and control of the system through community participation.” (Giddings and Underwood, 2007, p.22). However, despite being distributed, community energy generating projects tend to feed into a centralised national grid. For the purpose of this thesis, the definition of community energy groups is narrowed down to consider “projects developed and owned by local communities and community bodies” (Strachan, 2015, p.100), and in particular those that generate renewable electricity.

### **2.3.3 Community Ownership**

One of the most distinctive features of the community energy sector is that they are developments which are *owned* or part-owned by a community. Communities appear to be less concerned with the technology used for the generation of renewable energy, and more concerned with the arrangements of the management of a project - *who* are the developers and administrators of a project, *who owns* it and what are the beneficial outcomes (Walker and Devine-Wright, 2008). It appears that there is growing sensitivity, particularly with wind power developments in rural areas, regarding the disproportionate distribution of economic benefits and costs of renewable energy deployment (Munday et al, 2011). Local community ownership could alleviate these misgivings. It is argued that apart from being equitable in the distribution of benefits, there are higher levels of acceptance at the planning stage as well as more localised

support towards such projects (Rogers et al, 2008; Warren and McFadyen, 2010). These tend to be more ‘citizen-led’ and based within the community (Seyfang et al, 2013).

Having a sense of ownership over an energy scheme has proven successful in encouraging the establishment of more renewable energy projects. 80% of Denmark’s wind power facilities are owned by varying types of community partnerships, a result attributed to the implementation of particular policy and legislative frameworks (Kellet, 2007). One such policy entails that 20% of every wind energy project developed should be owned locally (Meacham, 2012). This sense of ownership is an influential tool in incentivising the use of larger, and more controversial renewable energy technologies within the country (Rae and Bradley, 2012). A significant correlation between ownership and support of wind energy has also been documented in a case study in the south-west of Scotland. In this study, Warren and McFadyen (2010) suggest that a change in the patterns of ownership in renewable energy projects could lead to an increase in support for renewable energy as a whole. This finding draws a parallel with research by Hughes (2008), showing similar results in the north-west of Wales, where a correlation was found between local ownership of a project and support of renewable energy. This conclusion also reflects survey based research in southeast Germany, that showed a marked difference in levels of tolerance between two case sites where there was, on one hand, a community owned energy project and, on the other, a private supplier energy project. Comparisons between both showed that the first community was regularly responding in the positive about renewable energy compared to the second (Musall and Kuik, 2011). It is therefore implied that local ownership can foster general support for renewable energy schemes.

Considering pockets of apparent resistance towards large scale renewable energy projects (particularly wind developments), this finding is significant, showing that community ownership could be key in unlocking acceptance of renewable energy technologies. Another case study in Germany shows that citizens are more tolerant of renewable energy projects that are community owned – a reason for the Federal government to further support the sector (Li et al, 2013). A case study by Walker et al (2010) also shows that there is a willingness within community owned projects to develop more renewable energy schemes on the back of earlier successes. This is supported by a recent survey of the River Bain Hydro project in the Yorkshire Dales, showing that 78% of community investors would reinvest in a further renewable energy scheme (Willis and Willis, 2012). This is a trend more recently supported by a UK wide survey of community energy groups by Seyfang et al (2013) that shows that half of the groups surveyed were planning to develop further sustainable energy projects. This should certainly

be noteworthy for policy makers who are interested in steering society towards low carbon practices.

Community ownership of energy projects can take various forms. Walker and Devine-Wright (2008) define some of these groups, which range from those with charitable standing and no commercial interests, to those with clear financial incentives. Within the UK, the cooperative model is popular and practiced amongst community energy groups who focus on retrofitting houses, combined heat and power systems and the bulk purchase of fuel and energy (Conaty and Mayo, 2012). The various possible community ownership types allow for greater flexibility in tailoring models to specific schemes. They can also be advantageous in comparison to government or private enterprise developments as they are sometimes deemed by communities themselves to be more trustworthy (Rogers et al, 2012). However, if the project does not ultimately benefit the community, despite being labelled as being a community project, a significant ‘something’ is lost (Walker and Devine-Wright, 2008).

#### **2.3.4 Financial Benefits – for whom?**

Community payments in the form of community benefit packages by big renewable energy projects is one example of developments that lose this ‘something’. These are payments made by renewable energy companies to local communities in which renewable technologies are implemented. The community receives some benefits as a result of the project. However, there is currently no mandatory statute that makes it compulsory for projects to contribute a community benefit package (Munday et al, 2011). In Wales, wind energy groups have signed a declaration (supported by the Welsh Government) to consider the economic and social benefits of their projects (Kelsey, 2013). This commitment is not binding. Writing from the Scottish perspective, Murphy and Smith (2013) observe that there are divergent systems developing within the emerging ‘community’ energy sector – large developments with a small element of community involvement, and small projects which are wholly community owned.

There is a marked difference between total ownership, part ownership and community benefit packages (Co-operative Group and Co-operatives UK, 2012). Evidence shows that the financial benefits received from community benefit agreements can be much less than financial benefits acquired by projects wholly owned by communities. This has been evidenced in a comparative study of a community owned wind farm, and a company owned wind farm in the south west of Scotland. The research compared the community owned wind farm on the island of Gigha

(off the Kintyre peninsula in Argyll) with three wind farms developed by Scottish Power, Powergen and Scottish and Southern Electricity on the Argyll mainland. There were three 30 meter turbines on Gigha with a capacity of 0.7MW. Across the sea on the Kintyre peninsula, there were a mix of sizes in the 70 installed turbines owned by the aforementioned companies (between 75 and 100 meters in height) with a shared generating capacity of 58.6MW. The community owned wind farm received annual net profits of £85,000 p.a. to be used for various developmental programmes on the isle of Gigha. On the other hand, the three privately owned wind farms on Kintyre contributed a total of £26,000 in 2005 for the immediate geographic community of the mainland, in the form of a community benefit package. This contrast highlights the potential for communities to benefit, in financial terms, *much* more from community ownership (Warren and McFadyen, 2010).

Allowing commercial ventures to decide upon the amount and distribution of community benefits can also lead to other difficulties. Interviewees in a case study in Ceredigion, Wales, asserted that such schemes could be divisive and disempower local communities (Bristow et al, 2012). Another Welsh case study in Moel Moelogan in the Conwy valley showed that a local wind energy project, despite being locally owned by farmers also failed in delivering financial benefits to the wider local community. Financial benefits did not filter down sufficiently to the local community, but remained in the hands of the three farmers that had developed the wind farm (Walker et al, 2010).

Although community projects stand to gain more financially through full community ownership, it is important to remember that there are other goals pursued by the community energy sector. These projects are not pursued solely for financial gains. Community energy projects are known to be spurred on by social and environmental factors as well as economic factors (Co-operative Group and Co-operatives UK, 2012).

## **2.4 INCENTIVES AND BENEFITS**

There are varying reasons as to why community energy projects are pursued. These include the desire to regenerate communities, the creation of a local income through local control and the pursuit of environmental and ethical commitments (Walker, 2008). Community Energy aids communities to be more independent as the economic benefits remain in the community (as previously discussed) and can help future generations achieve their goals (Li et al, 2013). These goals can include the social, environmental and cultural development of their own

communities. Other benefits of community energy projects include the strengthening of a local economy, collectively reaching energy goals, being a cost-effective strategy and being more respectful of communities' desires (Co-operative Group and Co-operative UK, 2012). Along with contributing to renewable energy targets; behavioural change in regards to energy use and a reduction in the numbers suffering from fuel poverty can also be achieved (Yadoo et al, 2011). The involvement of communities also has unforeseen benefits, including more support for renewable energy technologies and systems (Toke et al, 2008).

There are beneficial outcomes related to the exploitation of this niche sector which could also be useful in addressing socio-economic sustainability issues (Seyfang et al, 2012). Sustainable development considerations can be more effectively addressed through community energy projects – specifically the economic and social pillars of the model (Hain et al, 2005; Hinshelwood, 2003).

#### **2.4.1 Social Benefits**

Seyfang and Smith (2007) identify drivers of community energy groups as being ideological and based on social need. This is supported by Willis and Willis (2012) who identify the social benefits of community energy as being a particular driver. The strengthening of civil society and citizen participation in community decision making is another benefit. Community energy embodies the ideal of a strong civil society, allowing communities and their people to determine developments for themselves rather than having projects thrust upon them with little sense of power and self-determination (Co-operative Group and Co-operatives UK, 2012). As one piece of recent research describes, it is a difference between something being imposed upon a community and something being chosen by the community to pursue themselves (Willis and Willis, 2012). Putting communities in the driving seat of how the renewable energy sector develops is an opportunity allowing communities to shape the energy transition in a way that best suits their needs and goals (Murphy and Smith, 2013).

Community involvement in energy projects can also lead to a maturation of attitudes towards social responsibility (Walker and Devine-Wright, 2008). A thought-provoking model was used in Samsø, Denmark – where an interdisciplinary group from the local community partook in a workshop that aimed to make a carbon neutral energy system for the island at the lowest possible cost (Möller et al 2012). The outcomes of community collaboration in this example made a positive case for 'catalytic effects' on community involvement – including a better

understanding of sustainability issues and support for renewable energy on the island. It would seem that involving communities in energy development decision making has an educative role as participants learn to weigh and balance a number of linked considerations. This supports the idea that ‘bottom-up’ projects can have a range of benefits, which might not necessarily occur in ‘top-down’, commercial or corporate projects (Toke, 2005). This is supported by evidence showing that communities become more aware of energy issues and more connected to the issues of climate change through community energy projects (Willis and Willis, 2012).

The process of working as a part of and on behalf of a community can also lead to greater public trust in renewable energy, a feeling generated from the bottom up rather than artificially imposed (Walker et al, 2010). Perceptions of technology are shaped to a large extent by social interactions and attitudes of personal contacts - and grassroots community projects can have intrinsic value as a means of diffusing technological developments and linked sustainability measures (Rogers et al, 2012). The relationship between “social innovations and the diffusion of technological innovations are intimately linked” (Seyfang and Smith, 2007, p.588). Furthermore, shunning community participation can lead to missed opportunities of the ‘catalytic effects’ – or the benefits - that are drawn out through community involvement (Walker and Devine-Wright, 2008).

Another social driver for a more autonomous form of energy generation, developed from ‘below’ rather than imposed from ‘above’, is to establish protection from rising energy costs along with combating the rising threat of fuel poverty. Those facing the most serious impacts of price rises in electrical supply are those on low incomes and pensions (Giddings and Underwood, 2007). Non-grid connected houses, reliant on imported fuels such as oil and diesel are also vulnerable to price shocks in energy markets (Shamsuzzoha et al, 2012). Relying on energy supply from the current system through the national grid makes communities dependent and vulnerable. The centralised distribution system can entail more expense in rural or remote areas compared with other areas of the UK (Giddings and Underwood, 2007). Saving money on energy bills was the most frequently named objective in a recent UK wide survey of community energy projects (Seyfang et al, 2013). Developing decision making skills at a community level and addressing fuel poverty, health and other social issues are recognised as additional advantages of community energy (Kellet, 2007). Finance can be kept within the community which can then re-invest and tackle energy costs and the causes of fuel poverty. A number of countries including the UK recognise the potential of community renewable energy



in contributing towards combating fuel poverty in remote areas (Giddings and Underwood, 2007)

### **2.4.2 Cultural Sustainability**

Achieving new levels of economic and social sustainability as a result of community energy groups are topics presented in research papers and UK policy papers, most notably through the Community Energy Strategy (DECC, 2014). In comparison, there has been little, if any, research or acknowledgement to the ability of community energy to support cultural sustainability.

Culture can mean a host of different things to different people, but can be an umbrella term that can include a people's relationship to place, a language, dialect, the traditions of working the land, religion, history and heritage (Murphy and Smith, 2013). It is posed that the sustainability of these cultural attributes should be considered with as much value as ecological, economic and social sustainability (Soini and Birkeland, 2014). In fact, there are campaigns by UNESCO along with United Cities and Local Governments (UCLG) to ensure that culture is added as the fourth pillar of sustainable development in Europe, as published in their mandate on the proposal (UCLG, 2010). This call entails that national governments are mindful of cultural perspectives within national sustainable development measures and "include a cultural dimension in all public policies" (UCLG, 2010, p.7). Despite these calls and an increased understanding of the need to include culture within the sustainable development model, cultural sustainability has been maligned or excluded from public policies, developments and goals (Soini and Birkeland, 2014). Cultural sustainability within the energy sector is consequently a research area that is rarely explored.

Culture has previously been acknowledged as a component that fuels opposition to energy developments. Renewable energy projects can be resisted by communities who draw on their history and collective identity within an area, as evidenced in research based in Irish speaking Ireland (Murphy, 2012). The community under observation interpreted sustainability in cultural terms – through their cultural identity and relationship to place, which guided the community in County Mayo's desire to oppose a large gas refinery development. The effect that local cultural feeling can have is also demonstrated in a similar case on the Isle of Lewis.

Local residents objected to a large-scale 234 wind turbine private development on Mòinteach riabhach Leòdhais – the Brindled Moor (also known as Barvas Moor) on the Isle of Lewis (MacFarlane, 2015), based on cultural, historical and political arguments. The abundance of expressive Gaelic words that the local communities had for describing the moor, and how the proposed windfarm threatened to eradicate this heritage of words through changing the landscape, was a potential cultural loss that fuelled the protest against the development (MacFarlane, 2015). A similar struggle is also evidenced in McIntosh's book '*Soil and Soul*' (2004), which depicts a number of indigenous communities' battles in Scotland against global developments, struggles that are guided by cultural and historical foundations. Murphy (2012) suggests that there is a historical narrative of loss and dispossession within the Gaelic cultural context along with a specific "place-based vision of sustainability" (Murphy, 2012, p.12) which could be fuelling opposition to large corporate interest groups. This regional identity is often seen in positivist terms and as a factor that contributes towards social cohesion (Bristow, 2005).

The successful opposition of the large windfarm development on Lewis eventually led to the development of the smaller, more sympathetic and community owned Baile an Truseil wind project on the Galson Estate in the north of Lewis (Murphy and Smith, 2013). These cultural aspects might not only fuel protest and discontent *against* energy projects that are imposed on communities but could, conversely, contribute towards inspiring the take up of community energy amongst such communities. This is increasingly seen in areas where there is a tangible link between place and people, and a history of dispossession that Murphy (2012) refers to. The colonialism and dispossession experienced by the first nation peoples of Canada is an interesting case in point. Their culture, language and traditions, coupled with a historic narrative of loss and dispossession seem to play an intrinsic guiding role in their increasingly active participation in the development of local renewable energy projects in rural Canada (Henderson, 2013).

The community energy sector could also contribute to the direct or indirect support of cultural characteristics. A study in the south west of Scotland, saw the Gaelic language being used to affirmatively name community owned turbines, and the island experienced a rejuvenation of the local community through in-migration and a rise in pupil numbers in the local school (Warren and McFadyen, 2010). Community energy projects could be a possible answer to the economic rejuvenation of Welsh speaking communities too. The recently published census for

2011 has revealed a worrying drop in the numbers of Welsh speakers due in part to the general out migration of speakers. In order to halt and reverse this trend, Menter Iaith Conwy (a body promoting the Welsh language at a local level) has struck upon an innovative way to address this challenge. An 'EgNi' officer has been employed to specifically examine the possibility of recovering the Welsh language in the Conwy valley through investment in community renewable energy (Menter Iaith Conwy, 2012).

Cultural understanding in the renewable energy sector is an issue 'easily overlooked', although native language, history and culture can play a significantly important role in the way that communities have shaped concerns and goals in relation to the energy sector (Murphy, 2012). Overlooking such factors can lead to a misunderstanding of issues concerning communities' objection of large scale developments or their acceptance of small scale projects. There is a deficit of research into the social and cultural regeneration potential of community energy schemes. Further investigation in this field could prove valuable and contribute to an apparent knowledge gap.

#### **2.4.3 Environmental sustainability: Contributing to renewable energy generation**

There is some scepticism as to the *actual* potential for the community energy sector to contribute significantly to national electricity needs. In comparison to the success of the Danish model of community owned wind farms, it has been argued that the UK has failed to capitalise on the opportunity of sufficiently supporting the community renewables sector at a more localised level and at a much earlier date (Warren and McFadyen, 2010) thereby allowing them to become significant producers of energy. Only 0.5% of wind capacity energy in the UK is owned cooperatively, compared to 25% in Denmark, and 10% in Germany (Toke, 2005). Since 2008 there has been a policy in the renewable energy sector in Denmark that entails that 20% of every wind energy project should be owned locally, along with financial support for early starting projects (Meacham, 2012). This progressive development was reached in Danish policy following a number of grassroots calls, positive action on behalf of the state and the development of varying ownership models (Cumbers, 2013). There is no such historic policy in the UK, despite estimations that there is a potential for the sector to generate 3.5GW of renewable energy, worth three to four traditional power stations (Co-operative Group and Cooperatives UK, 2012).

There is optimism that the sector can still grow and meaningfully contribute to the overall transition to a sustainable energy future, whilst helping to achieve a number of other social and economic policy goals (Seyfang et al, 2012). In relation to Scotland, Warren and McFadyen (2010) agree on the importance of the growth of the sector but are doubtful as to the capacity of communities to make significant energy contributions. It is suggested by others that smaller, community owned schemes have the potential to be significant renewable energy generators if viewed *collectively* (Co-operative Group and Cooperatives UK, 2012). Although community energy projects are arguably more costly to set up (as a result of economies of scale) there is an additional value to such schemes, as previously discussed. Despite not at first being seen as significant generators in term of kW-hours or money generated, community energy projects could be more effective at addressing lowering energy consumption, behavioural change and bolstering communitarian values and “is a strong force for good in bringing people together to help others in the long-term” (Jones, 2015). Understanding this ‘force for good’ is something that needs to be evidenced further.

#### **2.4.4 Resource Peripheries and Community Energy**

Renewable energy generating projects are, on the whole but not exclusively, based in rural communities, where natural resources – particularly hydro and wind – are readily available (Kellet, 2007). This is a trend also seen in the community energy sector. A recent UK wide survey showed that the majority of community energy organisations described themselves as communities of place, with 2/3 of those taking part in the research located rurally (Seyfang et al, 2013). Community and cooperative energy are “particularly well suited to small remote communities” (Vaze and Tindale, 2011, p. 69). It follows then, that rural, peripheral communities both are and will be affected most by dispersed renewable energy schemes. Whether or not they will have control of such developments is another matter. Nevertheless, these areas are of central importance to the development of the renewable energy sector. It is suggested that more sensitivity is needed in understanding the geographical impacts of the energy transition, particularly on resource peripheries, i.e. where resources are utilised to supplement the more populated areas of ‘the core’ (Murphy and Smith, 2013). Murphy and Smith (2013) pose that resource peripheries are spaces where there is a power struggle in environmental, cultural and geopolitical terms which again throws up questions regarding power and justice. “Indigenous and economically marginal communities” have been

recognised as peripheral areas in which unjust energy processes can take place, such as the siting of energy infrastructure (Birkerstaff et al, 2003, p.5).

Recent windfarm proposals in mid Wales, for example, have been reproached for ignoring communities' relationships to place and landscape and for perpetuating energy injustice as financial benefits are drained from the area (Mason and Milbourne, 2014). The development of rural renewable energy, particularly wind energy, will entail that spaces and views will be impacted – problematic if views are considered a local natural asset. One way of viewing landscape is as an economic resource – attracting tourism into an area. Wind energy deployment could compete for this natural space and impact on that particular part of a local economy (Toke et al, 2008). The place identity of those with strong ties to a region or space can be threatened by large energy developments, which in its turn can lead to negative attitudes and opposition, as evidenced in a study of a wind farm development off the coast of north Wales (Devine-Wright & Howes, 2010). Natural spaces and the seascape view used by residents for recreational purposes were perceived as being ruined by the industrial off shore wind farm development (Devine-Wright & Howes, 2010).

However these arguments observe the wind energy sector as a whole and do not discuss the capacity of community ownership models in alleviating opposition towards wind energy development. Having a better understanding of the relationship between the energy transition, resource peripheries and ownership models could contribute further meaning to justice and equity issues within this research field. These peripheral rural areas often suffer from high levels of unemployment, low earnings, sparse job opportunities, a skill shortage as well as living with inequalities of health and poor housing (Giddings and Underwood, 2007). Community energy could be a means of protecting rural areas from having large projects imposed upon them – and a means of designing sympathetic renewable energy projects, that address social challenges and deliver energy justice. Drawing on research in Freiamt in the Black Forest of Germany, it has been argued that local ownership can allow for more sympathetic projects which protect cultural landscapes, agricultural land and have the added benefit of strengthening the local economy, tourism industry and conservation aims (Li et al, 2013).

## **2.5 CURRENT PROBLEMS FACING COMMUNITY ENERGY DEVELOPMENT**

Recent research has shown that the community energy sector is growing (Seyfang and Park, 2012). The success of the take-up of the DECCs ‘Feed in Tariff’ (FITs) incentive, a payment for small renewable energy producers, is perhaps a reflection of communities’ and individuals’ desire to become producers of energy (Julian and Dobson, 2012). However, this literature also recognises a number of challenges that face community led energy projects. Barriers have been stronger than incentives, despite the potential resource in the UK to be tapped by small community ownership projects (Walker, 2008). Small scale renewable projects can also be seen as marginal and not “worth the effort” (Kellet, 2007, p.391). Compared to large, private developments in the renewable energy sector (replicating the traditional centralist form of generating energy), community energy is facing a more difficult and ‘precarious’ time (Cooperative Group and Co-operatives UK, 2012). Energy has historically been resourced, created and sold on a large scale and from a centre of power. Small energy projects (along with micro generation) have not been the norm. This ingrained centralised approach has created limitations for community projects in the field of sustainable renewable energy (Yadoo *et al*, 2011). This has in turn created doubt within communities as to the viability of creating successful schemes in their locality (Rogers *et al*, 2008). Furthermore, this centralised approach to energy, and the lack of local devolved decision making in the field, can result in a descent into traditional political, economic and behavioural patterns – continuing to do things in the way they have always been done (Möller *et al*, 2012; Strachan *et al*, 2015).

### **2.5.1 Facilitation**

Facilitation is seen as an important factor in galvanising communities, enabling community groups to develop their own community energy schemes (Bomberg and McEwen, 2012). However, there appears to be a lack of direct support in the UK and community members have to voluntarily seek grants and tariff details on their own or with “minimal external support” (Yadoo *et al*, 2011, p.6404). Within the UK, organisations which are involved with supporting community energy developments are also arguably inefficient in their delivery. Community energy groups in Scotland, Northern Ireland and Wales were seen to lack the support of UK based organisations that focus on the facilitation of English community energy groups (Seyfang *et al*, 2013). Other related challenges facing the sector include the lack of knowledge transfer, networking avenues and strategic thinking (Conaty and Mayo, 2012) – components that could

possibly be addressed through better facilitation mechanisms. However, how facilitators play a role in community energy projects in Wales and Scotland specifically is an insight that is lacking. A more in depth investigation would be useful to understand the role of facilitators, networking avenues and knowledge transfer practices within the sector.

### **2.5.2 Community Engagement**

The level of public engagement in energy issues across Europe is another challenge that faces the community energy sector is. Psychological distance from the centralised energy system could be impeding communities' ability and desire to partake in being energy generators themselves. The level of civil participation in energy issues, such as the anti-nuclear movement in Europe, was particularly significant in Denmark and Germany, shaping a renewable and sustainable energy agenda in both countries, whereas similar anti-nuclear movements in England, Scotland and Wales were less successful in generating a similar mass movement (Toke et al, 2008). This absence of a national movement in shaping a renewable energy narrative or vision in the UK could be a contributing factor to the relatively small size of the community energy sector at present. The very nature of communities themselves can also pose a challenge to the development of the community energy sector. Not all aspects of community energy are guaranteed to be cohesive and affable. Not all community members might share the same vision or ideal. Also, administrative burdens are a barrier for communities, as the work involved in finding different grants and tariff systems, without much guidance or assistance can be onerous (Hain et al, 2005, Rogers et al, 2008, Yadoo et al, 2011). A community needs particular skills in order to face such burdens. More research is needed in order to unpick some of the challenges faced *within* communities who pursue community energy projects and an investigative approach to such experiences will contribute a new understanding.

### **2.5.3 Finance**

Financial barriers are also identified as a restraint on the development of community energy projects (Rogers et al, 2008). Within the wind industry in the UK, it appears that small projects find that financial institutions are less likely to finance them compared to similar projects in Denmark or Germany (Munday et al, 2011). However, this challenge has spurred alternative financial models for many community energy groups. As is noted by Seyfang et al (2012),

there appears to be a shift amongst community energy groups away from models of grant and funding dependency towards a more sustainable business model, such as raising money through share offers and crowdfunding. Such alternative finance has been practiced by a recent project, Egni Cooperative, in south Wales where a community solar project was financed fully through the selling of community shares to the local community and a wider community of interest (Egni, 2014). However, the tax reliefs that had made such shares attractive for investors will be cut by the Government at the end of November 2015 (Gani, 2015). Proposed cuts to the Feed in Tariff (along with the tax cuts to community shares) mean that finding new forms of finance will soon become a necessity if the sector is to develop.

#### **2.5.4 Technological barriers**

Technological barriers, particularly the lack of technical knowledge and expertise in the area of renewable energy technologies, also hinder community energy developments (Bomberg and McEwen, 2012). For rural areas the cost of grid connection for potential energy generating projects is a deterrent. There is a recognised lack of investor interest in supporting off-grid rural communities to develop renewable energy projects as a consequence of lower financial returns from such projects (Yadoo et al, 2011). The self-sustaining community of the Isle of Eigg in Scotland which owns a local grid, renewable energy technology (solar, hydro and wind turbines) and batteries to store this energy, is an example of how a localised grid system could potentially work (Isle of Eigg, 2014). The possibility of mainstreaming such projects beyond Eigg, however, currently appears unfeasible. The national grid and the nature of the current energy market appear to serve large incumbent energy generators rather than smaller community energy groups. The “economic processes, consumption practices, regulatory arrangements and infrastructure” remain in the hands of these incumbent energy actors (Strachan et al, 2015, p.97). Forming network connections and gaining entry into such an imposing market can prove difficult (Walker, 2008). Understanding how communities tackle such imposing problems will also help increase knowledge of the current community energy sector in Scotland and Wales.



### **2.5.5 The best conditions?**

Additional research is needed which focuses on the ‘conditions’ that make community energy possible in different cases (Musall and Kuik, 2011). Understanding current legislation and wider governmental visions for the sector, at national and sub-state levels is also key in this pursuit. Despite the promotion of the benefits and potential of community energy groups to reduce carbon energy generation, supply and use, there remains a need for support and funding to spur such developments on the ground (St Denis and Parker, 2009). A UK wide survey of community energy groups has revealed that groups themselves have admitted that there is a limit to what they can achieve alone – they require external support (Seyfang et al, 2013). Policy can be key to ensuring this support.

## **2.6 POLICY**

Within the community energy sector, difficulties have been caused by policy developments and regulations that are inconsiderate of the needs of community schemes as they continue to focus on the needs of traditional large generators (Co-operative group and Co-operatives UK, 2012). This has been exacerbated by more recent policy developments that seem to work against the development of community energy projects (Jones, 2015, Hopkins, 2015). This is despite an increasingly global endorsement of the desirability of community collaboration in promoting the transition to renewable and sustainable energy systems (Bristow et al, 2012). The European Union (EU), through the Renewable Energy Directive announced in 2010, acknowledges the role communities can have in reaching renewable energy targets along with recognising the associated local and regional socio-economic benefits. There is also recognition for the need for more flexible, distributed and smaller scale forms of energy and the necessity for a different grid and market base to serve the changing energy sector (European Commission, 2011).

Within the EU, Denmark is commonly regarded as the pioneering country in implementing a decentralised form of energy generation, where community equity and joint venture ownership models are normalised (Conaty and Mayo, 2012). Germany is also considered a leader in this sector, implementing a Renewable Energy Act that has laid a foundation for the development of community renewable energy. The financial incentives offered for communities, such as the

Feed in Tariff (FITs), have fuelled green energy development in Germany providing users and investors a guaranteed payment for renewable energy generation (Li et al, 2013). The German Renewable Energy Act also ensured that communities played a larger role in initiating developments by specifically supporting small suppliers with FITs and access to the grid (Li et al, 2013). Comparison studies have shown that in Denmark and Germany, the policy and finance structures in place there have allowed for more activity in co-ownership and local citizen participation in renewable energy projects, ensuring greater local economic benefits (Munday et al, 2011). Outside Europe, Canada has also implemented preferential FITs for communities, with Ontario offering 1cent more per kWh to communities and Nova Scotia only offering the tariff to community groups (Cooperative Group and Co-operatives UK, 2012). This likely contributes to the confidence of the community and cooperative energy sector in these country specific cases. The FIT model replicated in the UK has also shaped the market for community energy projects (Seyfang et al, 2013). However it remains unclear as to how community schemes will be supported financially in future (Rogers et al, 2012) particularly with more recent actual and proposed cuts to subsidy support of the sector (Gani, 2015). This is likely to cause instability for the sector (Vaughan, 2015).

### **2.6.1 UK Policy**

UK level policy has been criticised in the past for focusing too much on large scale renewable energy schemes rather than small producers – despite their potential to contribute towards renewable energy targets (Hain et al, 2005). An example of such a policy was embodied in the 2002 Renewables Obligation policy which required energy suppliers to increase the amount of energy bought from renewable technology. The scheme benefitted larger generators of renewable energy owned by “a small number of large, international utilities” (Strachan et al, 2015, p.101). They were able to meet the higher demands of the utility suppliers and therefore benefit from the scheme. Smaller, community based schemes were neither incentivised nor did they stand to benefit from the policy (Yadoo et al, 2011). The non-fossil fuel obligation and the Renewable Obligation were essentially ‘market oriented’ and in the case of wind energy development, has supported larger companies as opposed to locally owned and developed community projects (Munday et al, 2011). There are a number of more recent programmes that aim to support community energy schemes, FITs (which are currently under threat of cuts) along with funding programmes and award competitions (Seyfang et al, 2013). The latter two

schemes pit communities against communities as numerous groups have to compete for support. In regards to planning within the UK for renewable projects, there has been little policy development “that explicitly give advantages to community renewables” (Strachan et al, 2015, p.102).

If the UK Government desires community energy to develop in the same way as in counterpart countries, such as Denmark and Germany, a clear incentive to support and kick start this niche sector is needed (Willis and Willis, 2012). Julian and Dobson (2012) argue that an ‘enabling role’ should be adopted by national policies, allowing communities across the UK to take advantage of renewable energy technologies and local natural resources in their areas. There has already been recognition of the abilities of such projects to effectively address sustainability goals, engage with local people and ground issues to do with climate change more effectively (Peters et al, 2010). The community energy sector has also been described by DECC themselves as being “a perfect expression of the transformative power of the Big Society” (DECC, 2010 from Seyfang et al, 2012, p.3). Increased governmental interest in the community energy sector in particular was ascribed to the practical benefits of decentralised, local, community energy projects, and the “neo-communitarian discourses of local participation and empowerment” (Warren and McFayden, 2010, p.205).

However, academics argue that there is a need for more in-depth and sector-wide research allowing policy makers and supporting organisations to be able to assist the sector in its development (Seyfang et al, 2013). In lobbying terms, established figures in the energy sector carry more weight at policy making level, whilst communities or smaller producers have greater difficulty in influencing policy (Bomberg and McEwen, 2012; Strachan et al, 2015). The Community Energy Coalition, a newly established UK wide group plays a role in voicing communities’ vision for the sector, and calls for a clearer strategy for community energy policy (Community Energy Coalition, 2013). Nevertheless, further research at grassroots level would be valuable in contributing towards identifying the best conditions for facilitating the development of community energy. This will be useful for policy development for the sector.

It is proposed that there has been a step change in recent UK energy policy, which has started to look beyond centralised and large energy producers (Walker and Devine-Wright, 2008). This can, however, be contested with regards to the numerous recent changes made by the current UK administration who have apparently “long forgotten” the commitments made in the Community Energy Strategy (Hopkins, 2015). The Community Energy Strategy was published

by the Department of Energy and Climate Change under a coalition government in January 2014 (DECC, 2014). Although a positive policy progress in the field of community energy, it has been criticised;

“It’s not a strategy that’s going to scare anyone – nothing radical has emerged, and neither does it seem to contain anything challenging or really transformational in terms of making communities central to both delivery and management of energy resources.”

(Coxcoon, 2014)

It remains true then that stronger and more consistent policy is needed if the government genuinely wishes to see the development of community-based renewable energy schemes (Rogers et al, 2008, Yadoo et al, 2011). A recent UK level survey has also shown that community energy groups would like to see more cohesive ‘joined-up’ thinking between governmental departments since “the community energy sector addresses policy goals covering a number of different government departments, not solely energy and climate change” (Seyfang et al, 2012, p.24). Policy also needs to engage a broader cross-section of the population, rather than over-relying on a minority of active citizens, if further progress is to be made (Rae and Bradley, 2012). Also, the embedded patterns of ‘closed policymaking’ procedures and confusion about the policies and regulations in the sector can obstruct communities from venturing upon their own energy projects, despite financial incentives (Bomberg and McEwen, 2012). Furthermore, institutional support is also needed for communities in the UK to bridge what is called the ‘value-action gap’ – the relationship between the action taken to implement a scheme and the benefits returned (Yadood et al, 2011). It is argued that communities that pursue energy projects should receive recognition and a guarantee of the support that they would receive – through all stages of their projects (Cooperative Group & Co-operatives UK, 2012), rather than continual uncertainties regarding feasibility, finance, grid connection and the selling of electricity. The future success of an equitable sustainable energy infrastructure will be dependent upon existing and future political policies and frameworks (Möller et al, 2012).

It is proposed that policy should endorse the community energy *ownership* model above community benefit models by implementing practical steps, such as creating the role of a director who would make certain that community developments are understood not only in DECC but across other governmental departments (Cooperative Group and Co-operatives UK, 2012). Less influence and increased support from traditional commercial utilities would also

make the development of community energy more viable (Li et al, 2013). Planning policy could also be at the heart of the community energy sectors' success. At the moment, in the case of wind energy in particular, it is far more difficult to gain planning permission in England, Scotland and Wales, than it is on the continent (Toke et al, 2008). In regards to planning acceptance for all wind power project proposals, England and Wales have experienced 60% rejection in planning stages, while Scotland has experienced a higher percentage rate of acceptance of 75% (Toke et al, 2008).

It is starkly apparent that policy in the field of community energy is fast-changing. Changing circumstances could entail that there is a rippling effect which would adversely impact on communities. Further research is needed to examine how UK level policy can affect the community energy sector. Furthermore there is little research into the influence of devolution politics on the community energy sector, and whether there is a distinctiveness of approach within policy and governance at devolved nations' level. It is revealing that both Ministers holding the energy portfolio in the Welsh and Scottish sub-state governments, Fergus Ewing MSP and Carl Sargeant AM, are currently collaborating in their response to the threats that proposed changes to the Feed in Tariff could have on the community energy sector (Scottish Government, 2015). This is a clear collaboration in opposition of Westminster's proposals. The next section will discuss how each sub-state government goes about promoting and supporting community energy within their own nations.

### **2.6.2 Sub-State Government Policy (Scotland and Wales)**

Climate policy and energy policy within the devolved nations of Scotland and Wales, although driven by European targets and in tandem with UK policy, are nevertheless distinct and ambitious (Royles and McEwen, 2015). Scotland in particular has shown more enthusiasm in its pursuit of renewable energy deployment (Royles and McEwen, 2015) and, particularly, community renewables (Strachan et al, 2015). However, the ability of regional governments in the UK to support the development of community renewable energy projects is limited due to the centralised regulation of energy markets and infrastructure (Yadoo et al, 2011). Table 2.1 below, adapted from Strachan et al (2015), also shows the disparities in legislative powers devolved to the sub-state nations of Northern Ireland, Scotland and Wales and how consent for energy generation plants has been partitioned (according to size and production capacity) between the devolved governments in varying ways:

Country	Legislative power for energy policy	Provision of market support for renewable energy	Planning and Consenting (onshore)	Planning and Consenting (offshore)	Economic development spending
Northern Ireland	Fully devolved	Fully devolved	Fully devolved	Fully devolved	Fully devolved
Scotland	Executively devolved	Scope to shape delivery of some schemes	Fully devolved	Fully devolved	Fully devolved
Wales	Not devolved	No powers	Partial powers over planning policy and consent (for schemes below 50MW)	Power to determine applications up to 1MW (exception under Transport & Works Act 1992)	Fully devolved

**Table 2.1: ‘Formal energy powers held by Northern Ireland, Scotland and Wales’. Adapted from Strachan et al (2015, p.98)**

Scotland is increasingly considered to be the most progressive nation within the UK in the field of supporting and developing community energy projects. This is evidenced through the number of community energy projects in operation and development - over one hundred and thirty- six projects (Local Energy Scotland, 2015b). This is in comparison to the 50 groups that are being supported in Wales through the Ynni'r Fro scheme – a scheme that supports community energy projects in Wales both financially and with expert advice (Ynni'r Fro 2015). The success in Scotland is due in part to their Community Renewable Energy Scheme (CARES) which supports communities through a loan system and facilitation services, delivered up until 2013 by Community Energy Scotland and currently through Local Energy Scotland. Furthermore, a target of 500MW of community generated energy has also been set to be reached by 2020. In Scotland, 285MW of community or locally owned energy capacity was operational by June 2013 (Energy Saving Trust, 2013). Overall, Scottish renewable energy generation targets for 2011 were 31% and are 50% by 2020 – this is in comparison to 10% and

20% respectively, set by the UK government (Warren and McFadyen, 2010). Despite constitutional restraints under the devolution settlement, Scotland has still been able to maximise their capacity to promote developments in the renewables field (Bomberg & McEwen, 2012).

The same constitutional conditions do not apply to Wales, as illustrated to powerful effect through research by Strachan et al (2015) summarised in Table 2.1 above. Great disparities emerge at sub-state legislative and planning powers level. Welsh Assembly Ministers will have jurisdiction over only one third of all proposed energy developments in Wales under the current devolution settlement (Environment and Sustainability Committee, 2012). The outcome of the Silk report in 2012 (which has examined the current devolution agreement for Wales), and the draft Wales Bill published in October 2015 (and the final Wales Bill to be published in Spring 2016) could potentially change and expand upon the legislative powers devolved to the Welsh Assembly. These powers would entail the devolution of responsibilities on consenting projects below 350MW. Already however, there are debates as to whether or not this settlement will in fact be adequate as it fails to bring Wales the equal legislative powers consigned to other devolved nations of the UK (Clubb, 2015).

It remains unclear what the targets are for community owned projects in Wales, or how to boost the potential of community buy-ins of privately established renewable energy projects. Although there have been a number of allusions towards the importance of communities benefiting from energy developments as seen in ‘Energy Wales: A Low Carbon Transition’ (Welsh Government, 2012) and ‘Green Growth Wales: Local Energy’ (Welsh Government, 2015) there is a lack of a coherent plan and set target for the community energy sector in Wales. Despite having a community involvement clause in local planning guidelines (in the form of ‘TAN 8’), reasons for developers to involve themselves closely with communities’ remain unclear (Walker, 2008). Nevertheless, when it comes to policy and support structures, community energy seems more prominent in Wales and Scotland than in the UK as a whole (Strachan et al, 2015). An example of this is Community Energy Wales – which is a body delivering assistance and networking opportunities for the community energy sector (Community Energy Wales, 2015a). Another example is the Ynni’r Fro scheme which provides scoping grants for community energy projects to develop (Welsh Government, 2015).

Scotland benefits from having a strong civil society, which has become even more strong since devolution and central in guiding policy around renewable and community energy

developments, whereas “civil society in Wales is weaker” (Royles and McEwen, 2015, p.1047). As a possible consequence of this, the Environment and Sustainability Committee in the Assembly recommended in a recent report that there was a need for increased “public engagement, empowerment and political debate about renewable technologies” (Environment and Sustainability Committee, 2012). This also reflects a certain malaise across the UK in its “failure to cultivate actors that are willing and able to challenge the power of major, incumbent energy businesses and policies” (Strachan et al, 2015, p.105). Whether or not the civil society of Wales is weaker within the context of the community energy sector in comparison with Scotland is a question that could be explored further.

It is also important to consider the developments happening within the community energy sector in the wider framework of current devolution advancement in the UK. There has been a global rise of ‘regions’ with threatened languages, cultures and identities calling for the decentralisation of power, federalisation, or further devolution as a means of achieving regional aspirations (Anderson in Paasi, 2011). With the Scottish independence referendum, the historic 56 Westminster seats won by the Scottish National Party in the UK general election, the Silk Commission and the proposed Welsh Bill in Wales the issue of further devolution, and capacity of home nations to legislate over energy issues could potentially have an impact on the community sector. It is suggested that Scotland’s ambitions for its renewables, and its community renewables sector, is “in part intended to fuel demand for Scottish self-government” (Royles and McEwen, 2015, p.1049). Community energy advancement was also within the 2007 and 2011 manifestos of the Scottish National Party, and for the Welsh Assembly elections of 2011 within the manifestos of the Welsh Liberal Democrats and Plaid Cymru (Strachan et al, 2015). All three devolved political parties also call for further legislative powers for their sub-state nations (to varying degrees). The distinctiveness of energy policy and community energy support in sub-state nations could therefore be seen as “a feature of the territorial politics” and “broader claims to greater control over political and economic” futures of each nation (Royles and McEwen, 2015, p1049). Whether or not this extends to a nation’s rights to greater control over indigenous resources (which links back to the concept of resource peripheries), is an area in need of further research.



## **2.7 CONCLUDING REMARKS AND CONCEPTUAL FRAMEWORK**

It is evident that the community energy sector is an important avenue of research due to the multiple benefits that the sector can provide in a more equitable and just way. It is also a varied and nuanced sector in which a number of research paths can be taken. It appears from the literature reviewed in this chapter that a wealth of socio-economic benefits can arise from the sector, whilst also contributing towards renewable energy targets. These social and economic benefits could include job creation, regeneration, and rejuvenation of cultural characteristics. Greater benefits reach communities which own or partially own energy schemes compared to those in which schemes are privately run. It also appears that communities are less resistant to community driven projects compared to large private endeavours. Community energy projects deliver a more just and equitable ‘deal’ for communities through local ownership.

Community energy as a conduit for energy justice is one of the main concepts that guide this thesis. It is apparent, through the literature reviewed here, that elements of justice are naturally bound to the community energy sector, particularly through the fact that the communities themselves are ‘owners’ of such schemes. It is a sector that encourages an open and participatory relationship with communities of place and also delivers equitable returns. This is in stark contrast to the historically centrist ways of producing and delivering (and gaining from) energy – where it has been unfeasible for communities to own and therefore share the economic (and hence social) benefits accrued. Community energy challenges the whole tradition of ownership and generation of energy and the incumbent actors that continue to reign over the sector. Community energy appears to lead towards a number of social and economic benefits that also deliver equitable and just outcomes for communities, and contribute towards social resilience. Understanding what communities gain from ownership, and what ownership as a concept means to these communities will be one underlying aim to the thesis.

An emerging concept is that community energy could also contribute towards the cultural resilience of certain communities. However, this concept has not been researched in sufficient depth. The thesis aims to address this particular gap in knowledge within the broader concept of social resilience.

The concept of resource peripheries will also be central to the thesis, in particular how rural communities stand to benefit from community energy project as opposed to merely being geographical places on which energy projects are imposed. Being aligned with this concept, rural, peripheral areas will be the focus of this research piece.

The relationship between resource peripheries, energy justice and the creation of a sustainable community are concepts that are hoped to be bridged in this thesis. Being aligned with these concepts and therefore the possibilities that the community sector can pose, a practical outcome to this research would be to discover the best conditions for community energy, in order for such projects to be replicated. Comparing cases would pose a useful avenue for this aim. Microcosms or case sites can be useful “testing ground for the methods, practices and technologies that could be used to facilitate a switch to a more autonomous energy model throughout the rest of wider society” (Rae and Bradley, 2012, p.6505).

There is abundant research into community energy in the UK, but none of it, to the author’s knowledge, has compared experiences of development at a devolved nation’s level. Strachan et al (2015) have begun an interesting line of enquiry through their research looking at the development of community energy within a ‘Corporate Energy World’, and have touched upon the differences at sub-state level. There is a gap in knowing how processes in both nations work at grassroots level, the meaning of ownership at community level and any active attempt to listen to the voices of those that work intimately within the sector.

Comparisons between Scotland and Wales in academic research are common given their similarity in constitutional terms, and in regards to demography within the UK. Both have comparatively small populations in comparison to the rest of the UK and possess devolved governments, albeit with varying powers (Royle and McEwen, 2015). Comparing the community energy sector between both countries, however, has not been attempted before. The struggle between community renewables and the energy establishment, along with the capacity and ability of the devolved nations to facilitate the community energy sector is of particular interest and a field into which this thesis could contribute. A comparison study of this sort will generate new information which will help to better understand community energy development and confirm or challenge pre-conceived assumptions about the sector from a sub-nations point of view. Scotland’s developments in the field and the apparent struggle in Wales to develop

the community renewable sector serve as interesting microcosms for understanding the best conditions for community energy to flourish.

## CHAPTER 3

### METHODOLOGY

*“Research is frequently a frustrating and messy enterprise with false starts and blind alleys to negotiate, but in published work it is more often presented as a logical progression of stages.”*

(Elliott, 2009, p.154)

#### 3.1 INTRODUCTION

An overview of the methodology adopted and the methods used for collecting data for this research are discussed in the following chapter. The chapter will identify underlying assumptions and the motives for pursuing the particular line of inquiry chosen for this research project. The chapter will then present and justify the methodological approach and tools for collecting the data that will be examined in this research project. This chapter will show that the design of the research and its methodological approach is the most appropriate to meet the objectives set, and produces data in a manner that the researcher can manage and interpret within the scope of the project. Background to the case sites and participants at facilitation and policy level, and how they were identified is included within this chapter. A detailed introduction to the case sites will follow in Chapter 4.

#### 3.2 MINDFUL INQUIRY AND REFLEXIVITY

Awareness of the *reasons* for why a research project is being pursued, along with an understanding of the researcher’s world view and motivation behind this pursuit, should be clear. This awareness, known as mindful inquiry, gives foundation to the research questions chosen, the methodological approaches taken and the conclusions derived from a project (Bentz and Shapiro, 1998). Similarly, a consideration of reflexivity in qualitative research is needed – to acknowledge “the identity, or self, of the researcher within the research process” (Elliott, 2009, p.153). In other words - what is my background and identity, what are my motivations for looking at community energy, and why within two devolved nations?

The reason for undertaking research in this field stems from my many years working on sustainable development projects, including work with a community energy project in south Wales. The disparities in development between community energy projects in Wales and other nations, such as Scotland, and the frustration felt at grassroots level toward the complex process of developing such schemes was, and remains, tangible. Understanding these frustrations and difficulties was one inspiration for pursuing research in the field of community energy projects. Within the context of reflexivity, being brought up in a rural, Welsh speaking and ex-mining area of Wales, has also inspired some of the avenues of research in this thesis (in addition to the important scholarly rationales outlined in the previous chapter). The notion of establishing genuinely sustainable and resilient communities is of particular interest, and the community energy sector has posed itself as an important component of such an aim. Therefore the *reasons* for this proposed research have been guided by my personal interest and background of having worked in and around the community energy sector, particularly from a Welsh perspective. Learning more about the community energy sector through comparing insights made from two devolved nations' perspectives was particularly important – due in part to my past experience of hearing that Scotland was viewed by many in Wales as being more successful. Discovering whether or not this was, in fact, true was also a driver for this research. Developments under devolution and the legislative powers and needs of devolved nations within the UK to pursue community energy projects (and the development of renewable energy as a whole) are also of personal interest. However there is also practical use and importance to the research. The research intends to contribute meaningfully to the community energy sector, as well as satisfying personal curiosity. Part of the research aim is to recognise challenges and suggests possible avenues that could lead to more successful strategies for the development of community energy projects in both Wales and Scotland. The research also aims at contributing further understanding of the sector for academic advancement.

### **3.3 RESEARCH QUESTIONS**

The over-arching project aim is to compare, from the perspectives of community energy groups at grassroots level, the development of community energy in Wales and Scotland. This comparison is broadened by examining the insights of experts working in the field along with an understanding of policy development and outcomes in the two devolved sub-state nations within the UK. The main aim is to better understand the best 'conditions' (Musall and Kuik,

2011) that make community energy possible in different cases. Keeping this aim in mind, the research questions that have guided the project are:

- What are the motivations and benefits that drive community energy projects?
- What are the challenges facing community energy projects in communities in Scotland and Wales?
- How do policy, support mechanisms and targets in the devolved nations of Scotland and Wales differ in encouraging grassroots community and cooperative energy projects?
- How do community and cooperative projects in Scotland and Wales compare in social and economic aspirations and outcomes?
- Does community members' confidence differ in Scotland and Wales in their pursuit of community energy projects?
- Are language and socio-cultural issues included in the scope of benefits accrued in community owned renewable energy projects on the Celtic fringes?

### **3.4 GENERAL METHODOLOGY AND PHILOSOPHY**

Research methodology and philosophy literature say that branding research within constrictive terminology can be problematic, as meanings can be misunderstood (Wood and Welch, 2010). Whilst preparing the methodological strategy for the project, an attempt was therefore made to develop a clear strategy without the use of confusing terminology.

To begin, a clear epistemological (or philosophical) stance must be acknowledged, which will justify the methods used in the research. The epistemological approach chosen (and preferred) for this project was based on a constructivist approach. Simply put, constructivists focus on producing meaning through interactions – meaning which is mutually constructed between the researcher and research participants (Folkestad, 2008). Relying and allowing for a deep and meaningful input from participants for this research entailed that a qualitative, in-depth methodological approach was needed.

The research is focused on the collection of a variety of in-depth *views* and *opinions* of people who are involved in and around community energy projects. Qualitative research entails the collection of ‘rich’ data - as opposed to numerical data (Bryman, 2004). Qualitative interviews in particular are an attractive part of such an approach as they are a tool enabling the gathering of a wide scope of experiences, voices and portrayals (Smith, 2001).

As the project aims to *compare* developments in Wales and Scotland it was also designed as a comparative study. A comparative study allows for a snapshot of the current situation and differences that exist between two or more areas or situations, which are “cross-cultural, cross-national or cross-historical” (Gray et al, 2007, p.326). In this case, the comparison study will be cross-national and cross-cultural between Scotland and Wales. Many social research methods can be used within the theoretical positioning of a comparative study, including historical studies, fieldwork and cumulative data (Gray et al, 2007). There are issues to be considered in relation to variables within comparative studies. No two places are the same, and no two community energy groups within these areas are completely identical. Geographic location, population, history, economics and social dynamics are inevitably different. However, if these factors are recognised from the beginning of the research, and differences acknowledged, underpinning explanations for any phenomena discovered can still be made. The comparative method called ‘Most Different Systems Design’ in a study on community energy by Bomberg and McEwen (2012) acknowledges the differences between communities. This study was a comparison study between six different community energy case studies in Scotland. The symbolic resources of identity and quest for autonomy were compared between these groups as an indicator affecting the mobilisation of communities towards establishing locally owned energy groups (Bomberg and McEwen, 2012). Through using the ‘Most Different Systems Design’, the study compared diverse groups that differed in various aspects, but recognised an underlying trend in relation to similar symbolic resources. This method is a means of making a comparison study between two different ‘systems’, or communities in this case, where a similar phenomenon occurs (Anckar, 2008).

This is an insight that helps justify the comparison of the community energy sector in Wales and in Scotland. Scotland and Wales have a similar devolved politics, to a degree. In the referendum of 1998, the Welsh Assembly and the Scottish Parliament were established as devolved governments with limited legislative powers in various fields. In the field of energy, neither country has the authority over developing nuclear power sites, although Scotland has

executive powers for developing renewable energy and full powers for planning approval, whereas Wales currently only has authority to approve planning for energy projects under 50MW (Strachan et al, 2015). Scotland has more devolved powers overall in other legislative fields; law and order and the judiciary for example, and therefore have more general autonomy in comparison to Wales. These anomalies in legislative autonomy are certain to have an effect upon the psychological autonomy, will and confidence of both nations, a matter that appears in the research and that will be discussed further in the conclusions chapter.

This research also incorporates some philosophical grounding represented through participatory rural appraisal (PRA). This mind-set originates in the 1980s and aims at enhancing the role of the *participants* in the research story, empowering them with more influence and input to the research agenda and design. Although used mostly within developmental studies, a case can be made for adopting PRA for this particular research, given that the focus is on a social development through a community initiative. PRA has been used in researching community energy previously and “in the process researchers listen to local aspirations and creatively use the local context” (Giddings and Underwood, 2007, p.22).

The philosophy of PRA also encourages the researcher to modify their traditional approach. Rather than being the ‘imposer’ of an agenda, with pre-defined assumptions and with a particular design for gathering data in mind, the researcher allows the participants to lead the focus of the data collecting, highlighting what areas need to be researched and what benefits them as a community. Within the PRA mind-set, the role of the researcher is as a learner; learning through local people, listening rather than conducting, purposefully seeking out the unheard voices of the community, sharing ideas and the final outcomes of the research project amongst participants (Chambers, 1994). PRA therefore contributes to the constructivist epistemological approach of this study to co-construct and conduct the research. This was done particularly during the outset of the research project, during the scoping and piloting period. Consultations and conversations conducted within the sector during a scoping period spanning a year, fed into and finally formed the research questions. The lines of inquiry set out in the specific questions used for the semi-structured interviews and the Delphi method questionnaire were based on having learnt and listened to a number of stakeholders and local communities visited during this initial scoping study. The research design avoided being designed in isolation, and incorporated expert knowledge directly from the field. It is also intended that the final outcomes of the research will be circulated amongst participants. Interpretation of findings



within social science and qualitative research however is acknowledged as being, on the whole, more reflexive (Elliott, 2009), although direct views through quotes and answers of participants are presented throughout the thesis.

Critics of PRA have tried to demystify the romantic notion of the process by encouraging a more pragmatic approach. This is mainly done through ensuring the collaboration of other ‘experts’ within the process (not only the community), along with contextual understandings, such as policy evaluation (Bevan, 2000). This research is sensitive to this critique by Bevan (2000) and has therefore adopted a three tier approach. Making up the three tiers of the research are communities, facilitators and policy makers and policy development and relevant literature.

There is also an important point to be made regarding representation. Although a number of stakeholders and key community members were identified and included within this research, there will remain a number of unheard voices. Despite adopting the principles of PRA of purposefully seeking out the unheard voices of a community and relevant stakeholders, research “cannot avoid being partisan because it cannot represent *everyone’s* views” (Hammersley, 2000, p.12).

The reason for adopting the qualitative approach is to allow for the acquisition of rich, exploratory data from participants, and also to build upon existing qualitative research. This approach aims to place grassroots knowledge of those working within the community and cooperative renewable energy sector at the centre of the research. This is a means of challenging the ‘*top down*’ approach through which knowledge has been traditionally ascertained and also allows for the representation of a variety of participants (Smith, 2001). A plurality of in-depth views could lead to challenging the way that the community energy sector currently works and is supported in the devolved nations under study. The research is interested in the outlooks, hopes, aspirations, feelings and experiences of individuals, groups, facilitators and policy developers’ working in this field. The project incorporates a collection of these in-depth views and opinions from participants at multiple social layers; from grassroots to governance levels regarding disparities, developments and barriers in the field of community and cooperative energy projects in Scotland and Wales. This is in keeping with a constructivist methodology, which aims to discover meaning through a collaborative, qualitative approach.

### **3.5 METHODS**

The methods (or tools) used for gathering data for this research included an extensive literature review (which informed the research), a scoping study period (including meetings, email correspondence and phone calls with a number of community energy projects and facilitators in Scotland and Wales) and analysis of energy policy in Wales, Scotland and the UK. Feeding into the research also, were ethnographic field notes based on the observations made while staying, walking and exploring the case sites where the interviews were held. This was inspired by work done in the field of walking narratives, and how an understanding of place can contextualise the concerns of a local area and people under observation (Murray, 2012). I have continued to visit the places under observation in my research during the project term time – and walked extensively around these areas, interacting with local people and learning about the landscape and cultural history, thereby developing a more complete understanding of the context in which community energy in these areas have developed.

The main methods used for the research included in-depth semi-structured interviews with four community energy groups; two in Wales, two in Scotland; and a two-round Delphi questionnaire with community energy experts in both nations. These methods, along with an explanation of how participants were selected, are discussed below.

#### **3.5.1 Sampling and identifying participants for interviews and Delphi method questionnaire**

It is usual for qualitative researchers to use illustrative sampling of a population rather than random sampling as a means of selecting a demonstrative population (Valentine, 2001). Once Scotland and Wales were chosen as the comparative ‘subjects’ for the study (due to the disparities in the development of community energy in both nations), the first stage of the research design focused on identifying the main individuals, groups, institutions, governmental departments, and organisations within both countries that were best suited to partake in the research, and were an ‘illustrative’ sample of those involved within the sector. In order to find other contributors to the research, conversations were held with community members and experts working in the community energy field. In addition, networks were formed by attending numerous conferences, national and local meetings - both in the community energy sector and the academic. This is also known as a ‘snowballing’ effect (Noy, 2008). These conversations were a means of fine-tuning further avenues of research and modifications to the project. This

again adheres to the principles of PRA, allowing for the input of those working in the field of community energy to suggest what they deemed as important avenues and contributors for research in the field.

In relation to the community interviews, contacts that existed previously, along with introductions and enquiries through email, phone calls and general research through the internet formulated the list of participants. Groups in Scotland were confined to searches on the west coast (to allow for research into socio-linguistic aspects of community energy), and found through the Community Energy Scotland website. Groups in Wales have not yet been coordinated onto such a database, but were discovered through local contacts and knowledge. From this list of interview and questionnaire participants, each was contacted individually to explain the background to the research, the value of their participation and enquiries about availability and interest in partaking in the research. Site visits were organised as an initial scoping exercise, to meet members of community energy groups both in Scotland and Wales (along with communities that are a part of the Aran Islands cooperative on the west coast of Ireland). From these preliminary meetings with over ten community energy groups in Scotland and Wales, four case studies, two in each country, were chosen based on their size, similarities and objectives. All four groups proposed to or already had installed a community wind turbine. Looking at community wind turbines in particular became the natural focus for the project through the fact that the nature, and timings of each project coincided in a way that offered themselves as appropriate sites for comparison. Although community energy projects can include a variety of renewable energy projects, community wind projects will be the focus of this research, with many of the issues that arise applicable to other technologies too. Information about the four community energy groups are in Table 3.1 below, with further background to each four case sites presented in Chapter 4.

<i>Community Energy Scheme</i>	<i>Village and area</i>	<i>Renewable Technology</i>	<i>Ownership model</i>	<i>No. of Interviews</i>
Ynni Antur Aelhaearn	Llanaelhaearn, Pen Llyn, Gwynedd	500kW wind turbine	Cooperative	7
Horshader Devellopment Trust	Siabost, Isle of Lewis, Outer Hebrides	900kW wind turbine	Trust	10
Ynni Talybolion	Llanfechell, Amlwch, Ynys Môn	500kW wind turbine	Trust	7
Tiree Community Trust and TRELL	Isle of Tiree, Inner Hebrides	900kW wind turbine	Trust	10
<i>Total Interviews</i>				<b>34</b> <i>(37 individuals)</i>

**Table 3.1 Case Studies and sites, renewable energy technology and the number of interviews taken at each location.**

Participants for the Delphi method questionnaires were chosen through creating an extensive list of organisations, policy workers, campaign groups, facilitators and other community energy project organisers. These were contacted through phone and then through email if they agreed to take part in the Delphi process. Where possible I also met face to face with participants to explain the research and the worth of their input through the Delphi questionnaire. Table 3.2 below is a summary of the organisations that were involved and number of participants that contributed in this research practise.

<i>Country</i>	<i>Organisations</i>	<i>No. of participants (round 1)</i>	<i>No. of participants (round 2)</i>
Scotland	Planning and Energy Departments (Scottish and Welsh Governments); Planning and Community Development officers in Gwynedd, Anglesey, Argyll and Bute and Western Isles Council, independent consultants, Natural Resources	15	13
Wales	Wales, National Trust, Natural Heritage Scotland, Ynni'r Fro, Community Energy Scotland, Local Energy Scotland, Friends of the Earth.	16	14
<b>Total</b>		31	27

**Table 3.2 Participants of experts making up the panel for the Delphi technique questionnaire**

### **3.5.2 Conducting the Interviews**

Once the case study sites were chosen, each community was visited for preliminary meetings. This was to enable me to get to know the area, and the people involved and to discuss without any pre-conceived agenda about their project. This was keeping in mind the practice of PRA, discussed previously. It was important to become known and familiar with the groups themselves, rather than parachuting into their communities with absolutely no prior contact or attempt to visit and understand their area before commencing data collection. Emails were followed by phone calls, followed by preliminary site visits in May 2013 and contact was then maintained with the chosen four case sites on a constant basis. Through consigning a dedicated amount of time to this process from early on in the project, a personal and trusting relationship was formed between contributors and myself, and consequently, there was a good response during the period of data collection. From spring 2013 until the beginning of winter 2013, questions were prepared for my secondary site visits and period of data collection. Guided by conversations that were held during my first visit, along with secondary data from relevant websites and academic literature on the subject, semi structured interview questions were developed. These questions were revised following four stages of piloting of the questions

(done with members of a community energy group in south Wales, academics and friends). Interviews in Wales were conducted amongst Welsh speakers in Welsh. Lack of funding entailed that I could not conduct interviews in Scotland in Scottish Gaelic, although I had learnt a few phrases to show my understanding and sensitivity towards the local community language.

Interviews were conducted with community members who were directly involved with each community energy wind turbine scheme, along with some members outside – who could reflect, through a different lens, the impact of the group in the wider community. All interviewees were found through organising with central people involved in the project, and during my period staying in each community. Founders of the four community energy schemes had quite different ideas, visions and experiences in comparison to those who were less involved in the groups. This allowed for a more rounded view of current and past experiences, and the general vision for future development of each community energy project. It was also important to make participants feel at ease whilst participating by adopting unthreatening approaches in the interviews (Waddington, 1994) meaning that the interviews were non-confrontational and that the interviewees felt reassured during the interview process.

Semi structured interviews were chosen as a method to answer the aims of the research - to build upon knowledge through in-depth understandings of communities' experiences of developing community energy projects. Semi structured interviews are “neither an open everyday conversation nor a closed questionnaire” (Kvale and Brinkman, 2009, p.27). They are a way of understanding the experiences, or a lived world of a group of people (Folkestad, 2008). The questions were formed from meetings that had been conducted in the scoping study period during spring and summer 2013 and numerous meetings, phone calls and email correspondence with those working in the community energy field. Flexibility was important in the interviews, allowing scope for interviewees to develop theories or suggestions that might not necessarily have been formed if the interviews had been more structured. The questions were open ended, allowing the interviewee the ability to elaborate on a specific theme. Ideas that emerged during the interview period were noted as they appeared because they were important in guiding and informing the preliminary period of analysis (Flick, 1997).

The semi-structured interviews were held in the homes of many of the interviewees, or in appropriate meeting places. Interviews lasted from between thirty five minutes and two hours. Meeting places for conducting these interviews were suggested by the interviewees themselves.

This meant that the interviewees were comfortable with their settings. Most of the interviews were held individually, three with couples. One interview on Tiree was conducted in a car, with an interviewee driving around the island, to show and refer to significant cultural and historical sites. Before the interviews began, time was taken to introduce myself and the project, before ensuring that the participant was comfortable with being recorded and clarifying that the interview could be stopped if they desired or questions passed if needed. The interviews were recorded for later transcription. Notes were also made immediately after the interviews which formulated ideas for further enquiry. A copy of the semi-structured interview script can be viewed in Appendix 1.

### **3.5.3 Interview Analysis**

The interviews were recorded and subsequently transcribed with note taking made at all stages. These notes helped generate the themes which would go on to form the thematic data chapters of this thesis. Re-reading the transcripts in isolation before further scrutiny allowed the author to form a more concrete idea of emerging themes. The interviews were analysed in a cyclical way, through organising the transcripts of interviews in codes through NVivo 10 software. The analysing method was based on what is called bricolage analysis which allows for a “free interplay of techniques during the analysis” (Kvale, 2008, p.115). This involves the use of a number of different approaches in order to examine a wider array of aspects which make up the interview e.g. themes, narrative and content. In contrast to a systematic approach, meaning is constructed through an interaction of analysis techniques (Kvale, 2008). In this sense, an atypical grounded theory pattern is adopted, creating codes and subsequent themes within the transcripts (Bryman, 2004). These codes were created based on the words and meanings that were used within the interviews. The themes were driven by theoretically informed codes (based on literature review and discussions with a number of experts and community groups at the outset of the research) and codes driven by the data itself. There is also an intuition to the nature of the analysis, where ideas, themes, codes and interpretation are reached,

“... not by laborious pondering, but rather at a stroke, whereby patterns in complex wholes are illuminated by a kind of mental flashlight, giving an immediate and complete overview.”

(Alvesson and Skoldberg, 2000, p.52 quoted in Elliott, 2009, p.157)

### **3.5.4 Conducting the Delphi Method Questionnaire**

The Delphi Method is a means of condensing the comments of experts for the purpose of research and planning for the future (Rowe and Wright, 2001). It is a means of gathering comments from many experts in a particular field, comparing them and reaching a group consensus within the discussion. For the purpose of this research a classical Delphi design was chosen, to gather opinion and gain consensus amongst panellists (Hasson and Keeney, 2011). The process allows for open ended and closed ended questioning (but with encouragement to comment further) and is presented as a questionnaire to be filled independently. The answers are then relayed back to the panel, and further comments and a consensus of thoughts are encouraged amongst the group. Simply put, it is a simulated conversation. It is also a technique that reduces the problematic influences that arise through traditional group decisions (Gupta and Clarke, 1996). Within a traditional group situation, extroverted personalities can over dominate, and prevent other observations being imparted by a group. More introverted personalities of such groups can find it difficult to contribute their ideas under such circumstances. This is one of the core reasons for omitting the use of focus groups in this research and adopting the Delphi method technique. It is also a more practical method. Since the participants in this exercise are geographically dispersed across Wales and Scotland, it would be difficult within the time and financial remits of this research to arrange such a focus group. The Delphi technique allows the researcher to conduct a conversation between multiple participants at a distance, making it more manageable and affordable.

Despite this, it is possible to critique the process for being too superficial and systematic. If the theme or the mode of questioning is not inspiring then the response might be weak – people do not necessarily enjoy or are inspired in answering questions on paper or screen. Ensuring an engaged panel through preliminary face to face or over the phone contact with participants, ensured that there was a genuine desire to take part and contribute in the process. Gupta and Clarke (1996) suggest that the process is particularly appropriate when there is no historical data available for the research. To the author's knowledge, there has been no prior research into the differences between community energy experiences in Scotland and Wales. Similarly, there is no data on the cultural and linguistic benefits of community and cooperative energy groups. The Delphi method therefore posed itself as an interesting and appropriate method to adopt.



Again, questions were partly framed through adopting a PRA approach, contacting experts and travelling for informal meetings during a scoping period prior to preparing the questionnaire. The interviews with the community energy groups themselves, which were conducted before the qualitative Delphi method questionnaire, also informed the questions being asked of this panel of experts. There were two rounds of questioning in Wales and Scotland. Questions in the first round were the same in both nations; however, as the responses were slightly different in each case, the second round of the questionnaire was guided by the responses of the first round. Questionnaires in Wales and Scotland were both bilingual. The data was qualitative, open ended questions encouraging answers beyond a simple yes or no. The purpose was to see if there was a consensus emerging amongst participants, in regard to what challenges, opportunities and future laid in store for the community energy sector.

### **3.5.5 Analysis of Delphi Method Questionnaire**

The first round of the Delphi questionnaire was circulated in March 2014. Responses were then analysed through the bricolage analysis method (Kvale, 2008) considering themes, narrative and content, in the same process as used for the interviews. The most salient responses to the first round of questioning were circulated in August 2014. A number of comments were chosen for each theme that emerged through the questionnaires. These statements were selected to be used as prompts for the second round of questioning, to invoke more discussion and to draw conclusions as to where there was possible consensus. The second round of responses was collected in January 2015. NVivo software was used to organise the second flow of responses into existing themes (that arose from the first round of questioning) and any other themes or ideas or consensus that had emerged. Through use of coding the responses, themes arose for further discussion, many of which reflected similar issues raised by communities through the interviewing process. See Appendix 2, 3, 4 and 5 for the questions and statements that were circulated for the first and second rounds of this exercise in Wales and Scotland.

### 3.6 USE OF LANGUAGE (WELSH AND SCOTTISH GAELIC)

The west of Scotland and the north-west of Wales, from a socio-linguistic perspective, are similar due to the areas being strongholds for minoritised<sup>2</sup> languages of the proto-Celtic branch - Cymraeg and Gàidhlig; Welsh and Scottish Gaelic. Part of the research aimed to look at the cultural and language benefit of community energy. It became apparent in early scoping stages of the research that community energy was seen as a means of protecting cultural and language features of a community. A community energy cooperative on the Aran Islands of the west coast of Ireland (where Irish is a living community language, and was visited as a part of the scoping study period) state on their website, that one of their main objectives is,

"...to preserve the islands' unique language, heritage and culture by providing sustainable employment and a sustainable environment for people to live in"

(Fuinneamh Oileáin Árann, 2013).

Comparing the visions of community energy groups in Scottish Gaelic and Welsh speaking communities was one of the objectives of this research project along with seeing if or how they have linked language preservation to community energy generation and community resilience. The sustainability and resilience of these languages was also under observations. Whether or not each community energy project was acting with the intention of supporting their languages through ownership of their renewable project was also under examination.

Email correspondence with Delphi questionnaire participants was bilingual in Wales and Scotland. Questionnaires were also bilingual in both cases. Interviewees in Wales were interviewed in the language of their choice. It had been affordable to employ a Gaelic translator for the questionnaires and for official email correspondence for the Delphi method questionnaire. However, it was unfortunately not financially possible to employ a Gaelic interviewer for the purpose of interviewing Gaelic speakers participating in the Scottish interviews. When directly quoting interview participants or questionnaire respondents in this thesis, the original language in which their answer was given, along with the English translation beneath, is presented.

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<sup>2</sup> Minoritised is a term used to describe how a language has become a minority language. Languages are not minority languages naturally, but have gone through processes that have caused their decline.

### **3.7 ETHICS**

The ethical policy of Bangor University (Bangor University, 2008) was followed throughout the period of the research period. All views and opinions made by contributors to the research were valued, and names and personal details were kept private. Pseudonyms have been used throughout to protect the identities of participants. Ensuring that the participants were aware of these ethics facilitated greater access.

### **3.8 CONCLUDING REMARKS**

It has been postulated that the key to good research is not to aim for a consistent and ‘linear’ story, but to understand the nuances generated by different methods in producing a richer understanding of the research topic (Valentine, 2001). Adopting the above methods allowed this research to find relationships between community energy development in Wales and Scotland. What is particularly important is that this research combines the views of those developing community energy projects (the four case study communities) and those who facilitate and create the policy and processes allowing these communities to develop (Delphi questionnaire participants). These views, when examined in conjunction with the current political context and a review of the literature will lead toward a more rounded understanding of the community energy sector in Wales and Scotland.

## **CHAPTER 4**

### **CASE STUDY SITES**

#### **4.1 INTRODUCTION**

This chapter will give some background to each case study site under observation as a part of a comparison study between Scotland and Wales. An introduction to the historical, cultural and economic background of each community will allow for a better understanding of the motives behind each case site's pursuit of their community wind energy projects. This will give better context to the subsequent data chapters in the thesis. This chapter will first introduce each case study site separately, including population numbers and a cultural and historical overview of the area and its previous relationship with energy infrastructure and development. These introductions will present the type, nature and size of community energy projects being pursued in each case.

The four case sites were chosen due to their rurality and similarity of technology being utilised (500-900kW community wind turbines). The four were also chosen due to the fact that Cymraeg and Gàidhlig (Welsh and Scottish Gaelic) are still used as community languages. Despite being at different stages of development, the four case sites make for an interesting comparison, where lessons can be learnt from a mixture of experiences, hindsight and current experiences. This approach can contribute towards a rounded understanding of the trajectory of community energy projects development in two separate sub-nation states, within four different Local Authorities. Conclusions can then be drawn from these differences, which can contribute towards a number of new insights.

## 4.2 SCOTTISH CASE STUDY SITES

Figure 4.1 below shows on a map of Scotland where the two Scottish case sites, Siabost and Tiree are situated.

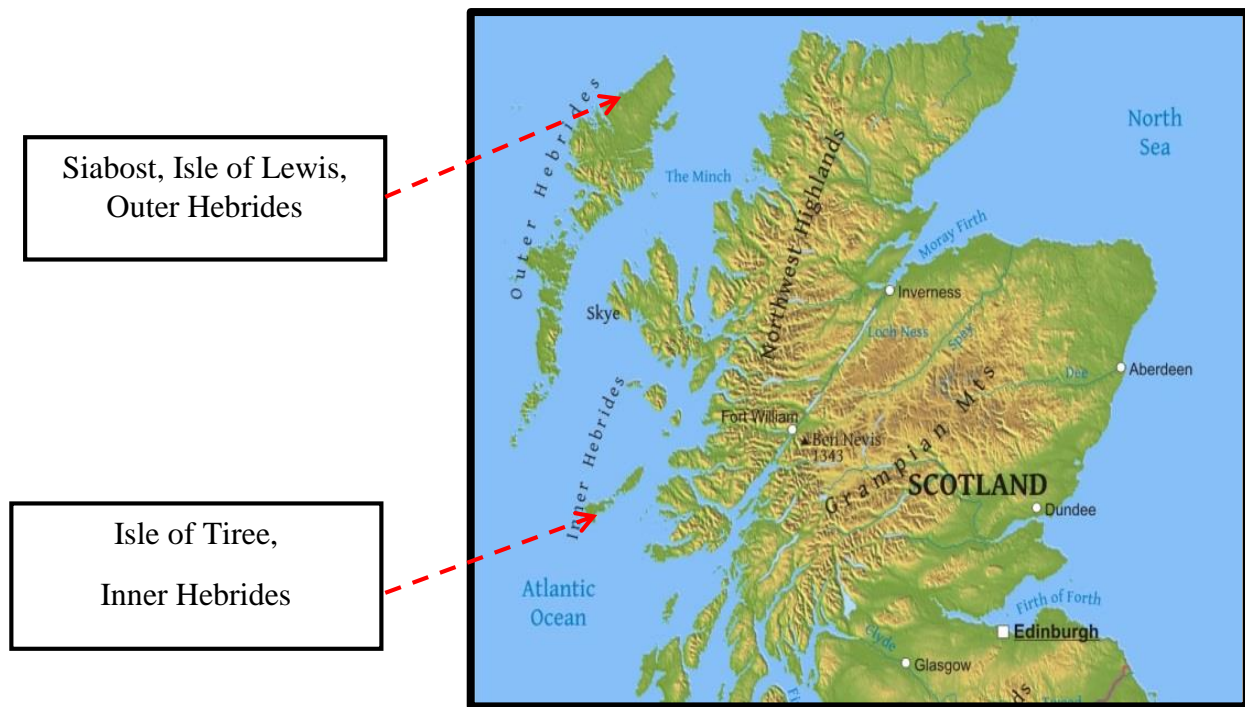


Figure 4.1 Map of Scotland showing Siabost and Tiree (Free World Maps, 2015a)

### 4.2.1 Siabost | Shawbost

Siabost (English spelling Shawbost) is a township that comprises of north Siabost, new Siabost and south Siabost, and is on the west coast of the Isle of Lewis in the Outer Hebrides of Scotland. The township falls under the local jurisdiction of *Comhairle nan Eilean Siar*, The Western Isles Council. One fifth of the population of the Western Isles are over the age of 65 and the last census report showed a decrease in the number of young people aged 5 to 18, although there was a slight increase in the population aged 5 and under (Comhairle nan Eilean Siar, 2015).

Siabost is to the west of *Mòinteach riabhach* - the Brindled Moor described as “several hundred square miles of bog, hag, crag, heather, loch and lochan that make up the interior of Lewis”

(MacFarlane, 2015, p.15). Siabost is approximately 40 miles away from Stornoway, the main town of Lewis and Harris. Unlike a traditional village that has a distinctive centre, Siabost is a dispersed township and its households are scattered across a few miles of coastline. North, south and new Siabost have a collective population of approximately 280 people (Scotland's Census, 2015). Including the areas of Bragar, Dalbeag and Dalmore, the area consists of approximately 560 people. Siabost has 77% Gaelic speakers, and in the wider area (including the aforementioned villages) as a whole between 62 and 74.6% of the population can speak Gaelic (Scotland's Census, 2015). However, interviews with local people suggested that the future of Scottish Gaelic as a living language was held in the balance,

“The Gaelic language will not die. The quality of life it's going to have is what's in the balance...ultimately the sustainability of the language is a question for the community, for the people who are there...and they have to take responsibility for that. The language is in a very, very precarious state at the moment and certainly its opportunity to continue as a living language in the organic way that it had developed is probably over, and the way that it will go on now is the way that it will be managed and constructed...”

(Calum, Siabost)

The tradition of crofting was of particular social, historical and cultural importance to the area. Many of the traditions bound to this small scale farming tradition are still practiced, such as peat cutting and common grazings (communal grazing rights of common land). Peat cutting was a local tradition that saw families from Siabost and the surrounding area working together to cut peats on *Mòinteach riabhach* - the Brindled Moor. However, the tradition of communal peat cutting was becoming less practiced, which in turn lessened the opportunities for people to convene, to socialise and to use the Gaelic language,

“...there's less people cutting peats, and these...traditional things are the places where the Gaelic gets spoken most...so there's less people doing that...I think you need the Gaelic traditional thing...the traditional activities to keep the Gaelic going...”

(Ciaran, Siabost)

The tweed industry and the Harris Tweed mills were also important employers and cultural contributors to the area. A Harris Tweed mill is operational in north Siabost, as well as smaller cottage industry millers in the surrounding area. Other employers included the off sea oil

industry of Scotland, meaning that many young men<sup>3</sup> would leave the area, or were employed away from the area on off-shore rigs for a certain amount of weeks or months per year.

Established in May 2005, Horshader Community Development is a community owned charitable trust based in Siabost aimed at developing and running a community wind turbine on behalf of and for the benefit of people living in south Siabost, Dalbeag and Dalmore. The turbine is,

“...owned and operated by Horshader trading subsidiary Risort Power Generation Ltd. This company gifts all of its residual profit to Horshader Community Development, which is a registered charity.”

(Horshader Community Development, 2015)

Therefore, the wind turbine is ‘owned’ by the local community through membership of Horshader Community Development Trust,

“The things that make it a community energy project are the fact that the community owns it, and they own it by being members of Horshader Community Development Trust, and the Trust is owned by its members, and the Trust owns in turn, the trading subsidiary, so the membership, through the Trust own the trading subsidiary, and therefore it owns the turbine and also, that money...The money that’s made - it comes back into the Trust not the trading subsidiary [it] is not liable to paying corporation tax, because it’s being donated to charity, so then when it comes into the Trust, it belongs to the people who are the members of the Trust, so therefore, that would define it as being a community energy project.”

(Stephen, Siabost)

Their 900kW wind turbine was erected in October 2012 (seen in figure 4.2 below) and is generating an income that is gifted to the Trust who manage its investment back into the community. The turbine is affirmatively named as *Cuibhle an Fhortain* in Gaelic – The Wheel of Fortune.

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<sup>3</sup> The off sea oil industry appeared to be a sector that employed local men rather than local women.



Figure 4.2 Picture showing the *Cuibhle an Fhortain* (The Wheel of Fortune) turbine from north Siabost

The challenges that have been identified and confronted in the area include a number of socio-economic challenges as explained on the Trusts' website,

“...the cost of living is high; there is a lack of employment opportunities and support for new businesses; community transport is insufficient; and social and leisure activities are few and far between. Additionally, ours is an ageing population, with 54% of survey respondents 56-91 years of age. We want to meet these challenges to ensure that our community remains a special place to live for generations to come.”

(Horshader Community Development, 2015)

Local employment had been created by the community wind turbine at time of interview, where the Horshader Trust, having acquired some joint funding, was employing one full time post and a part-time position in their offices in Siabost. There were also plans to employ a further member of staff for website and social media work. Furthermore, a poly-tunnel project that was being developed would entail the employment of one or more members of staff. Horshader Trust also organised a local minibus service (creating another employment role) that transported children to the local school or the local *croileagan* (nursery). Apart from the



development of more opportunities, employment and services as highlighted through the statement from their website as seen above, improving housing and making the area a desirable place to live was a linked driver that was cited amongst interviewees;

“I would love to see more houses being built here...and people being encouraged to move here, because of Horshader.”

(Ciaran, Siabost)

#### **4.2.2 Eilean Tiriodh | Isle of Tiree**

*Eilean Tiriodh*, The Isle of Tiree is the furthest westerly island of the Inner Hebrides, as seen in Figure 4.1 above. The island falls under the jurisdiction of *Comhairle Earra-ghàidheal agus Bhòid*, Argyll and Bute Council. The 2011 Scottish census reports there to be a 15% fall in the population number from 770 to 653 (An Tirisdeach, 2013). National Records of Scotland also supply projections for possible future population and demographic scenarios of Scotland, and predict that there will be further depopulation and aging of the communities of Argyll and Bute, including on the island of Tiree (Argyll and Bute Council, 2015). Just under half of the current population of Tiree are able to either speak write or/and read in Gaelic (Scottish Census, 2015b). Despite a drop in the number of speakers and concerns for the fate of the language on the island some interviewees hoped that there were possibilities of reversing the language shift,

“If we as an island pull together and try to make Gaelic the centre of one of the things we try to promote... I think we have a chance of actually doing better than the rest of Scotland in terms of up keeping our language...a small community with a high concentration relatively of Gaelic speakers - we could actually really do something to reverse that language shift.”

(Martha, Tiree)

Tiree's past economy was based mostly on agriculture and naval employment. Crofting was of particular importance on the island, and is the key to many of its cultural underpinnings. Tourism has become increasingly important on the island with the abundance of Machair<sup>4</sup> and birdlife along with surfing and music festivals playing a role in attracting visitors. Crofting was

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<sup>4</sup> Machair is a low-lying grassy and flowering habitat found on sandy dunes unique to the north-west coasts of Scotland and Ireland, and promoted by traditional relationships between crofting and the natural world.

still considered a strong factor on the island which reinforced the Gaelic language and the culture of the island,

“...there is a strong Gaelic culture here, and I think in terms of percentage per head of population we’re one of the highest percentages of Gaelic speakers in...the islands and highlands. So yeah, there’s definitely still a quite a strong cultural identity in terms of both the crofting side and the Gaelic language side.”

(Thomas, Tiree)

Tiree Community Development Trust was formed in March 2006 with the mission “to encourage and facilitate the sustainable development of the Isle of Tiree, with due regard to the unique culture, heritage and environment of the Island.” (Tiree Trust, 2015a). Their 900kW wind turbine was erected at the end of 2009 and the Windfall Fund<sup>5</sup> launched in 2011. The turbine is owned by Tiree Renewable Energy Ltd (TREL), as explained on the Trusts’ own website,

“Tiree Renewable Energy Ltd. (TREL) is a wholly owned subsidiary of Tiree Community Development Trust. TREL owns and operates the community wind turbine on behalf of the people of Tiree. All surplus revenue is donated to Tiree Trust to finance community projects through the Windfall Fund.”

(Tiree Trust, 2015b)

A full list of recipients of funds from the Windfall Fund can be found on Tiree Trust’s website, and range from maintenance costs for community buildings to business start-up grants (Tiree Trust 2015c). The main objective according to one interviewee is,

“To simply keep the community going and...keep it doing what it does and to encourage sustainable development of other things and other projects on the island.”

(Henry, Tiree)

The Tiree Trust (who manage the money generated by the community turbine) investments in the community are separated into four categories. These include a Community Support Fund (up to three thousand pounds), a Community Investment Fund (for long term large projects), Business Start-up Grants (five hundred pounds) and a fund for the maintenance of Community

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<sup>5</sup> Windfall Fund is the name given to the funding available for the community to apply for – funding that has come directly from the community wind turbine.

Owned Buildings. The Trust was also able to apply for match funding in order to pursue bigger projects, one of which was the proposal of developing a harbour for the ferry service and fishermen to use (simultaneously enhancing opportunities for tourism by supplying safe anchorage for yachts). Other ideas included the development of a community shop, a community swimming pool and community owned residential home. The Windfall Fund had already contributed towards the design and building of a boat shed (to house a traditional Tiree fishing boat), funds towards projects organised by the historical centre *An Iodhlann* and the community centre *An Talla* and a number of other community ran projects. The Tiree Trust currently employ eight members of staff, with the Music, Culture & Communications Coordinator role having been part funded by the Tiree Windfall Fund at time of interviewing.

#### 4.3 WELSH CASE STUDY SITES

Figure 4.3 below shows on a map of Wales where the two Welsh case sites, Llanfechell and Llanaelhaearn are situated.

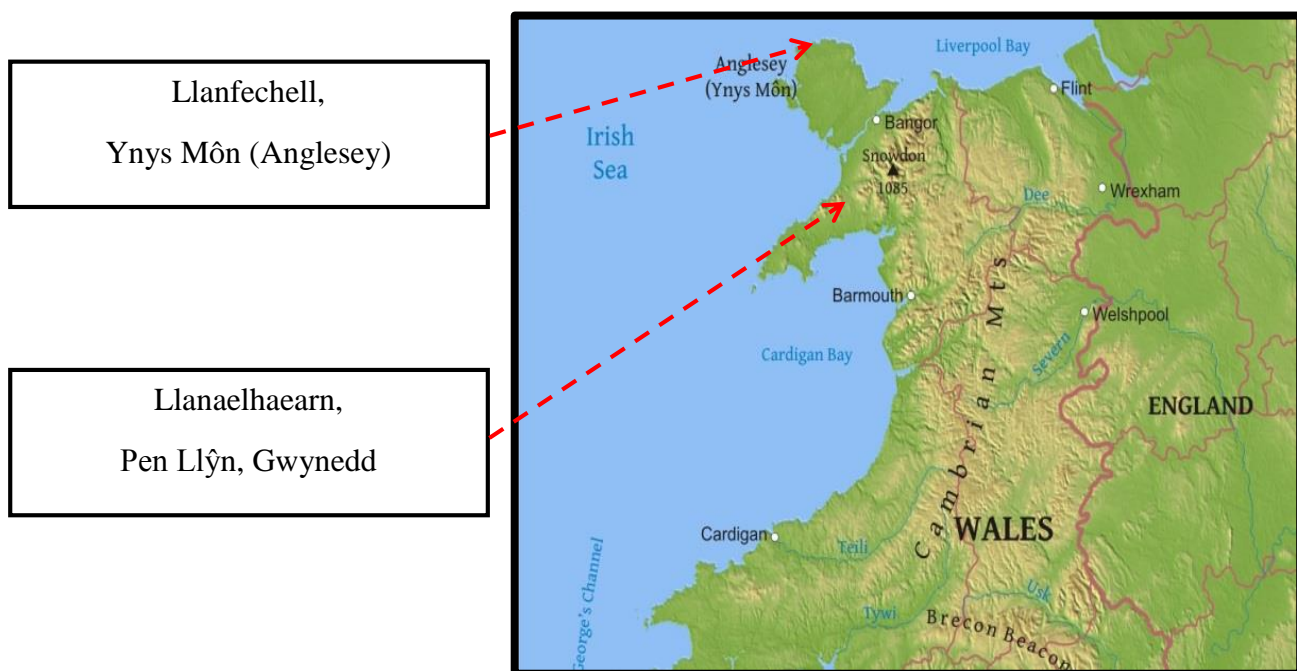


Figure 4.3 Map of Wales showing location of Llanfechell and Llanaelhaearn (Free World Maps, 2015b)

#### 4.3.1 Llanfechell

Llanfechell is a village on the outskirts of the coastal town of Cemaes on the north coast of *Ynys Môn*, the Isle of Anglesey. It lies within the jurisdiction of *Cyngor Ynys Môn*, the Isle of Anglesey Council. According to the 2011 Census, within the parish of Mechell (which includes the village of Llanfechell along with Carreglefn, Mynydd Mechell and Rhosgoch) the population is 1,293 people (Office for National Statistics, 2015a).

Llanfechell is based in a rural area in the north of the island, where agriculture is one of the main industries, along with employment in the public sector. Anglesey Aluminium had also been one of the major employers for the north west of the island until its closure in 2009. The Wylfa nuclear plant and its possible replacement, Wylfa B have also provided work for local islanders.

Ynni Cymunedol Talybolion Community Interest Company (CIC) was formed and registered in July 2011. The proposal is to develop and own a 500kW community wind turbine, from which the financial benefit would be shared amongst the communities of two parishes – Mechell and Llanbadrig. During time of interview, this turbine was proposed to be located amongst wind turbines already being proposed to be raised as a part of the Rhydygroes development. This proposal, however, was at the time of interviewing, uncertain. According to the Articles of Association for Ynni Cymunedol Talybolion, the objective of the CIC is to;

“- deliver projects which will promote environmental sustainability by generating power from renewable energy sources or by other methods and opportunities which may be identified;

- utilise revenue gained from the sale of energy to promote and support social sustainability by supporting new provision, or enhancement, of amenities and providing support for individuals, organisations or groups that will lead to social or economic benefit to the community;

- utilise revenue to support the sustenance and development of the linguistic and cultural education & heritage of the communities within the Mechell and Llanbadrig electoral wards;

- carryout any other community regeneration activities as decided by the Board of Directors.”

(Ynni Cymunedol Talybolion, 2015)

Although the project was very much in its infancy at the time of interviewing in 2013, there were clear visions as to the aim of the project. The community were expecting between fifty and a hundred thousand pounds in income each year from their 500kW turbine and were in discussions as to how this potential income would be distributed amongst the local community,

“We want the whole income...the entire income stream comes to the villages...our intention is to create a trust...this bifurcated structure...so you have a body that pushes the project through, and then you have a quite different kind of body that is distributing the benefits...that’s still the model that we have in mind.”

(Gerald, Llanfechell)

Apart from the community wind project being pursued by Ynni Cymunedol Talybolion, the community and a number of the interviewees included in this research were also involved with a project to develop a community shop in the village of Llanfechell. The community shop project was often described as being more manageable than trying to develop a community wind turbine project. Energy developments were nothing new for villagers in Llanfechell and neighbouring villages in the surrounding parishes of Mechell and Llanbadrig. Wylfa nuclear plant seen in the background of figure 4.4 below, associated pylons, wind farms and solar developments are all within a five mile radius of the village.



Figure 4.4 Standing stones to the north-west of the village of Llanfechell with Wylfa nuclear plant and attributed electric pylons in the background

Such developments had reportedly impacted on the cultural, economic and linguistic nature of the area. Wylfa nuclear plant had led to more people moving into the area due to the new employment opportunities offered. Although there were a number of employees from a Welsh speaking, local background, it had also attracted a number of people into the area, meaning that by the time of interviewing, less than half the children in the local primary school were from a Welsh speaking background. This had caused a language shift according to some,

“...[mae] na mwy o Saeson wedi dod i mewn ‘swn i’n ei ddeud...mi fasa wanio eto, pan fydd y sefyllfa, bod y steshon newydd yma’n mynd i fyny yn Cemaes de, y power station newydd”

“..[there] are more English people moving in I would say...[the Welsh language] would weaken again when the situation, the new station will go up in Cenmaes, the new power station.”

(Iwan, Llanfechell)

#### 4.3.2 Llanaelhaearn

Llanaelhaearn is a village on the eastern arm of the *Pen Llŷn* (Pen Llyn) peninsula. It is described as being a gateway to the peninsula, within the old administrative ward of *Dwyfor Meirionydd* and currently within the jurisdiction of Gwynedd Council. The last census showed that the ward of Llanaelhaearn (that includes the village itself and the villages of Pistyll, Llithfaen and Trefor) consisted of 1,683 citizens (Office for National Statistics, 2015b).

Llanaelhaearn, meaning the forehead of iron (in reference to the Iron Hill fort *Tre'r Ceiri* above the village on the mountain Yr Eifl) was a predominantly agricultural community before the development of the granite mines in the area in the 19<sup>th</sup> century. The local granite mines were a source of employment that led to a flood of incomers into the area – creating many of the villages in the locality, such as Trefor. Llanaelhaearn is famous for being the village which established the first ever community cooperative in the UK. Antur Aelhaearn, established in 1974 (and the root to the proposed community wind turbine project) was originally set up with the following aims, as written in their constitution:

- a) to maintain and promote the existence as a community of the village of Llanaelhaearn and the associated district, and in particular to halt and reverse the trend towards depopulation;
- b) to provide opportunities for the employment in the district, and for this purpose to set up, attract, introduce or carry on such trades, industries or businesses as may seem suitable to the character of the community;
- c) to provide such housing, amenities or services as may from time to time be deemed to be of benefit to the community;
- d) so far as may be considered necessary or expedient for the accomplishment of the foregoing objects, to provide and carry on any ancillary services, trades, businesses or constructions.

(Antur Aelhaearn Limited, 2015)

Apart from establishing a successful pottery and wool cottage industry, a building to contain a workshop and run community courses, members of Antur Aelhaearn also went on to develop the now famous Welsh language centre at the site of the abandoned mining village of Nantgwrtheyrn. The centre was a means of creating a hub for the furtherance of the Welsh language and to create jobs in the area. Despite demographic changes, Llanaelhaearn has remained a Welsh speaking community.

The community energy project in Llanaelhaearn is being developed by Antur Ynni Aelhaearn which is a sub-group to the Antur Aelhaearn community cooperative. The aim is to raise a 500kW wind turbine on Moelfre hill, opposite the Eifl Mountain. Although the business model for the project is not yet solidified, the senate of Antur Aelhaearn hope that the Antur Ynni Aelhaearn scheme will be ran as a cooperative (Antur Aelhaearn, 2015). Antur Aelhaearn would invest 80% of the costs, and four local farmers would invest the remaining 20% of costs, with both partners then receiving the same percentage of profits. The income that would be raised from the 80% profits returned to Antur Aelhaearn from the wind turbine would go towards funding a ten year project in the village, including developing the concept of a ‘Pentref Werdd’ – a green village plan that aims to encourage carbon-free solutions for the village, install greater insulation and provide solar technology for local homes. The vision also included the creation of affordable homes, the establishment of a heritage centre, a nursery, the support

of the local school and the encouragement of local business start-ups and enterprises, including the establishment of a community shop.

Plans included developing a centre that would be similar to a portal for the Llŷn peninsula – a centre for interpreting the history of the peninsula and the iron hill fort Tre'r Ceiri, thereby aiming to bring more publicity and visitors to the area. Interviewees also believed that there were business potentials in the area, despite a commonly placed myth that there has been no appetite for venture in Llŷn. Owain believed that their projects economic impact study would show the economic benefits that would come from their community owned wind turbine;

*“...yn [y cynllun economiadd] da ni’n gobeithio dangos y budd economaidd i’r pentra, faint o gyflogaeth fydd o’n creu, faint o incwm ac yn y blaen, a wedyn mi fydd o’n ddewis eitha’ plaen rhwng yr effaith gweledol o weld y tyrbine o ben Tre’r Ceiri a, neu creu cymuned hyfyw am y 40 mlynedd nesa’...Dwi’n gwybod pa un swm i’n ei licio...”*

“...in [the economic plan] we hope to show the economic benefits for the village, how much employment it would create, how much income and so on, and then it will be a clear choice between visual impact of seeing the turbine from the top of Tre'r Ceiri, and, or create a viable community for the next 40 years...I know which one I'd like to see...”

(Owain, Llanaelhaearn)

However, in the case of Llanaelhaearn there were doubts as to whether or not planning officers would consider fully the economic benefit of the proposed project. Local planners were perceived as being slow to realise the economic benefits of a community energy project, and focused too heavily on visual or environmental impacts,

*“Dwi’m yn meddwl bod cynllunwyr wedi arfer ar meddwl felna, mae nhw di bod yn meddwl ei hunain fel amgylcheddol yn unig am flynyddoedd maith... Da nhw ddim di meddwl yn nhermau...economaidd.”*

“I don’t think planners are used to thinking like that, they’ve been thinking of themselves as being environmental only for many years. They haven’t thought in terms of...economy”

(Tristan, Llanaelhaearn)



These doubts proved to be true. By the time of interviewing in December 2013, a mast had been on site recording wind speed and predicting possible sound impact of the wind turbine. After the time of interview, the project was refused planning permission by Gwynedd county council in 2014. However, there is an appeal to this decision, which will take place in autumn 2015.

#### **4.4 CONCLUSIONS**

As can be seen from these introductions to the case study sites, there are a number of similarities between the cases, most notably that they are rural and peripheral areas, with mainly agricultural backgrounds. They are also areas where Scottish Gaelic and Welsh remain, to varying degrees, spoken as community languages. All four areas are challenged with depopulation, an aging population and rising living costs – which can block younger families and people living in such areas. These socio-economic issues naturally threaten the future viability of each community, further exacerbated with actual and imminent cuts to facilities and services, as a result of austerity measures. These issues will become more apparent in the discussions disseminated in the following chapters, as we progress to look at how community energy projects play out within each of the case sites introduced here.

## CHAPTER 5

### COME ALL WITHIN: THE GRASSROOTS AND COMMUNITY ENERGY

#### 5.1 INTRODUCTION

*“Mae dyfodol pentre’ yn dibynnu ar trigolion y pentre ei hunan.”*

“The future of a village depends on the residents of the village itself”

(Tudur, Llanaelhaearn)

Community participation is one of the fundamental features that define the community energy sector. Knowing how communities begin, engage and work together in achieving their collective goals in renewable energy generation contributes towards the aim of this thesis in discovering the best ‘conditions’(Musall and Kuik, 2011) for community energy to multiply and grow as a sector. It seemed that all of the case study groups had experienced a number of challenges at grassroots level that threatened the viability and success of their projects. Rarely, if at all, did the communities talk about the ease of establishing their community energy projects. External and unforeseen influences also challenge the means that communities can work, their ability to adapt and succeed in their aims. It is telling that the established projects in Scotland took up to a decade to be fully operational – an excruciatingly lengthy period for a community project to keep up momentum, especially as the projects initial years were based on voluntary work. For the case studies in Wales, where their community wind turbines had not yet been erected - the operational date for their projects seemed a distant goal.

Difficulties and challenges that face a community setting up a renewable energy project are not only of a technical or administrative kind, but can arise from human relationships within a community. Despite previous research indicating that community renewable energy projects can lead to greater public trust and acceptance of renewable energy (Walker et al, 2010), it will become clear from the following chapter that this is not always the case. Analysis of interviews showed that communities are staggeringly complex and that human relationships within communities are not always reflective of the “warmly persuasive” connotations (Williams, 1976, p.6) that the word can sometimes conjure.

Keeping the main aim of the research in mind, i.e. identifying the ‘conditions’ that make community energy possible in different cases in Scotland and Wales, this chapter will present a discussion of the grassroots issues that can help or hinder the success of a community energy project. Through comparison of the four case sites, the chapter will illustrate the successes and difficulties faced at grassroots level, why they exist, their implications, and what is needed to avoid them in future to allow other community energy projects to succeed. An understanding of these nuanced challenges that face community energy, will contribute towards an appreciation of the issues facing the sector in Wales and Scotland.

## **5.2 LEADERS FROM WITHIN**

Support from within the community emerged as being of central importance in developing a community energy project in all four case sites. Rallying community support and using skills available within the community was a means of developing autonomously, without having to rely on support from outside. This sense of taking responsibility over the fate of a community is reflected in the extract below,

“Our local council I don’t think spend enough time thinking about what’s going to happen to the island in twenty years’ time, who’s going to be living here, are we gonna have anybody here...who’s the last to leave and switch the lights out as she goes sort of thing, you know? Whereas if you’re living in that community and you can start thinking of ideas...to keep everybody there and make it a better community then you’ve got to do it yourself... I don’t know if it’s right or wrong, but probably better to be honest, cause it’s people living there and their ideas so...it’s just got to be better.”

(Bridget, Siabost)

Taking responsibility for a community’s fate and to ‘do it yourself’ in regards of projects that would benefit the community was a common concept amongst interviewees across all case sites. Initial inception or the spurring of each community energy project came from particular individuals, as was the case in Siabost;

“...the reason it started is cause of Stephen, it hasn’t grown out of a local... something. It’s grown out of a man who has seen many different things from far away. All the local people have been involved but he is the driving force, I mean he is the vision of this thing...he is bringing other people on”

(Caitlin, Siabost)

The skills and experiences accumulated by individuals from outside their geographical community contributed towards the development of an initiative, or having ‘the vision’ as Caitlin above mentions, to pursue an initiative such as a community energy project. This was also the case with establishing the community cooperative Antur Aelhaearn<sup>6</sup> in Llanaelhaearn during the 1970s,

*“...fuodd Rhys a fi yn ddau o’r tu allan wedi dod i mewn i Llanaelhaearn, ag, oherwydd hynny oedd rhywun yn medru gweld pethau o berspectif wahanol i bobol oedd yn byw yn y pentra a’r ardal hefyd.”*

“Me and Rhys were both from the outside coming into Llanaelhaearn and, because of that, somebody could see things from a different perspective to people who actually lived in the village and area as well.”

(Tudur, Llanaelhaearn)

A trend in the interviews showed that community energy projects need a core of individuals that have ‘a vision’, the ability to show leadership and furthermore have the ability of gathering wider support from within the community, in order for such projects to succeed. This finding supports what has been noted in other community initiatives such as Transition Towns where a survey has shown that they tended to be instigated by an active core of individuals (Seyfang and Haxeltine, 2012). Leadership roles differed between each case, although it was possible to distinguish key people that guided each development. Again this echoes previous research that acknowledge the similarities between community energy groups in “having key committed individuals to drive a project forwards” (Seyfang et al, 2012, p.8).

Apart from leadership, participation, activism and a sense of doing things for the benefit of a locality was integral to the process of developing a community energy project. Such fundamentals could have an inspiring effect,

*“Mae o’r fath o beth... sydd yn ysbrydoli chi. Dwi ddim yn eistedd nol a gadael i bob peth rowlio drosda i, dwi’n gneud rhwbath fy hun, neu mi fedran ni greu rhwbath ein hunain...wedyn, mae o...yn codi ysbryd rhywun o’r safbwynt yna de.”*

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<sup>6</sup> Community Cooperative in Llanaelhaearn set up in 1974

“It’s the sort of thing... that inspires you. I don’t sit back and let everything roll over me, I’m doing something myself, or we can create something ourselves... then, that...it raises somebody’s spirits from that perspective you see.”

(Bedwyr, Llanfechell)

There was an inherent curiosity amongst some individuals, mostly those who had instigated the community energy projects themselves about how their communities could stand to benefit. Understanding how the local economy worked and how it could be improved, in these cases through community wind turbines, was a driving force for some individuals within the community. However, confidence in a community’s ability to ‘take on’ an energy generating project varied. In Wales, some interviewees thought that there was a lack of self-belief amongst Welsh communities in their ability to develop viable projects within their communities.

*“Problem sy’ gennon ni ‘di problem seicolegol fel Cymry. ‘Da ni rhy parod i ddeud, o dos na ddim byd yma i ni, rhaid i ni mynd o ‘ma... a ydan ni ddim yn sylweddoli cymaint sy gennon ni...potensial economaidd sy gennon ni ar trothwy drws ein hunain llu.”*

“The problem that we have is a psychological problem as Welsh people. We’re too ready to say, oh, there’s nothing here for us, we have to move from here...and we don’t realise how much we have here...the economic potential that we have on our own doorstep”

(Tristan, Llanaelhaearn)

In relation to the economic potential available through renewable energy projects, specifically community owned, the above chimes with what has been referred to as a “a psychological distance between people and energy generation” (Warren and McFadyen, 2010, p.205). If this psychological distance can be closed and an understanding of the economic benefits of community energy projects realised, perhaps this description above of a psychological distancing or the inherent lack of self-belief as evidenced through the Welsh case sites, could be reversed. The lack of confidence in the Welsh case sites was in stark contrast to the attitude found on Tiree,

“I think we were bolshie and we wanted to do it ourselves”

(Jane, Tiree)

It would seem then that self-belief in the ability and right to capitalise on local natural resources varied. The Scottish communities in this research seemed to be much more confident in pursuing their community projects. Whether or not this is an ingrained attribute, a national trait or circumstantial quality would need further research. Amongst First Nations people in Canada, there is an increasing feeling of locals 'rights' towards natural resources. As Phil Fontaine, former national chief of the Assembly of First Nations puts it: "We are not stakeholders. We own the land. We should make or be among the parties which make decisions over the use of lands, water and resource above and below ground" (Fontaine in Henderson, 2013, p.26). Perhaps this notion of a communities 'rights' to their natural resources, and capitalising on natural resources varies across different regions and cultures. Furthermore, the level of support available for communities pursuing community energy projects in Scotland might have fostered their apparent confidence, as we will look at in the following chapter.

Some interviewees were also moved by a desire to be resourceful and to develop 'green' renewable energy, although this was not one of the main drivers. Community energy was more frequently seen as a principled development that entailed a tangible benefit for the community. The pursuit for a community energy project was sometimes seen as a 'duty';

*"Achos bod na fudd cymunedol yn hwn, 'sa well gen i fuddsoddi yn hwn, a dyna beth sy'n gyrru ni...i neud o...hwrach y teimlad yna o ddyletswydd... yn hytrach na'r teimlad o 'get rich quick' a sdwffio pobol arall."*

"Because there's a community benefit to this, I prefer investing in it, and that's what drives us...to do it...it might be that feeling of duty...rather than a feeling of get rich quick and stuff other people."

(Owain, Llanaelhaearn)

This belief that there was a civic duty in pursuing community energy projects appeared to motivate support for community energy. However, leadership along with confidence from within the communities seemed crucial in this pursuit.

### 5.3 SKILLS FROM WITHIN

Identifying a wider skill base within the community for the benefit of developing a community energy project was also of particular importance. Sourcing skills within the community entailed that there was no need to find skills from outside, thereby keeping a sense of ownership and autonomy for the group (as well as keeping costs down). Although the skill set within each four case study site varied, all communities seemed to have a number of skills that were relevant to developing a community energy project. Antur Ynni Aelhaearn in Llanaelhaearn was the only group who had decided to employ a project officer from the inception of their project. Other groups had relied on voluntary members and support from government supported bodies to start their projects. Why this is the case is unclear, apart from there being more finance available for employing a project officer in Llanaelhaearn (due to money raised through activities ran through their established cooperative Antur Aelhaearn). Nevertheless, voluntary time and volunteered skills were seen as invaluable to the development of a community wind energy project,

*“Digwydd bod, bod yna sgiliau yna falla sydd ddim ar gael mewn pob pentra’ - dwi’n gwerthfawrogi hynny; a heb sôn am yr ymroddiad, y ffaith bo’ gen ti rhyw hanner dwsin o bobol sydd yn fodlon ysgwyddo’r baich...mae hynny’n peth mawr dwi’n meddwl i sicrhau llwyddiant...”*

“There happens to be skills that are maybe not available in every village - I appreciate that; and that’s without mentioning the devotion, the fact that you have a half dozen people who are willing to shoulder the burden...that’s a big thing I think to ensure success...”

(Rhys, Llanaelhaearn)

This support from within the community, the hours volunteered towards each community energy project was crucial. Some of the skills, particularly management skills, were developed amongst many individuals through having already been ‘active’ community members, and having had experience of running and maintaining past community projects. Other skills were the result of experiences acquired from past employment. One of these crucial skills was in the field of finance, a skill that had been essential during setting up both community energy project in Tíree and Siabost,

“...you certainly need somebody...you don’t necessarily need an accountant but you need somebody who’s good with numbers, because that’s what it’s all about, because it’s so easy to think, oh yeah – that’s fine that’s fine, and then you just start realising, well actually we’re going to make a loss if we’re not careful, or we need to keep an eye on such and such...”

(Jane, Tiree)

“I think there was a lot of help available when required. I mean like...the accountant from down the road here...I think he did a lot of ad-hoc assistance...the finance side...volunteered with us as well... I think a lot of these people go around looking for projects to go and do for nothing...and then move on when they’ve done the heavy hitting...”

(Ciaran, Siabost)

Ciaran intimates there was an altruistic quality in local people, who were willing to volunteer their time to community projects, and even actively looking for such projects in which to contribute their skills. These volunteers were of particular importance while the community,

“...were negotiating with the bank, negotiating you know, a two million pound loan and negotiating with the company who was providing it and all this. So there was a lot of big hitting to be done.”

(Ciaran, Siabost)

Other skills within the community that lent support to projects were resourcefulness and local knowledge. The steering group of the project in Llanaelhaearn saved their project thousands through showing that they could get their wind turbine to its proposed site on Mynydd Moelfre through only widening a small road in a few key places. This was the alternative plan to avoid having to engineer a new road that would have disturbed the local area, and again incurred additional costs.

Other skills present in the community were as simple yet crucial as filling forms, as Walter from Siabost remembers;

“It’s nice to think that you have skills or experience that may be in short supply where ...um, I can’t contribute to looking after sheep or something like that, but I can look at application forms for charitable status and so forth, and go duh-duh-duh-duh-duh –



sorted! Which is useful. In some ways it's a sort of a skill that's useful at all proportion to what it is cause it's the sort of thing that can be very intimidating"

(Walter, Siabost)

However, not all of the communities were confident that they had all of the relevant skills, particularly in Llanfechell, although they were still proud to be showing local initiative,

"We have found that there are certain skills that we lack... and we're going to have to compensate for those...but you know...the idea of doing things for ourselves is very satisfying really"

(Gerald, Llanfechell)

This would suggest that more support is needed for some community energy projects, and a need to contribute skills and training and support where skills are lacking within the community. This would be the case for all case studies, although it seems that some communities need more help than others.

Apart from contributing support through volunteering certain skill sets, many interviewees talked about *gaining* new skills through being involved in their local community energy project,

"It was really, really good... I got out more of it than they got out of me! It was a great experience for me...so that's the good thing. If you get involved you learn stuff."

(Ciaran, Siabost)

This learning was enjoyable for others that were active in their local community energy project, not only regarding energy distribution and generation issues, but practical skills. Skills learnt during the process of setting up a community energy scheme in Llanaelhaearn's case included project management and financial responsibility skills – skills that could make the community more equipped and resilient in the future,

*"Mae'n dysgu lot o wersi 'practical' i bobol dwi'n meddwl - sud mae menthyg arian, sud mae talu amdan y peth nôl - pethau dy pobol ddim wedi arfer efo hwrach yn draddodiadol...[maent yn] eitha' ceidwadol, ofn mentro a menthyg ag yn y blaen...ond, mae'n ffordd...i gymuned fod yn hunan gynhaliol am wn i..."*

“It teaches a lot of practical lessons to people I think - how to borrow money, how to pay back for the thing - things that people aren’t possibly used to traditionally...[they have been] a little conservative, afraid of risk and borrowing money and so on...but it’s a way...for a community to be self-sustaining”

(Owain, Llanaelhaearn)

Learning new skills and being involved in a community energy project was also seen as contributing towards local empowerment. A variety of skills and the ability to understand new processes had been learnt, arming the community for the future,

“We’ve got a body of probably thirty people now who are used to a battle, getting things done and how you do things and how you form a committee and how it runs properly and how you talk to banks and how you talk to lawyers, and that’s given a really you know, we’re... We can do things now...”

(Jane, Tiree)

Tiree was particularly well equipped with skills within the community which supported the development of their project. Individuals with financial, legal and engineering backgrounds in particular were crucial in establishing and developing the project over a course of many years. This support in the case of Tiree and similarly for all other projects, were also offered on a voluntary basis, avoiding costly fees. Other skills within each separate case study group included knowledge of planning procedures, agricultural knowledge and practical experience through serving as county councillors. Resourcefulness and problem solving gained from such experiences amongst community members contributed towards saving each project time and money.

## **5.4 COMMUNITY ENGAGEMENT**

“I just wish more people would get involved with it and show some interest”

(Helen, Tiree)

Wider community engagement from residents in four case sites was a desirable although difficult aspiration. It is assumed that community energy projects, due to their very nature, are steeped in the community and would instinctively involve an active and engaged community. However, in reality, it seemed that engaging communities in all case study sites was a difficulty.

Community malaise was a real problem for those that were developing their community energy projects. It was also a problem in a more general way for those who were running activities paid for by money generated from the operational community wind turbines,

“I’m really cheerful and positive and work my ass off and still people don’t really come out... ‘cause they can’t be bothered, ‘cause they just want to watch TV – instead [of]...do stuff and take part in stuff.”

(Juliet, Tíree)

Similar community engagement issues arose in Llanaelhaearn. Despite the history of cooperation and community engagement that had made Llanaelhaearn famous across the UK in the 1970s through the establishment of the first community cooperative, Antur Aelhaearn - this spirit of cooperation had recently eroded. The civic engagement and civic recruitment that are central to the social capital of a community (Hoffman and High-Pippert, 2010) seemed to be a thing of the past, according to some interviewees. There was particular disappointment that local people had not attended an open day event that aimed to explain the scheme that was being proposed,

*“Mae hyn yn deud lot amdan sut mae bobol wedi mynd i feddwl de. Dwi’n siŵr bo gynnon nhw diddordeb, mae pob tŷ wedi cael pamffled, dwyieithog yn egluro beth oeddan ni’n cynnig, a pan ar y ddyddiad daeth trideg o bobol yn diwedd, o’n i’n meddwl bod hwna’n cythreulig o siomedig a sa pobol wedi gallu rhoi pum munud o’i hamser i biciad yna a gweld, a jyst cael sgwrs, a dwi ddim yn gwybod pam – weithiau fedri di ddim neud dim byd amdano’r peth...”*

“This says a lot about how people have gone to think. I’m sure that they have an interest, every house has had a bilingual pamphlet explaining what we’re offering, and when on the day about thirty people came, I was thinking that was diabolically disappointing and people could have given five minutes of their time just to pop over and see and just have a chat and I don’t know why – sometimes you can’t do anything about the thing...”

(Owain, Llanaelhaearn)

This reaction to the project had a negative impact on the steering group, frustrated with the inability of other members of the community to see the potential of the project that could potentially generate an average of £150,000 a year for the community over the next twenty years,

*“...O’n i’n meddwl, wel os nad di hyn yn ysgogi pobol i cymryd rhan, a teimlo’n gyffrous am ei pentra, a be di’r posibiliadau, dwi ddim yn gwybod beth sy’n mynd i gyffroi bobol”*

“...I was thinking, well if this doesn’t inspire people to take part and feel excited about their village and what the possibilities could be, I don’t know what will excite people”

(Owain, Llanaelhaearn)

However, there seemed to be hope that their community wind turbine project would re-install a spirit of community cooperation,

*“...pan mae gennoch chi gymdeithas fel sa gynnoch chi rwan yn Llanaelhaearn... fedrwch chi neud dim. Ond dwi’n gobeithio, hefo’r prosiect ynni gwynt ma...y daw o a bywyd yn ôl ...Pan dwi’n deud bywyd yn ôl, brwdfrydedd, pobol yn sbïo tu allan i’w cylch bach nhw ei hunain, pobol â brwdfrydedd dros beth sydd yn digwydd yn y pentra ei hun felly, ag nid yn byw o fewn pedwar wal yn eu tai.”*

“...when you have a society such as the one you have in Llanaelhaearn now...you can’t do anything, but I hope, with the wind energy project...that it will bring life back to...when I say bring life back - enthusiasm, people looking outside their small circle, people with enthusiasm over what happens in their own village, and not just living within the four walls of their homes.”

(Tudur, Llanaelhaearn)

Community engagement and civic engagement was also thought to be spurred by central volunteering figures actively stepping down from their roles within the community energy development, so that others could ‘come on board’,

“I eventually stepped down from [being a director] in January this year, 2013, largely because I was beginning to get a bit exasperated with some aspects of, um, the final stages of the project, and partly because I think it’s a very good principle to keep things fresh, and because of the certain passive reticence of the community I felt that people were more likely to come on board if there was an obvious space, so I created the space for them. As long as I was there, nobody would bother to replace me, I had to go first.”

(Walter, Siabost)

Combating the tendency amongst community members to become cocooned within their homes was a familiar challenge facing all case study sites. As a consequence of this phenomenon, much of the effort needed to set up each community energy project fell upon the shoulders of a small number of community members. However, there was also recognition amongst these ‘active few’ for the need to create and spur more activism and participation within their communities. This was approached through aiming to develop the trust of the wider community.

## 5.5 EARNING TRUST

General support from within the community was not, and could not be acquired straight away. A certain amount of work was needed within the community to explain, encourage and to earn the trust and the support of community members that were not necessarily taking central roles in developing the community wind energy projects themselves. In Siabost, improving community engagement was addressed through creating a paid position for the Horshader Trust<sup>7</sup>. The development officer communicates and sustains a dialogue with local people about developments to do with the community wind turbine, alleviating any pressure from volunteers to engage and communicate all developments with the community. In Llanfechell, it was felt that more community engagement was needed, although in fairness, their project was still at conception phase. There was a general feeling amongst some however that there would be opposition towards the community turbine, and that ‘strong’ people who could engage with the wider community and gain local trust was needed on the steering group,

*“Mae gennon ni lot o bobol yn erbyn ti’n gwbod a mae rhaid chdi cael pobol cry ofnadwy i ddelio efo fo timbod.”*

“We have a lot of people against you know and you have to have people that are strong enough to deal with them you know.”

(Hannah, Llanfechell)

Rallying local community support was valued, and understood to be vital for the success of all four projects. Support from a small number of individuals who volunteered their time, expertise

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<sup>7</sup> The Trust who manage the finance coming in through the Cuibhle an Fhortain community wind turbine

or leadership roles was not in itself enough. However, gaining the support of local people in the community was difficult, to varying degrees in all case sites:

*“Mae’n job cael pobol pentra’ ‘ma at ei gilydd i neud dim byd de. Sydd yn bechod. Yr un un bobol sy’n gneud y pethau ‘ma i gyd yn y pentra’.”*

“It’s a job getting the people of the village together to do anything. Which is a shame. It’s the same old people doing all the things in this village”

(Selwyn, Llanaelhaearn)

The above statement reflects a common sentiment that recurred across the case studies. It seemed that getting individuals within a community together for a common purpose was a difficult undertaking. This phenomena was not only attributable to community energy projects, but was a common malaise to do with any activism within the community. Selwyn goes on to describe an account of the transient nature of the community - where people only seemed to stay in the village of Llanaelhaearn for a few years before moving on again. These more transient members of the village were non-committal in relation to any long term visions of developing the village or any projects in the surrounding area. The temporary nature of these community members suggested to Selwyn (and other interviewees in both Welsh case sites in particular) that they did not consider themselves a ‘real’ part of the community. Rae and Bradley argue that a sense of community arises from those who share a certain sense of unity to people and place (2012). However, if there is a lack of shared views, a cultural and shared commonality, attributes that can give grounding to a community (Parkhill et al, 2015), it seems that community projects can be adversely affected. This was certainly the case in Llanaelhaearn, where there were a number of ‘incomers’ who were actively against the community wind turbine project. They were seen by interviewees as unwilling to unite behind the community turbine (and other community initiatives) which embodied a local, cultural and common objective – to become self-reliant. Those who were heavily immersed in the community, through involvement in groups such as Merched y Wawr<sup>8</sup>, Cylch Ti a Fi<sup>9</sup> and the Urdd<sup>10</sup> in Llanaelhaearn were widely supportive of the community energy project, seeing the benefit in having a local income stream to support their community activities. In the case of

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<sup>8</sup> Social women’s movement through the Welsh medium

<sup>9</sup> Welsh language baby and toddler group

<sup>10</sup> A national movement organising Welsh –language youth activities

Llanfechell a small nucleus of people – ‘movers and shakers’ as they were called - were central to getting things done – without which nothing would be done,

*“...pethau fatha Menter Mechell, Ynni Talybolion, criw bach ydy’r movers and shakers, a duw mae hynna’n wir am bob cymuned de... ac heb y criw bach ‘na, snam byd yn digwydd de... ac os dach chi’n mderu cael y criw bach na i gyd weithio yn dda...mae pethau’n medru digwydd de, ond heb y cnewyllyn bach yna de, digwyddith ddim byd”*

“...things like Menter Mechell<sup>11</sup>, Ynni Talybolion - the movers and shakers are a small crew, and *duw*, that’s true about every community isn’t it?...and without that small crew, nothing happens...if you can get that small crew to work well together...things can happen, but without that nucleus, nothing will happen”

(Huw, Llanfechell)

In both Welsh cases, these small nuclei of ‘movers and shakers’ were sat on local community councils, school governing boards and church and chapel committees. This entails that a small nucleus of people had a grip on local power – possibly seen as being anti-democratic at a local level (i.e. that it was the *same* people on all committees and involved in all projects). This could lead to a situation where an unintentional ‘elitist’ group was formed,

*“Mae hynny’n bechod yn ei hun, achos mae o’n creu um, criw elitaidd anfwriadol o fewn cymuned. Dydw i ddim yn licio ei weld deud y gwir, ond mae o yn anfwriadol, dyw o ddim yn rhwbaeth mae pobol yn fynd allan i greu yn fwriadol a trio neilltio pobol, ond mae o’n rhywbeth sy’n digwydd achos mae’n anodd ysgogi rhai eraill i ymuno de.”*

“That in itself is a pity, because it creates a, um, an unintentional elitist group within a community. I don’t like to see it to be truthful, but it is unintentional, it isn’t something that people go out and try and create intentionally to side-line other people, but it is something that happens because it’s difficult to inspire others to join.”

(Owain, Llanaelhaearn)

Community engagement was recognised as something that needed more effort, in the Welsh case sites more than in the Scottish examples that were further ahead in their developments and already had their community wind turbines up and generating. Here lay a clear contrast in the interviews. The Welsh case sites appeared to be struggling with rallying community support

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<sup>11</sup> A community venture in Llanfechell

for their energy projects, whereas the Scottish case sites appeared to enjoy more support from within their communities. This could be attributable to the different stages at which each case site project was at. Both projects in Wales are at initial stages of their project development, whereas both examples in Scotland are fully developed, with their wind turbines up and generating money through the Feed in Tariff (FIT)<sup>12</sup>. The infancy of the projects at hand in Wales however, could mean that community support had not yet had time to develop and galvanize, since obvious benefit was yet to reach the community. Communities therefore, do not necessarily rally round a community energy project automatically at its inception, despite claims that they are potentially economically, socially and environmentally more beneficial to an area. In fact, there was some form of opposition towards all four community wind turbines during each inception phase. Both case studies in Wales however were living through this particular stage during time of interview, and therefore dealing with opposition within the community was a much more immediate experience.

Community opposition in Wales could also be due to the uncertainty of *how* the project will work, whereas the communities in Scotland are already living with the outcome and are already beginning to see the benefits of having ownership of a 900kW wind turbine that generates money for the community. However, lack of protest in case sites in Scotland does not necessarily mean acceptance, although the majority of the interviewees were wholly positive about their community turbines. Time will tell if the community schemes in Wales will eventually become more accepted within their communities. This is implied through retrospective insights from Scottish case sites as illustrated in the following extract, a conversation recalling the day of the community wind turbine launch in Siabost and how acceptance and support had changed during the course of the development,

Walter: “One thing that really surprised me, and made me smile, was when we had a sort of community day when the ribbon was going to be cut and I was really surprised at how many people all of a sudden were just there. You hadn’t seen anybody, nobody seemed to ask about it, every time there was an annual general meeting you’d get two people and a dog...there was no obvious...”

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<sup>12</sup> Feed in Tariff is “a government programme designed to promote the uptake of a range of small-scale renewable and low-carbon electricity generation technologies. It is available through licensed electricity suppliers.” (Ofgem, 2015)



Gladys: “It was really like that! About five of us met for five years and didn’t see anybody else!”

Walter: “No obvious interest, no obvious...nothing at all, and all of a sudden, these people were there and smiling and saying things like, oh, I think it’s wonderful seeing that, that on the horizon...”

(Walter and Gladys, Siabost)

This extract shows how the process of establishing a community energy project might begin in isolation, and possibly develop in relative obscurity, with only a handful of the ‘movers and shakers’ being involved, but can possibly end with galvanized community support. This reflects findings into the crucial role of a core of individuals within communities who will “commit to an exceptional level of community-oriented activity that can stimulate the ‘marginal’ activity of the majority of people who prefer minimal participation” (Hoffman and High-Pippert, 2010, p.7573). This nucleus is the fundamental driver for ‘community’ energy projects. This seems to be the experience in the Welsh case studies too – where developments are being driven by a small number of people in isolation. Support could become more apparent as their projects develop, as seen in the Scottish case sites. However, at present there seems to be an actively hostile opposition towards the community energy projects in the case sites in Wales, particularly in Llanaelhaearn. There were also apparent gulfs existing between people who had moved into the village and wider area and the ‘indigenous’ members of the community,

*“...be sy’n tynnu fy sylw ydi mae, y bobol dwad ma sydd ar blaen y gâd ymhobman yn erbyn y tyrbinau gwynt ‘ma, a bo nhw’n tynnu ambell i un lleol efo nhw llu.”*

“...what draws my attention is, the people who have moved here are at the front of the anti-wind turbine movement here, and they’ve drawn one or two locals in with them.”

(Selwyn, Llanaelhaearn)

Opposition reported in the case studies in Scotland did not have such an apparent split between ‘indigenous’ and ‘incoming’ members of the community. In fact, the opposite was the case – with many active members driving the Scottish community wind turbine project forward being ‘incomers’ themselves. Why the difference between the relationship between ‘incomers’ and ‘indigenous’ in the case sites will be discussed at more length further below. The Scottish case sites overall, experienced much more support for their community turbines. In Siabost there

was a high uptake of support for the community energy project that came under the wing of the Horshader Trust,

“...the Horshader group were fortunate in that there was a very, very high uptake of membership within the community...so they were able to show any sort of funding bodies that, it was well supported in the community. I think that would be absolutely essential for any place that... wanted to start one up. I don’t think it would work if you didn’t have the support of the community”

(Màiri, Siabost)

There was also a high percentage of support for the turbine on Tiree, despite some initial opposition. This was attributed to the fact that Tiree is a community on an island, and due to that isolation, *had* to accord with the project;

“I think an island like this it’s... easier to get support for a project like that – most people can see the benefit of it. There were one or two against and of course there’s people who ended up living quite close to it, and totally understandable, you know being a big turbine...but it was I think, it was 98% folk did – were in favour of where it was, so from that perspective it was easier.”

(Helen, Tiree)

Other frustrations that hindered a communitarian approach to community energy project development was how aspects of modernity and its impact on community life had prevented community members from participating,

*“Os ydi pobol yn mynd i aros yn ei tai bob gyda’r nos, watshad y bocs, ddim yn mynd allan, ddim yn mynd i addoldy ar y Sul - mynd i ddal i ddirywio mae’r pentra hwnw.”*

“If people are going to stay in their homes in the evenings, watch the box, don’t go out, don’t go to a place of worship - that village will continue to deteriorate.”

(Tudur, Llanaelhaearn)

This modernity has shaped a different type of society according to Tudur above. Rather than being interested and eager to develop and sustain the local community, people tended to live within the four walls of their homes. This relates back directly to difficulties faced in getting people involved in community development of any sort let alone participating in a community energy project. There was a genuine fear that communities were becoming disaffected and less

communitarian. This was an emotional and a practical difficulty faced by both Welsh and Scottish communities.

Apart from modernity making people more distant from each other within their communities, another hindrance to rallying community support and engagement for a locally owned renewable energy project was people's inability to engage with energy issues.

*“...mae'n job galad i ennill pawb drosodd...ac i godi ymwybyddiaeth...dyna ydi natur y broblem mewn ffordd...chi'n deud wrth pobol, mae pris trydan yn mynd i ddyblu i dalu am ynni niwclear, neu ynni ar y tir...cynhyrchu ynni yn y môr...tydi pobol ddim isha talu dimau ddim mwy na sydd rhaid – well gan nhw ddod a oil o Algeria neu lle bynnag...tydi'r weledigaeth ddim yn mynd dim bellach na hynna mewn ffordd...”*

“...it's a difficult job winning people over...raising awareness...that's the nature of the problem in a way...you tell people that the price of electricity is going to double to pay for nuclear or energy on the land...generating in the sea...people don't want to pay a penny more than they have to - they'd prefer seeing oil being brought in from Algeria or wherever...the vision doesn't go much further than that really...”

(Bedwyr, Llanfechell)

It seems that people are more concerned with the price of energy, rather than how it is supplied, and the sustainability of the energy resource being used. This excerpt above reflects again what Warren and McFadyen (2010) describe as a psychological distance between users of energy and the means of generating energy. This psychological distance seems to have created apathy in acting upon energy issues at a community level. This is especially interesting when considering Llanfechell in particular – a village which is set within an area encircled by energy generating facilities, with a number of wind farms and Wylfa nuclear site within a five mile radius. Does living close to energy generators hamper the willingness of communities to pursue community energy projects? – a question that opens up an interesting avenue for further research.

In contrast to the accounts of difficulties in regard to mobilising community support, there were comparisons drawn with historical community cooperation in the past. These references were made in all four case sites. Community energy projects therefore seem to lend itself well to communities that have experience of cooperation. In Llanfechell, the community had experience of pursuing and running their own allotment project. On Tiree, there were a number

of community groups that had been coordinating activities for years before the community wind turbine was developed. Antur Aelhaearn in Llanaelhaearn, the first community cooperative in the UK was another example of historical community cooperation. There was also a local cooperative bus company in Trefor (a neighbouring village to Llanaelhaearn) that had been in existence for over one hundred years. This company (that still runs today) was established as a reaction to dissatisfaction with traveling to the local town of Pwllheli on horse and cart. Owain uses this historical story of innovation and self-determination as a symbol of what is possible for a community to achieve. This example was very significant in his opinion, as there could be further cuts to services, such as the local bus service, due to current austerity measures in public spending;

*“Y cwestiwn ydi wedyn – be da ni’n mynd i neud? Er enghraifft os di’r gwasanaethau bys lleol yn mynd i gael eu dorri lawr... ydi ni yn Llanhaearn, Trefor a pentrefi eraill yn mynd i gwyno yn ddiddiwedd a neud placards a meddwl bod hynny’n mynd i weithio, ta da ni’n dod i fyny hefo syniadau eraill mwy chwyldroadol deud y gwir a ni’n gwbod sy’n mynd i bara am byth.”*

“Then the question is - what are we going to do? For example if the local bus service will be cut down...are we in Llanhaearn, Trefor and other villages going to complain non-stop and make placards and think that is going to work, or are we going to come up with our own ideas - more revolutionary to tell the truth and which we know will last forever.”

(Owain, Llanaelhaearn)

Drawing from local historical examples, and knowing what communities have achieved through community cooperatives and community bus cooperatives in the past, Owain believes that it is possible for communities to be innovative and think creatively,

*“Wedyn mae posib ei neud o, ond um, mae isho meddwl chydig bach tu allan i’r bocs arferol o jyst brotestio a cwyno am y pethau yma ynglŷn a’r pethau sy’n cael ei tynnu ffwrdd wrthan ni. Mae’n rhaid i ni meddwl, dwi’n meddwl, yn fwy creadigol yn y blynyddoedd nesa yma, neu mi gown ni’n gadael heb ddim de.”*

“So it’s possible to do it, but um, there’s need to think a little bit outside the typical box of just protesting and complaining about these things and the things that are being taken

away from us. We have to think, I believe, more creatively in the next few years, or we'll be left with nothing.”

(Owain, Llanaelhaearn)

The supportive role that retirees and older residents within communities played in developing community energy in the four case studies was also quite staggering at first glance. Apart from Tiree, retirees were shown to have been central to the development of each community energy project. This could be due to more free time that they had to contribute towards sustaining the development of such schemes. There were also useful skills that retirees could offer. Semi-retirees Tudur and Rhys for example, who were both involved with the project in Llanaelhaearn, had a wealth of experience having set up Antur Aelhaearn in the 1970s, and could pass on their experiences and knowledge to younger members of the community. A number of the steering group in Llanfechell and Siabost were also retired or semi-retired. There was however a desire across these cases for younger people within the community to take a more central role in the developments,

“What I would love to see is more of the people that are younger than me getting more involved with it because...I know it's for all of us, but it's particularly for the ones that are coming up after us as well...”

(Emma, Siabost)

This desire was also seen in Llanfechell, particularly as the project that they envisaged would last for at least twenty years,

*“...da ni'n mynd yn hŷn, chi'n gwbod, a mewn ffordd wel mi ydan ni'n chwilio am y genhedlaeth nesa' i ddechrau rhedag yr holl bethau ma...mae'n bwysig bod 'na genhedlaeth newydd yn dechrau cymryd gafael yn pethau de...oherwydd mae'n project ugain mlynadd wrth gwrs de, chi'n gwbod...a'r gamp ydi mewn ugain mlynadd y bydda gynnwch chi 'funds' i gychwyn rhywbeth tebyg eto de.”*

“...we're getting older you know, and in a way well, we're looking for the next generation to start running this whole thing...it's important that the new generation start taking a hold of things...because it's a twenty year project of course, and you know...the trick is within twenty years is that you'd have funds to start something similar again.”

(Huw, Llanfechell)

Despite the overall importance of requiring backing and assistance from within the community, amongst ‘incomers’ and ‘indigenous’ members of that community, and amongst young and older citizens, support from outside of the community was also of great importance, as Rhys from Llanaelhaearn summarises in the extract below;

*“Dwi’n meddwl hynny ydy’r cyfuniad i mi i gefn gwlad yn gyffredinol ydi arweiniad oddi fewn gyda chymorth o du allan, cymorth priodol felly o tu allan, so da chi’n denu’r cymorth a mae’r arweiniad yn dod o oddi fewn”*

“I think that the [best] combination for me for rural areas in general - is leadership from within with support from outside, relevant support from outside, so that you attract support from outside and the leadership comes from within”

(Rhys, Llanaelhaearn)

## **5.7 A LITTLE HELP FROM MY FRIENDS? A WIDER COMMUNITY ENERGY NETWORK IN WALES AND SCOTLAND**

Support received from a community energy network was mentioned in many of the interviews. Many people spoke of the importance of a relationship with other communities that were developing similar community energy projects. In both nations there was a network which acted as a source of support and information for community energy groups, through which there was a willingness to share information and learn from experiences. This network seemed much more tangible in Scotland - possibly because there are so many community energy projects completed and underway and hence they have enough home-grown grassroots expertise to share. At the time of interviewing, this network was facilitated by Community Energy Scotland (CES), who were actively putting communities into contact with each other. They also have an online webpage mapping the different types of community energy projects developed as a means to “share and network” similar experiences (Community Energy Scotland, 2014). There is no website which lists information about community projects in Wales, making it more difficult for groups to network and share experiences. Knowledge of other projects seemed to be sporadic. There was some knowledge of projects happening in mid and south Wales (Eco-Dyfi, Cwm Arian, Awel Aman Tawe and Egni Coop were mentioned), along with projects in the Lake District and Cornwall. There was a keen interest and knowledge

about community energy in Scotland, but less knowledge of more local community energy projects. Some interviewees talked about sharing technical equipment (a mast used for measuring wind speed in Llanaelhaearn), and also visiting on site examples such as the Bro Dyfi turbine in mid-Wales.

In Scotland, there was an established network and knowledge of other community energy groups, as well as practical cooperation with other community schemes. Interviewees in Siabost spoke of their groups' cooperation and constant communication with other community energy groups on the Isle of Lewis (in the northern townships of Tolsta and Galson) and the Uists. Having this connection with other community energy projects was valuable to the Horhader group in Siabost as a means of providing support in what can be a lonely pursuit,

“...with the Galson Trust, and with the north Tolsta Trust - I've a good relationship with each of the development managers there because, you know you're working in isolation really, you know, and... it is good to just have a get together every now and again, we kind of see what's happening in their areas and you know kind of the issues they're facing, and the challenges...”

(Molly, Siabost)

The above extract shows that networking plays an important supportive role amongst community energy projects – with groups supporting each other in what would otherwise be quite an isolated process. This is evidenced in previous research in which a UK wide survey showed that “forming supportive partnerships and information-sharing networks” play an important part in the community energy sector (Seyfang et al, 2012). These networks were,

“...helpful to be able to share ways of getting round things, experiences we've had, people we've met who've been helpful.”

(Walter, Siabost)

Stephen from Siabost also recalls learning a lot from their own personal experiences in setting up the community wind turbine, and how passing on information and experiences in the meetings set up by Community Energy Scotland allowed other projects to develop faster and save money, as he explains in the extract below,

“At these meetings then... we would pass information on to other people, and when they'd come to those problems...like for instance...We got a bill for about £10,000

about a year ago for rates right...£10,000 – that’s a lot of money. So we had to do a bit of digging around...and then we found out that...under council legislation, we were duty bound to pay this, but under Scottish Government legislation which over-ruled the Council legislation...we could actually apply for exemption. So we did that, wrote them a letter, and had to quote all the...document numbers and everything, and references, and sure enough...we got a refund to cover that first invoice, and then we got another one, exempt and ‘0’ on it. So we passed that onto everybody else so that when they came up against that they didn’t have the difficulties...and that was it...So all of these people have been saving time...and it’s been gradually getting quicker and quicker...because of that - that effect of sharing information.”

(Stephen, Siabost)

This learning experience and the sharing of information within a community energy network was also the case in Tiree, although they believed, that being one of the first community wind turbine projects in Scotland had put them in the position where they were sharing information, tips and guidance, rather than receiving any from other community groups,

“Because we were one of the first communities... to go through this process, we do get quite a lot of...requests for help and information...We are in the position to be able to help other communities go through the process... We do quite often take a call from a community that are you know coming up with a certain issue – they’ve just got to find out, how do we tackle that particular issue...Most projects are now coming on to the grid now, and they’re starting to earn money and they’re wanting to know information more from the Trust side about how the grant system operates and how we set that up, so there’s two aspects - there’s the sort of very technical side of setting up TREL<sup>13</sup> and then there’s...the fall out would be the operating the grant scheme which a lot people are interested in how we are doing it.”

(Thomas, Tiree)

Tiree was also able to compare notes with other community projects that were developing at the same time as them,

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<sup>13</sup> Tiree Renewable Energy Limited



“I think probably at that time, Community Energy Scotland were just really getting their act together as well...along with Westray<sup>14</sup>, Gigha<sup>15</sup>...but they were much smaller, they were two or three years ahead of us, and Westray were looking at having a big turbine as well, so there were the two islands and we sort of were able to compare notes with Community Energy Scotland”

(Jane, Tiree)

From the perspective of the case site interviewees in Wales this level of intimate networking was not currently present. With the recent establishment of Community Energy Wales since the time of interviewing however, this could likely change. Nevertheless, all of the interviewees in the case studies in both Wales and Scotland showed enthusiasm in encouraging other communities to develop their own energy projects. There was also a sense that communities had a duty to tell others about the possibilities and the benefits of pursuing community energy and had an advocacy role to play for the furtherance of the sector.

## 5.8 TEETHING ISSUES: A NEW VENTURE IN A NEW FIELD

*“Pan mae gen ti rhywbeth newydd, mae na amheuon amdano fo”*

“When you have something new, there are doubts about it”

(Selwyn, Llanaelhaearn)

Community energy as a mainstream form of renewable energy generation is a young concept and young sector which seemingly has an effect on how it was viewed by local communities as is suggested from the extract above. People have become accustomed to energy being produced and provided by large, private developers – the “psychological distance between people and energy generation” (Warren and McFadyen, 2010:205). As a consequence of being a relatively new concept and “discovering new territory” (Tristan, Llanaelhaearn) – community energy projects seemed to generate some doubt within geographic communities, particularly

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<sup>14</sup> Westray Development Trust are based on Orkney in Scotland. They use income generated through their 900kW wind turbine (owned by its subsidiary company Westray Renewables Ltd.) to “develop the economic, social and cultural sustainability of our community by harnessing the quality of our resources, people and island environment” (Westray Development Trust, 2015)

<sup>15</sup> Gigha is a small island off the coast of the Mull of Kintyre in Scotland. Gigha Trust generate a projected £150,000 gross annual income from three 225kW wind turbines owned and operated by its subsidiary company Gigha Renewable Energy Ltd. (Gigha Island, 2015)

in the Welsh case study sites. This was reflective of experiences in the Scottish case sites too, although there was a belief that doubts were being gradually tackled through the delivery of numerous projects. This initial doubt is natural according to Jane from Tiree who compares the reaction of islanders to when electricity poles were first introduced and how the “people were horrified” by the visual impact of this new technology accompanying the arrival of electricity. However as people have become ‘used’ to living with these poles, so too she believes they would become used to the community wind turbine of Tiree, and the concept of being community owners.

Another initial ‘teething’ problem common to all four case site projects was the justification used to argue for the establishment of such a project in the first place, particularly a wind-turbine project. Controversy and doubts about the wind technology’s reliability, and in some cases, saturation and visual impact was a common worry during the initial set up of the community energy schemes. This was especially the case on Anglesey, where many large, privately owned energy generating power plants, including a number of wind farms, were already established in the locality. Local people saw that another energy project, be it privately or community owned, was undesirable – particularly as Anglesey as a whole was perceived as producing enough electrical energy. Other areas that were developing community owned energy projects were seen as being different and more capable than Llanfechell,

*“Pan oeddau ni di bod yn...cyfarfod pobol oedd wedi neud prosiectau yn yr Alban, mae nhw yn rhyw cymunedau pell anghysbell, ond i rhyw rhaddau, mae na fwy o undod yn y gymuned oherwydd mae nhw ar ben eu hunain yn bell o bobman, ac y, mae o’n rhwbath fedar pawb yn y gymuned elwa ohono fo, a mae nhw wedyn yn fwy bodlon i’w derbyn e de, ac yn fwy bodlon y, gweithio tuag ato fo. Yn fama mae...da ni’n cystadlu yn erbyn gwahanol rhwystredigaethau... mae hynny’n neud o mwy anodd... ella bod o’n haws cael y gymuned i gefnogi tyrbin pan mae nhw wir angen un ar ynys fach ella’, neu mewn rhyw gymuned sydd ar ben ei hun, sefyll ar ben ei hun yn bell o bobman”*

“When we...met with people who had done projects in Scotland, they are [members of] some faraway communities, but to some extent, there is more unity in the community because they are on their own far away from everywhere, and it’s something that everybody in the community can benefit from, and then they are more happy to accept it then, and more happy to work towards it. Here it’s...we’re competing against different obstacles...that makes it more difficult....it might be easier to get the

community to support a turbine when they really need one on a small island maybe, or in a community that is on its own, standing on its own far away from everywhere.”

(Bedwyr, Llanfechell)

However, the above perception of Scottish rural communities and community energy project development is not necessarily accurate. Both rural Scottish case studies interviews revealed that there were similar difficulties as had been experienced in Wales concerning initial support amongst members of their own communities during the inception of their community wind turbine projects,

“...it’s not easy you know, I think as soon as you come up with an idea, there are ten people lining up to make things as difficult as possible for you instead of saying, right, we’ll come and help ye...they are lining up to put as many obstacles in your way as possible...I really do take my hat off to the people that are involved in that. Cause some of them had nearly, was responsible for...going to an early grave sort of thing, cause they got so much grief from the thing. And it’s just not, it’s just not right at all.”

(Fergus, Tiree)

## **5.9 MANAGEMENT OF THE PROJECT**

Administrative burdens and management of projects was a barrier for communities, as the work involved in finding different grants and tariff systems, without much guidance or assistance, can be arduous as evidenced in previous research (Hain et al, 2005, Rogers et al, 2008, Yadoo et al, 2011). The length of time that community projects take from inception to completion, and hence the amount of time needed to volunteer is an often quoted barrier (Seyfang et al, 2012). High levels of administration and the voluntary management of community energy schemes can cause projects to develop at a sluggish pace. It is understandably disconcerting for communities to know that projects can take up to a decade to implement,

“...it took years and years and a vast amount of work for a lot of people...a huge job in terms of budgeting, in terms of dealing with the bank, in terms of dealing with solicitors in terms of the estate to get the land in the first place.”

(Henry, Tiree)

The amount of time and amount of volunteering needed to progress was clearly an issue for communities in Scotland and Wales,

“This sense of not having made it happen yet, for me that frustrates me, but I think you know there just are these other outside factors which have slowed things down.”

(Gerald, Llanfechell)

Working with a volunteer committee and board of directors could also bring challenges for community energy groups. It was also difficult to draw upon the volunteering time from small populations in such rural communities, people who also had their own lives, work and family commitments – some of the issues echoed in the conversation between Walter and Gladys below;

Gladys: ...again there's the difficulty of getting people to come out to meetings, whether it's about the poly-tunnels or the playpark or whatever but, it's slowly beginning to happen – it's very dependent on the same people all the time but, but most community groups are, but we're not a big population to draw on. There's 80 households?

Walter: 80 households

Interviewer: Does that make it easier or more difficult or...

Gladys: Harder, harder – because you've got a very limited population to draw on...

Walter: And if we were individuals who had shall we say, shall we say, proper jobs, it wouldn't have happened...there was no way we could have done what we did if we'd had ordinary jobs.

Gladys: Somebody needed the time and energy and patience in the day to get this up and running so Stephen's basically retired. We certainly have time.

(Gladys and Walter, Siabost)

There were some who felt uncomfortable with being the managers of financial distribution and project development within the community after establishing their community turbine. The excerpt below discusses how one of the interviewees felt uncomfortable about making decisions on the outcomes of a cafe and crèche, that was refused funding from the Horshader

Trust in Siabost since it did not comply with charity law (as the individual would be profiting from the business plan),

“So when they were discussing all this, I was on board then and they were discussing all this about, should this girl be given help from Horshader, and what kind of help could they give other than handing a cheque and sort of thing. I was sitting amongst people who were, well they had a questionnaire in front of us and different categories on how would this help the community and things like that and I thought, oh, this is too much for me, I don’t want to be involved in this bit because it...I knew the people who had applied, and I wasn’t going to sit as judge and jury over them”

(Emma, Siabost)

How charity laws worked influenced the way the Horshader Trust distributed the money that they raised through their wind turbine,

“...they’re doing all of this for the right reason there’s so much potential – but they haven’t really worked out how to do it even yet, and it’s all circular and it’s all charity law, because... you can’t do anything for anyone’s personal gain; and you can’t do anything that will interfere with anything else, you can’t do anything that’s basically going to stop the council doing stuff it should be doing anyway, it seems very difficult. On paper there’s so many community things we could do – we made a huge list of things we would like, community was all polled...and it’s actually really hard to spend the money, they’ll get better at it, it’s only in their early stages like”

(Caitlin, Siabost)

Despite the ‘huge list of things we would like’ that had been developed amongst community members in Siabost – it seemed difficult in following phases of the project to implement them. On Tiree, the ‘oldest’ project of the four case study sites, it seemed that at time of interviewing, there was a dry period of applications from groups and individual residents for money from their Windfall Fund. Tiree Trust could allow for loans for business start-ups on the island, although the difficulty in doing so was recognised,

“There’s a pot of money which is business start-up loans...when the Windfall Fund first started, and it still is open to private businesses as long as it generates employment opportunities, promotes Tiree and all those sorts of things...but it’s difficult to give

community public money to a private enterprise that a part of it goes back into somebody's pocket.”

(Jane, Tiree)

It appears that not only do communities have to struggle through a process of getting a community wind turbine, but that there are continuing difficulties to do with management of money and profits, and how these are distributed once the turbine is up and running. As Caitlin puts it,

“Building the turbine was one thing, getting the projects going seems to be quite another.”

(Caitlin, Siabost)

## 5.10 COMMUNICATION

“...there's a lot about it I don't fully understand at this stage... it's early days”

(Emma, Siabost)

Although termed ‘community’ energy, the community owned wind turbine projects in all four case studies relied heavily on either the voluntary work of individuals or that of a small steering group, rather than a *whole* community. These active bodies had varying levels of success when attempting to communicate the principles and activities of the project to the wider community. Despite diverse attempts to be inclusive, it seemed for practical reasons, that initial developments of the community energy groups were undertaken by small groups ranging from one to eight people. This small nucleus of active community members working towards has been reflected in past research on civic engagement and community recruitment and participation (Hoffman and High-Pippert, 2010). Securing the support or even the understanding of the wider community with regards to the purpose and structure of the energy project proved difficult. Community engagement required tactful management of interpersonal relationships with local residents. This often proved more difficult than the technical and bureaucratic aspects of project development. Dealing with people and a number of emotions and human relationships sometimes posed a more nuanced difficulty that needed its own particular skill set.

One of the drawbacks mentioned by interviewees regarding community engagement was that the steering groups were sometimes underprepared. This was particularly relevant to the experiences of Llanaelhaearn, who had organised an open public meeting at the very inception of their project. At such an early stage, the steering group did not have any concrete information to share with community members. Also, through the very nature of being an open meeting, wind turbine opposition groups in the Pen Llŷn area were able to attend, causing a loud opposing voice from the very outset,

*“...baswn i ddim yn awgrymu cael cyfarfod cyhoeddus, heb fod ganddoch chi y ffeithiau i gyd o dy flaen... Wedyn mae’r broses yma yn bwysig...Hwrach bysa diwrnod agorad, a bod fwy o feddwl wedi mynd i mewn iddo cynta wedi bod yn well, yn hytrach na’ jympio’n syth i fewn i gael cyfarfod cyhoeddus, lle oedd na gyfle i bobol jyst fynd yn hollol boncars – a dyna ddigwyddodd, ar ambell i stage yn y cyfarfod arbennig yna...”*

“...I would not recommend having a public meeting without having all the facts in front of you...so this process is important...Maybe an open day, and that there had been more thought going into it first would have been better, rather than just jumping straight in to having a public meeting, where there was an opportunity for people to just go completely bonkers – and that’s what happened at certain points of that special meeting...”

(Owain, Llanaelhaearn)

A similar ‘mistake’ was made in Llanfechell, where a public meeting to discuss a local private application for a wind turbine became an unofficial launch of the idea to develop a community wind turbine. This came as a shock to some people – active community members and local community councillors, who did not know anything about the project,

*“Wel, do’n i ddim rhy hapus iawn de - dim am bod fi isho gwybod bob dim am bob dim de - ond ti’n gwbod y gwaith wyt ti’n rhoid i fewn yn y gymuned...o’n i’n weld o’n wael bod ni’m yn cael gwybod. Oedd fi a cynghorydd arall ddim yn gwybod dim byd amdano fo...Ella bod nhw wedi meddwl deutha fi neu, timbo bod nhw ddim wedi trafod o ddigon...a timbod a bod nhw am dod a fo allan timbod nes ymlaen, ond oedd o fatha ‘whoa – what’s this?’...”*

“Well, I wasn’t too happy you know – not that I want to know everything about everything – but you know. The work that one puts into a community...I saw it was

bad that we weren't told. Me and another councillor didn't know a thing about it...Maybe they had thought about telling me or, you know that they hadn't discussed it enough...and you know that they wanted to announce it later on, but it was a bit like 'whoa – what's this?!'..."

(Hannah, Llanfechell)

Hannah's comment suggests that community members can easily be made to feel 'left out' of community energy developments, if initial communication neglects to have engaged with them. Knowing when to announce, and to whom to announce such a development as a community energy project needed tact. It would seem that personal relations with the community are essential from the very beginning, as Hannah goes on to explain,

*"Mae rhaid i chdi wybod be mae pobol isho, cyn i chdi rhoid rhywbeth iddyn nhw. Be sy'n mynd o dan groen pobol ydi pobol sydd ddim yn gwybod, ti'n gwobod – 'o'n i ddim yn gwobod am hynna; nath na neb deutha fi' tingwbod, a mae hynna'n cael pobol yli... dy nhw ddim ishe methu allan ar rhywbeth sy'n diwgydd yn y pentra. So...dwi'n meddwl [bod] 'communication'... 'priority' – 'PR. Communication'."*

"You have to know what people want before you give them something. What goes under peoples skins is when people don't know about something, you know – 'I didn't know about that – nobody told me' you know, and that really gets people you know...they don't want to miss out on something that happens in the village. So...I think communication [is] a priority – PR. Communication."

(Hannah, Llanfechell)

Although some interviewees thought that only a select few of Llanfechell's residents knew about the development of the project, others thought that many people knew, although there was already mounting opposition due in part to being misinformed of the community benefit derived from the proposed development,

*"Mae 'na lot o bobol yn gwybod amdano fo oes, um, ma na lot o bobol yn ei yn erbyn o, sydd yn bechod, achos sa nhw ond yn deall mae i'r gymuned mae o...bysa'r bobol...swn i'n gobeithioi sa nhw'n gweld y peth da ynddo fo de"*



“There are a lot of people that know about it yes, um, there are a lot of people against it, which is a pity, because if they only knew that it’s for the community...those people...I would hope would see the good of it.”

(Iwan, Llanfechell)

There was also a desire, from the perspective of the steering group to avoid any further public meetings to discuss the community wind project, so as not to have the scheme lumped in with another renewable energy project that was being developed by TGP Wind Limited<sup>16</sup> near Amlwch,

“We haven’t had a public meeting about it, we’ve talked with the community councils ...given the way that the, the climate was developing, that and given that TGP were going to be bringing forward proposals anyway...if we’d had a public meeting at that stage to talk about our proposals, you know...it didn’t make sense for us to act as a lightning conductor really for all sorts of questions which we couldn’t answer.”

(Gerald, Llanfechell)

Communication with the community had therefore come to a slight stop in Llanfechell, as the steering group were trying to establish the practicalities and viability of the project.

*“Dwi’n meddwl bo nhw wedi ail-gysidro rwan...mae rhaid ni fynd yn fwy ofalus rwan [efo] sut da ni’n mynd i weithredu hefo’r tyrbein gwynt Talybolion yma, achos heb gefnogaeth y gymuned mae nhw’n mynd i gael problemau de...A be mae nhw isho neud dwi’n meddwl ydi trial um, perswadio’r gymuned bod o’n rhwbath da, ond dwi’n meddwl bo gynnyn nhw uphill struggle i neud hynny de. Real uphill struggle.”*

“I think that they’ve re-considered now...we have to be more careful now [with] how do we go about implementing this Talybolion wind turbine, because without support from the community, they’re going to have problems...and what they want to do I think is try and persuade the community that it’s something good, but I think that they have an uphill struggle to do that though. A real uphill struggle.”

(Ruth, Llanfechell)

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<sup>16</sup> TGP Wind Limited are the developers of Rhydygroes wind farm on the outskirts of Amlwch on Ynys Môn, who proposed the updating of the windfarm in 2013, enabling the generation of 18MW from twenty turbines (Energy Live, 2013)

Similarly Llanaelhaearn were struggling with effectively communicating their project. Due to a ‘break’ in Antur Aelhaearn’s general activity in the village, there was much work needed by the steering group in order to communicate the new Ynni Aelhaearn project effectively,

*“Broblem ydi, mae’r Antur wedi bod yn eitha’ dormant os lici di...a toeddan nhw ddim yn gwerthu eu hunain fel sefydliad o fewn y pentra’, fel sefydliad oedd yn gneud da o gwbl, er ei bod nhw’n gneud... A wedyn mae gynnon ni dipyn o waith ar y funud, i hysbysebu be mae’r Antur yn neud yn y pentra... Do’n i’n gweld y diwrnod agorad hynna’n gam cychwynnol i hynny. Ond mae gynnon ni dipyn o ffordd i fynd de...”*

“Problem is, the Antur had been quite dormant...and weren’t selling themselves as an institution within the village, as an institution that does good, although they were...So then we have quite a lot of work to do at the moment, to advertise what the Antur does in the village... We saw that open day as a starting point, but we have quite a long way to go...”

(Owain, Llanaelhaearn)

Communication of project development was not only a challenge for newly established community energy schemes as the case studies in Wales show. The community energy projects in Scotland also faced difficulties in communicating their project to a wider community. Winning people over to the cause was particularly important according to Ciaran from Siabost, if community divisions were to be avoided,

“The PR I would say we need to work on a lot more, cause I think we’re, we should be selling ourselves ...you’ve got to win that battle...or else it’s going to be us and them...”

(Ciaran, Siabost)

Despite having established their community turbine, on Tiree the difficulty now was in communicating the availability of a new funding source generated through the community wind turbine,

“I think there’s still quite a lot of people...that could be using it that don’t use it, and maybe that’s something that we need to maybe work on to kind of explain how it works or to help people more to push projects thorough and stuff like that.”

(Jessie, Tiree)

The same issues faced the community project in Siabost, where engaging with the community was also seen as difficult, particularly due to the fact that community members had different interests. This poses an additional strain on community energy projects to deliver projects with limited resources,

“Sometimes it’s tricky to engage people because they’re maybe not impressed with one project but they’re interested in something else – you really want to try and get...as many things going that could interest everybody really, so I think that’s, that’s the biggest thing.”

(Bridget, Siabost)

Local newspapers were used by both communities in Scotland to communicate the developments of their projects – ‘An Tirisdeach’ on Tiree and ‘Fuaran’ in Siabost (along with a monthly newsletter published by the Horshader Trust). However, despite these publications some interviewees felt that information regarding their local community energy project was not being communicated efficiently,

“We don’t hear how much they’ve earned, how much money it makes, and what proportion of it is still being set aside for paying for paybacks and how much is available to the community...that kind of information is not available... I suppose the information will be on the Trust’s website...”

(Claire, Tiree)

In Siabost, since the turbine was up and running, community members had a better understanding of what the project was aiming to achieve. Although not everybody in the community were actively involved in the project, there was a broad understanding of what the objectives were,

“I mean everybody in the community knows... what it is - what it’s doing. Not everybody has been actively involved in it, and you’re never going to get everybody ...but it is definitely a community project. Yes, it was driven forward by a couple of people, two or three people, but, you know...for the benefit of the community... there’s going to be difficult decisions to be made, but you’d rather have the difficult decision than not have the money. You know the things we can do with it is going to be great...”

(Ciaran, Siabost)

There was a continuing effort on behalf of the community to communicate the purpose of the project and how it would stand to benefit the surrounding village. For some this was a huge task, to communicate this new way of doing things,

“We want to be that kind of open organisation...we want them to embrace this ...we don't want them to see it as a - them and us...Yes – there is a board of directors, yes there is an employee, but at the end of the day, this is our turbine, and this is our money, so we have to spend it according to our needs...because we're always used to public money, public funding, where you're always answerable to someone...it's a huge learning curve to think that we're in charge of this money, it's ours...I think there's still an awful lot of work to be done, but that's certainly by the end of it what I would like.”

(Molly, Siabost)

Doubt was a common difficulty that had to be overcome in all case sites. The Scottish community energy projects (that were both more advanced in their development) had some practical examples to show their communities how the community energy scheme was benefiting their economy and wellbeing. In Tiree building maintenance had been carried out on community buildings, a new boat shed for local traditional boats had been built, a new member of staff (Music and Cultural coordinator) had been appointed through the Trust, and money had been donated towards the islands annual music festival, Tiree Music Festival (TMF), and traditional music festival, the 'Feish'. These accomplishments could be communicated to local people as tangible projects developed as a result of owning a community turbine. There was also a democratic process in which the community were consulted and given feedback, and asked to participate,

“We go back to the community every year and tell them – this is what we've been doing with the money, what else do you think we should be doing, and that – that changes all the time but it's got to come from the community – it's not us telling them what they want, it's them telling us what they want and how they want the money to be spent, and a big thing now is they want quite a lot of money to be kept back, as a kinda' big pot for a big project, and we don't know what that project might be.”

(Henry, Tiree)

However, despite democratic processes, the community wind turbine project and the income generated and reinvested in the community, was still regarded by suspicion amongst some, although in time, it was believed that this doubt would dissipate,

“I think everyone...are aware that it’s there that it’s doing good things, I think people will need to understand it a bit better, and understand us a bit better, and what, why we’re here but, it’ll come I think. People don’t like change and new things you know, so it’ll take them a while to get used to it...”

(Juliet, Tiree)

Similarly in Siabost, it was seen that with the eventual development of projects funded by their community wind turbine, and communicating these developments, more support would be nurtured,

“I think people need something tangible, and people will begin to hear about small grants being given out to individuals...to start up things...”

(Gladys, Siabost)

However, the benefits that could be accrued in the Welsh examples remained an abstract possibility, and therefore, it seemed that convincing local residents of the possible benefits of a community owned wind turbine proved more difficult. This was compounded with an element of doubt, uncertainty and adverse effects of erecting a wind turbine. In Llanfechell, there was not enough community understanding of the project due to a lack of communication – residents therefore did not understand or accept the idea – an idea which remained somewhat vague,

*“Dwi’m yn meddwl bo nhw wedi dallt yn union um, be sy’n mynd ymlaenerch...ma’ y pentra fasa’n ei phia hi. Dwi’m yn meddwl bod nhw wedi dallt na derbyn y syniad, achos toes na ddim digon o wybodaeth snam digon o drafodaeth, a snam ddim digon o gyfarfodydd efo’r gymuned wedi bod iddyn nhw ddallt.”*

“I don’t think they’ve understood what’s going on...that the village will own it. I don’t think that they understand or accept the idea because there’s not enough information, there’s not enough discussion and there aren’t enough meetings with the community for them to have understood.”

(Ruth, Llanfechell)

It seemed that a careful plan was needed to sell the idea to the local community in Llanfechell,

*“Dwi’n meddwl sa rhaid i werthu fo’n ofalus i bobol...er mwyn cael nhw i sylweddoli be yn union ydi o llu”*

“I think that it would have to be sold carefully to people...so that they can realise what it is exactly.”

(Siân, Llanfechell)

Similarly in other case sites, it appeared that communicating a coherent narrative – a narrative that emphasised the community benefit that could come from having ownership of a renewable energy project was a desirable part of this ‘PR’ plan,

“I think we have to make sure that people understand what the benefits are going to be and how it’s going to....benefit the community and that kind of stuff. We have to tell the story as well....of this is our graft.”

(Ciaran, Siabost)

## 5.11 OPPOSITION TO WIND TURBINES

It has been suggested that in relation to the most controversial of renewable energy technologies, wind energy, if there is a collaborative approach to its implementation opposition can be avoided (Toke et al, 2008, Warren and McFadyen, 2010). This could be proven to be the case on Tiree and to an extent in Siabost, where opposition towards their community wind turbines was certainly diminished due to the collaborative approach used and the ownership of the project coupled with having reached the point where they had examples of successes to show. Opposition was not as subdued in the Welsh case sites of Llanaelhaearn and Llanfechell. Despite being community driven, strong anti-turbine sentiments in Llanfechell threatened to block the Talybolion community turbine development. This was attributed to a lack of understanding and miscommunication of facts about the proposed community project, along with a general negative reaction to turbines in the area according to some interviewees,

*“[Mae] pobol yn deud pob fath o bethau ma nhw’n meddwl sydd yn wirionedd, ac ella heb efo’r ffeithiau cywir, a dyma hi’n mynd yn anodd wedyn achos mae’r gwybodaeth anghywir wedi mynd allan...ond dwi’n meddwl syth mae rhywun, mae rhei pobol yn clywed ‘tyrbeins’, mae gynnon nhw agwedd negyddol yn syth at y peth”*

“People say all kinds of things that they think are truths and maybe don’t have the correct facts and then it becomes difficult because the wrong information has gone out...but I think when somebody, some people hear ‘turbines’, they have a negative attitude about it straight away.”

(Siân, Llanfechell)

An anti-wind turbine campaign group ‘Anglesey Against Wind Turbines’ was also active on Anglesey, which was also a factor that worked against the development of the Talybolion community wind turbine project in Llanfechell. It seemed that trying to develop a community energy project whilst living in such close proximity to wind farms and energy generating plants appears to work against community led developments,

“If there are all sorts of, all kinds of construction work and development work going on all around then you’ve got this one little thing, it’s very hard to anticipate how that will play, I mean it may be, it may be just right for us, but it maybe that people are going to say ‘oh for god sake, do we have to put one up as well do we?’ you know...we’ve got all this stuff going on, and they’re all now setting up community benefit funds you know...it’s in a very dynamic state, we’re sort of thinking about our original idea, simple idea of a simple community wind turbine, it’s complicated by all these other things that are going on.”

(Gerald, Llanfechell)

The above extract seems to suggest that trying to establish a small community wind turbine amongst large private developments was more difficult than developing such an idea in an area where no energy projects already exist. Opposition already existed towards large scale wind turbine developments, which could possibly, according to the above extract, be directed towards the Talybolion community development in Llanfechell. The lack of understanding about the project seemed to suggest that opposition could develop. However the opposition was more against saturation of wind turbines in the area, rather than against the concept of community ownership. This goes against a finding by Warren and McFadyen (2010) who showed that cumulative impacts of wind farms turbines did not impact on the acceptance of more turbines on the Kintyre peninsula. However their findings also show that acceptance was increased “if future windfarms were owned by local communities” (Warren and McFadyen, 2010, p.209). Whether or not this finding is applicable in the case of the north coast of Anglesey would be an interesting line of further research.

Parallel developments by local individuals had also caused bad feeling in Llanfechell and fuelled doubt and misunderstandings that Ynni Talybolion was a project that would only benefit a few members of the community. Interestingly there was a desire by some not to become too closely associated with the Talybolion development, since anti-turbine sentiment was so fierce, that being involved could affect their business and how they were personally perceived within the community. This highlights the difficulty posed by a community turbine project trying to develop in an area with high density of energy developments.

Antur Aelhaearn also encountered resistance from wind turbine opposition to their project in Llanaelhaearn. Prior to the public meeting that they had organised, opposers had reportedly handed out leaflets throughout local villages claiming that the proposed project was like a version of Tryweryn in Pen Llŷn. Tryweryn refers to the drowning of Capel Celyn village in Gwynedd to create a reservoir supplying water for Liverpool. Despite all Welsh MPs (bar one who abstained) voting against the decision to drown the village, Westminster continued with their plans and the valley was drowned in 1965, exposing the “powerlessness of Wales” (Williams, 1985, p.291). Tryweryn is since used as a historically symbolic example of the rights of a people being defeated by the will of Westminster. The proliferation of wind turbines in Wales is seen by some as symbolising the continued marginalisation of Welsh people by the energy sector (and Westminster) which perpetuates “social (in)justice” (Parkhill and Cowell, inprint, p.351) as embodied through the history of Tryweryn. However, opposers of the Ynni Aelhaearn scheme, who viewed the community project as going against the will of local people, misconstrues the way the Tryweryn example tends to be used. According to Owain, opposers to the project had a head start to the organisers – particularly during their first open meeting, where the steering group did not have detailed information to share,

*“Ar ddechrau’r prosiect, mi oedd hi’n anodd cyfleu yn union y manylion - doedd y manylion ddim gynan ni. Oedd gynon ni guess go lew, mae o’n le gwyntog, ddasa tyrbin o’r math yma, 500kW, gynhyrchu hyn a hyn o drydan. Toedd gynon ni ddim syniad digon clir o... sut basa ni’n rhannu’r arian, ac yn lle basa ni’n gwario’r arian, wedyn pan gafon ni gyfarfod gyhoeddus...mi oedd hynna’n gamgymeriad difrifol, achos oedd y manylion yna ddim gynon ni, a mi gafon ni lambastio gen y gwrthwynebwyr...oedd efo dadleuon digon hawdd i’w cynnal, gan bo gynnon ni ddim manylion de”*

“At the start of the project, it was difficult to convey the exact details – we didn’t have the details. We had a good guess – it’s a windy place, a turbine of this sort, 500kW,



would produce such and such electricity. We didn't have a clear enough idea of...how we would share the money, where would we spend the money, so when we had a public meeting... that was a serious mistake, because we didn't have those details, and we were lambasted by the opposers...who...had arguments that were easy to put across because we didn't have the details.”

(Owain, Llanaelhaearn)

Interviewees believed that there were approximately six vocal opposers to the project in Llanaelhaearn. The tactics used for opposing, using social media in particular, displeased many of the interviewees who appeared visibly frustrated and hurt by what they saw to be malicious accusations. Opposers to the project were viewed as being small in number, but very vocal and were drawing on other wind turbine opposers from beyond the village,

*“Mae gynon ni lond llaw o wrthwynebwyr, ond mae nhw'n lond llaw swnllyd iawn felse rhywun yn ddeud...mae nhw'n gellu denu pobol o ardaloedd lot fwy eang, felly tydyn nhw ddim yn neilltuol yn 'representio' be mae'r...ardal isho, ond mae nhw'n cyfleu gwrthwynebiad reit gry' yn erbyn hwn...”*

“We have a handful of opposers, but they're a noisy handful as somebody would say...they can attract people from a wider area, so they're not necessarily representing what...the area wants, but they are conveying strong opposition against this...”

(Mark, Llanaelhaearn)

As a consequence of this wind turbine opposition, community divisions were created. This is touched upon in some of the literature (Walker et al, 2010) although more positive aspects of community energy tend to be emphasised within the public domain (Johns, 2015, Cooperative Group & Co-operatives UK (2012). There is no intention in this research to stress a murkier side of communities in general, but community schisms are a factor that needs acknowledgement, and researched further. White washing the sector as being affable and solely positive would be disingenuous. If the energy sector is to involve communities then the knowledge base of community development practitioners and academics also needs to be employed, including a realisation that community conflicts are a reality.

Some interviewees were visibly upset and frustrated by such conflicts, particularly in Llanaelhaearn. The opposing group in the area had threatened to take their project application through a judicial review if the scheme was accepted by the planning office at Gwynedd

council. This was seen as a stalling tactic. There were also allegations that opposers were trying to intimidate and influence local people through using social media sites to make claims about the community wind turbine project, such as the negative health impacts that could affect local people in a residential home. There was also an incident following the planning permission for an anemometer (a mast to measure wind speed), where opposers had apparently depicted threatening behaviour towards members of Antur Aelhaearn who had gone to listen to the outcome. The community wind turbine opposers were reproached for not being part of the community by interviewees. The excerpt below, referring to one, unnamed opposer of the energy scheme, goes some way in explaining the roots to some of these frustrations,

*“Fuoedd o eriod...pan oedd y siop yn gorad, mi fuodd o erioed yn y siop sti, fuodd o rioed yn y dafarn. Fuodd o erioed yn un o'r Capeli na'r Eglwys, erioed. Fedrai fentro deud a fy llaw ar fy nghalon i ti fuodd o erioed yn un o'r rheina. Wedyn dio'm collad iddo os dio'i gyd yn cau nadi. Wedyn yr unig, yr unig ddadl sydd gennyn nhw os oeddau nhw'n bod yn onast ydi bot hi'n weledol iddyn nhw.”*

“He never...when the shop was open, he never went into the shop you know, never went in the pub. He never went to any one of the Chapels or the Church, ever. I can dare say with my hand on my heart that he never went into any of them. So it's of no loss to him if it all closes. So the only, the only argument that they have if they were to be honest is that [the wind turbine] is visible to them.”

(Selwyn, Llanaelhaearn)

There was also concerns that an S4C<sup>17</sup> television news programme ‘Taro 9’, broadcast a few weeks before time of interviewing, had caused a damaging effect on the perception of the community energy project by presenting the whole project as being a local controversy,

*“Do, do mae'r rhaglen wedi cael effaith arni [y prosiect]...effaith negyddol i deud y gwir...dim yn ofnadwy, dim ond...dim yn lleol i deud y gwir, ond hwrach yn fwy i bobol sydd ddim yn nabod y gymuned. Mae di codi amheuan hwrach yn feddyliau rhai pobol sy'n bechod.”*

“Yes, yes the programme has had an effect on it [the project]...a negative effect to be truthful...not terribly, but only...not locally to say the truth, but possibly more so on

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<sup>17</sup> S4C: Sianel Pedwar Cymru is a Welsh language public service broadcaster

people that don't know the community. It's raised doubts possibly in the minds of some people which is a shame.”

(Owain, Llanaelhaearn)

However in the long term, some interviewees, particularly those who had been involved in setting up Antur Aelhaearn in the 1970s along with other local projects such as the Nantgwrtheyrn Welsh centre, were unnerved by the opposition towards the energy scheme.

There were also opposers to wind turbines in the Scottish case study sites, although again, due possibly to the fact that they had progressed significantly in their community energy schemes, and had already erected their wind turbines, opposition was not a matter that was as stark and present as in the Welsh case sites. According to some on Tiree there had been a committed anti-turbine lobby,

“ [the project] involved a pretty small and quite committed opposition to the turbine... but by comparison to other[s]... it was relatively muted and that's presumably because... it was seen as an endogenous project rather than an exogenous one.”

(Robert, Tiree)

It has been argued that the acceptance of renewable energy is affected by social factors, including trust, fairness and inclusiveness of local communities within locally developed renewable energy projects (Musall and Kuik, 2011; Walker et al, 2010). It would seem that this was the case in the Scottish case sites, as opposition to the projects was rarely spoken about. However, the Welsh case sites seem to disprove this argument, as despite being proposed and presented as a community project and asset, there seemed to be a small yet vocal opposition to the community wind turbines. Community involvement does not entail an automatic response of support within that community. This is particularly pertinent when some members of a community are felt 'left-out' of developments. It is also relevant in communities where there is a greater divide or discord in the attributes that give 'grounding' to a community – the shared cultural and social views (Parkhill et al, 2015). It would be interesting to see in future if opposition in the Welsh case sites dissipates when (or if) their community turbines are erected.

## 5.12 INCOMERS

Incomer, in its simplest of terms has been defined as the opposite of the ‘local’ (MacDonald, 1997). When or how an incomer becomes an integral part of a community, if indeed that ever happens, is also highly contested (Burnett, 1998). Indeed a person belongs “inasmuch as they are willing to cherish and be cherished by a place and its peoples” (McIntosh, 2004, p.4). Measuring this ability to cherish and belong however is subjective.

Not all relationships with incomers and the communities under observation could be classed as difficult. Some viewed the in-migration of new people as a positive thing as they contributed new skills and ideas into the community, and respected and merged themselves into local cultural life. In the case of Tíree and Siabost, incomers were seen as being an asset, and were active members and drivers of developing their respective community turbine projects. It was also the case that in Llanaelhaearn, during their open day event, that they had a positive response from half a dozen incomers who were also enthusiastic about helping the project to move forward.

However it seemed that there were examples of difficulties posed through in-migration. In Anglesey, in the case of Llanfechell, incomers into the area had moved for a particular reason according to some interviewees,

*“...yn Sir Fôn, mae na nifer o bobol wedi dod yma...pobol cefnog, ac mae nhw’n bobol mae rhywun yn gorfod cydnabod, mae nhw’n bobol galluog...proffesiynol a pethau felly a ma nhw di ymddeol i fama, a wedyn ma nhw di prynu tai, wedyn ma nhw efo’r syniad yma yn eu pennau nhw... bod nhw isho dod i rhyw le fach twt a golygfa neis a pethau felly...a hefyd mae nhw efo’r syniad... o bod nhw di gwario ar y tai ma, y tyddynnod, a bod nhw’n mynd i golli gwerth os os na dyrbines yn agos iddyn nhw de...”*

“...in Anglesey , there are a number of people who have come here...affluent people, and they are people that you have to acknowledge, they’re intelligent people...professional and so on and they have come to retire here, and then they’ve bought houses, and then they have this idea in their heads...that they want to come to a small quaint little place with a nice view and those sorts of things...and also they have the idea...that they’ve spent money on these houses...and that they’ll lose value if there are turbines close to them...”

(Bedwyr, Llanfechell)

The above excerpt aligns with research that suggests that many opposers to renewable energy (wind in particular) in rural areas tend to be middle class incomers (Van der Horst and Toke, 2009). The transient nature of some incomers to these communities entailed that there was less community interconnection and cohesion and in Llanaelhaearn's case, incomers were also seen as the main opposers to their community energy project,

*“Mae lot o bobol sydd gen ti’n byw yn pentra Llanhaearn ar y funud yn...bobol dwad, mynd a dwad ydyn nhw, a dy nhw ddim yn cynnwys eu hunain yn y gymuned chwaith. Mae’r bobol sydd gen ti yn blaenllaw yn y gymuned, cant a cant tu ôl i’r [tyrbein gwynt cymunedol] achos mae’n nhw’n gweld ei angan o de”*

“The people that you have living in Llanhaearn at the moment are...blow-ins<sup>18</sup> they’re people who come and go, and they don’t consider themselves a part of the community either. The people that are prominent in the community are one hundred percent behind the [community wind turbine], because they see the need for it so...”

(Selwyn, Llanaelhaearn)

It was also commented that these ‘blow-ins’ were not trying to include themselves into the community, but keep themselves to themselves. According to some, this detachment from the community meant that they did not care if local assets like the school and pub closed,

*“Di o’m otsh iddyn nhw, achos dy nhw ddim yn rhan o’r gymuned os lici di. Dio’m otsh gennyn nhw os sa’r ysgol, sa bob dim yn y pentra yn cau, dio’m otsh gennyn nhw...da nhw byth yn mynd i’r pentre jyst iawn i neud dim byd, jyst pasio drwadd i fynd yn ôl ac ymlaen”*

“It’s of no worry to them, because they’re not a part of the community in a way. It’s of no worry to them if the school closes, or if everything in the village closes, it wouldn’t bother them...they never go to the village just about, to do anything, just passing through to go back and forth”

(Selwyn, Llanaelhaearn)

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<sup>18</sup> Blow-ins, an Irish saying describing people who have moved into an area

Incomers who were organising the opposition group against the Ynni Aelhaearn community wind turbine had invited other opposers to the open meeting early on in the process,

*“...oeddau ni jyst isho pobol Llanhaearn i fod yna achos, tyrbin nhw di hwn...ond mi gafon ni bobol o gymunedau eitha’ pell i ffwr’ yn dod yma, gwaeddu....lot ohonan nhw’n fewnfudwyr, uh, rhei pobol o Llundain yn deud dy’n nhw ddim isho i ni ddifetha olygfa...dyna oedd y brif ddadl, difetha golygfa a dibrisio gwerth eu tŷ nhw.”*

“...we just wanted people from Llanhaearn to be there because it’s their turbine...but we had people from other communities far away coming here, shouting...many of them incomers, some people from London saying that they didn’t want us to spoil their views...that was the main argument, spoiling views and devaluing the price of their houses.”

(Owain, Llanaelhaearn)

This early open meeting that Owain is referring to seems to have created fission between incomers and ‘native’ community members,

*“Baswn i’n deud bo na ffiniau wedi cael ei creu noson yno – rhwng y rhei di-Gymraeg sydd wedi mewnfudo yma, a Cymry cynhenid sy’n rhan o’r cymuned ers blynnyddoedd...cenhedlaethau...tydi o ddim yn rhywbeth be sa ni di ddymuno, sa ni di dymuno wedi cael powb yn cefnogi ni, ond tydi hynny ddim yn bosib pob tro, yn enwedig pan mae rhywun yn cyflwyno newid mor fowr de, mor radical hwrach i olygfa, amgylchedd...”*

“I would say that there were boundaries created that night – between the non-Welsh speaking incomers and the indigenous Welsh people who are a part of the community since years...generations...it’s not something that I had desired, I would have liked that everybody would support us, but that’s not possible every time when somebody presents such a big change, so radical possibly to the view and environment...”

(Owain, Llanaelhaearn)

The Welsh Assembly member for Dwyfor Meirionnydd and former chair to the Assembly's environment committee, Dafydd Elis Thomas, contributed to the delicate issue of incomers relationships with renewable energy project in rural parts of Gwynedd as a part of the aforementioned S4C programme, Taro 9;

"I've noticed that there are a number of people who have moved into Wales who vocally oppose - stopping Wales developing natural resources and I think this is something very serious. Because if people move to an area to live, they must learn to work with the people in that area and the economy of this area is vitally important to us all."

(BBC, 2013)

### **5.13 ADVICE**

Many of the interviewees were keen to impart advice to other communities seeking to establish their own community wind turbine project. Below is a discussion of some of these cautionary tales.

There was a note of caution in regards to the possible unforeseen consequences of developing autonomy and self-reliance through having created a new income stream for the community. This autonomy could entail that it was more difficult for communities to get funding from other sources,

"...some agencies now are turning round and saying you've got this pot of money on Tiree, you don't really need to come to us, you'll have to go somewhere else, whereas before Tilly, they were, they were supporting – which I don't think is right...whether the Council are beginning to look upon Tilly as a means of us being more self-sufficient, and less reliant on them...I don't know – they would probably say not, but..."

(Fergus, Tiree)

There were also fears that having easy funding would change the way community groups operated, and that they would become less active, as money was so readily available to them,

"I think it has changed the ways that groups think about funding things as well. So maybe for like the last twenty years, all the groups would have been fund-raising and probably doing exactly what they're doing now, but then they had to do a lot more work for it, and now they don't need to as much, so it's almost changed people's attitudes to running groups"

(Juliet, Tiree)

Awareness of the amount of work and time a community energy project could take should also be kept in mind according to many interviewees,

“I mean there’s a lot of people on that committee who, wouldn’t dream of doing it again. If they knew how long it was going to take, and the amount of work it’s going to be they probably wouldn’t do it now....cause some people say – oh, why don’t you put up a second one, and...it’s a vast amount of work”

(Henry, Tíree)

In Llanelhaearn, due to the level of community rifts and other problems that their development had faced, it seemed that there was a cautionary tale for other communities thinking of pursuing community wind turbine projects,

*“ ‘Swn i’n meddwl yn ddwys iawn cyn mynd ymlaen hefo rhywbeth fel hyn...baswn wir achos fel dwi’n deud...mae na waith mawr hefo fo...ond i gymuned gymyd hwn ymlaen mi wyt ti isho bod yn ofnadwy o benderfynol, mi wyt ti isho bod yn ymwybodol o’r abuse sydd yn dod efo fo.”*

“I would think very deeply before going ahead with something like this...truly I would because, as I say...there’s a lot of work involved with it...but for a community to take on something like this you need to be seriously determined, you need to be aware of the abuse that comes with it.”

(Mark, Llanaelhaearn)

There were also messages of caution from Siabost, particularly due to the type of controversial technology that was being used in all cases,

“I think it’s up to individual communities because there is quite a strong anti-turbine element isn’t there...and if the majority of the community were against it then it’ll be not much point in proceeding with it...but turbines...can lead to very heated arguments and opinions...on both sides”

(Iris, Siabost)



## 5.14 CONCLUSIONS

Leadership within a community in conceiving and developing a community owned renewable energy project was revealed as being paramount to success. One person alone, however, could not establish a whole project of this kind without some form of support. Local support from other individuals during all phases of the development was crucial. Community renewable energy, being such a technically and financially demanding *kind* of community project also benefited from having as much support as possible from technical and finance experts – expertise which could sometimes be sourced from within the community itself. However, not all communities possess such skills locally, meaning that external assistance can be crucial for some projects. This external support can come from other community energy projects, as was shown in the Scottish case site examples. Their national support network, which included communities that had been through similar processes and had therefore gained valuable experience, has been shown to be of great value for the community energy sector in Scotland. Networking can flag common problems and obstacles, but also offer practical solutions. Such a network did not yet seem to be in place in Wales at time of interviewing, although increasing efforts to create such a network have been underway through bodies such as Community Energy Wales.

Community engagement, overcoming local entrenched rifts and coping with local protest groups is not an issue that has been researched in great depth within the current literature available on community energy. There is an assumption that community energy reduces local controversies for energy development as the benefits remain local (Rogers et al, 2008; Warren and McFadyen, 2010). However, from this research it appears that, apart from external difficulties with developing a community renewable project, community engagement and community inter-relationships were some of the most prominent challenges facing each case study. In Wales, in particular, dealing with community members was seen as a more complex problem than dealing with the technical and administrative challenges of developing a wind turbine scheme. This was partly due to the hostile position of some community members in the Welsh case study sites, incomers in particular, some of whom were active participants in opposing the community wind projects. Strained community relationships seemed more profound in the Welsh case studies. This could possibly be due to the fact that their projects were in an ‘abstract’ phase – they were not in the position to show the end results of having a community owned turbine. The Scottish case sites on the other hand were able to show the

tangible results of owning a wind turbine. Also, during time of interview, their memories of conflict within their communities might have subsided with time, and therefore given less emphasis. In Wales, however, community confrontations were still being experienced and were therefore given a strong emphasis. Interestingly, elderly community members interviewed in Wales were less distressed by apparent community rifts, having seen such conflicts come and go in their past experiences as community activists.

Encouraging community engagement was a difficulty that was present in all four case study sites. Challenges with trying to inspire enthusiasm were evident prior to, during and, in the cases where the projects were up and running in Scotland, even after the establishment of each community wind turbine. How best to encourage community engagement was not addressed directly through the interviews – and it appeared at times to be considered an insurmountable task. It did, however, become apparent that a strong willed ‘nucleus’ of people was needed to drive projects forward, supporting past research concerning recruitment and participation within community energy projects (Hoffman and High-Pippert, 2010). In all four case study sites, these nuclei of people seemed to be driven by altruistic motivations. The sense of community duty and giving something back to their community, rather than “get rich quick and stuff other people” (Owain, Llanaelhaearn), incentivised the pursuit of each community turbine. Nevertheless, in relation to increasing community engagement, more information is needed to raise awareness within communities towards the potential of developing locally owned renewable energy projects. Whether or not this would succeed in encouraging more community engagement, however, would need further research.

Prior to implementing their community wind turbines, interviewees in both Scotland and Wales alluded to the difficulties posed in rallying support for abstract community projects that are not ‘the norm’. Community projects in Wales were at least able to point to other projects established in Scotland as examples of how their proposed wind turbine project could work. However, a common response amongst Welsh communities was that ‘Scotland is different’. This leads to the question of whether or not communities in Scotland *are* essentially ‘different’ or, is it that the facilitation mechanisms apparently available there have given the community energy sector more confidence to prosper. Are Welsh communities lacking in this confidence to develop? Research implies that civil society in Scotland in general is much stronger than in Wales (Royles and McEwen, 2015), suggesting that the foundation for civil society developments, such as community energy projects might be weaker in Wales than in Scotland. Research in Canada by St Denis and Parker (2009) also shows that community participation

levels in renewable energy groups were at their highest in the Northwest Territories of the country – where rural (and indigenous) communities reside. It seemed that these isolated rural communities had a higher proportion of community inclusiveness in their energy projects due to an inherited communitarian approach to community development (St Denis and Parker, 2009). This might help explain why the most northern, rural communities of Scotland are considered as ‘different’ and exceptional cases, as they are the British Isles equivalent to the Northern Territories of Canada. What might therefore be beneficial for community energy development in Wales, are more *Welsh* examples of success stories in the community wind energy sector (rather than drawing examples from ‘outside’, from places such as Scotland).

Frustrations with impractical voluntary time commitments and work load placed on communities were common themes in all four case studies. Managerial processes and the need to be adaptable to external influences were also problematic for all case studies. The Scottish case study sites showed that volunteering and the management of a community energy project do not, however, come to an end once their turbines were up. Communication with the local community was also highlighted as being important, with Llanfechell having experienced the most problems in regard to coherently explaining their project to the wider community.

Overall, there did seem to be a more pessimistic feeling and insecurity amongst the Welsh case studies. This might be as a result of a lack of existing wind energy projects in Wales to draw upon as corroborative examples, a lack of knowledge within communities themselves to the possibilities of community energy developments, and the lack of an effective and well established facilitation mechanism (and policy) that has been available in Scotland (as will be seen in the next chapter). Other external difficulties facing all four case study sites included challenges with financing their projects, planning procedures and navigating relationships with the energy sector’s district network operators (DNOs). These challenges will be explored and compared in Chapter 6.

## **CHAPTER 6**

### **COME ALL WITHOUT: COMMUNITY ENERGY SUPPORT**

#### **6.1 INTRODUCTION**

This chapter will assess the relationship and levels of support given to community energy projects at varying governance, facilitation and business levels. Relationships with local authorities, facilitation bodies, sub-state governments (in Scotland and Wales), the state government (Westminster) and various business entities such as district network operators (DNOs), financial institutions and wind-turbine manufacturers will be discussed.

Past research has shown that policy developments and regulations in the energy field have not considered the needs of community schemes (Co-operative group and Co-operatives UK, 2012). Financial support also seems to be lacking in the UK, compared with Denmark and Germany, where financial institutions seem more supportive of community schemes (Munday et al, 2011). The support gained from knowledge transfer through networks is also thought to be lacking in the UK (Conaty and Mayo, 2012). Mussal and Kuik (2011) suggest that more research is needed in exploring which ‘conditions’ are needed for community energy to flourish in different cases. The following chapter is a purposeful attempt to address this gap in knowledge. This chapter aims at identifying the best policy and practical ‘conditions’ in the experiences of Wales and Scotland for the further development of the sector. Conclusions at the end of the chapter will condense the differences between the Welsh and Scottish experience of community energy support structures. The discussion will consider what these differences are, why they exist, the implications of these differences, and what is needed to ensure a more successful support structure for future community energy projects to succeed.

#### **6.2 YNNI'R FRO AND COMMUNITY ENERGY SCOTLAND**

UK based organisations geared at supporting community energy groups have failed to do so in the devolved nations facilitating, at most, community energy projects in England (Seyfang et al, 2013). However, there are schemes in Wales and Scotland that provide facilitation and deliver sub-state governmental support schemes aimed at encouraging community energy

developments. Ynni'r Fro is a programme funded by the Welsh Government since 2010 aimed at helping community scale renewable energy projects. The scheme, delivered through the Energy Saving Trust, offers grant aid, advice and support through its seven technical development officers across Wales (Ynni'r Fro, 2015). The Scottish Government's CARES scheme (Community and Renewable Energy Scheme) established in early 2011 (Scottish Government, 2011) was managed by Community Energy Scotland up until 2013 and is presently delivered by Local Energy Scotland. The scheme provides loans for community energy groups and advice through its eight regional development officers across Scotland and a further eight members of staff based in Edinburgh (Local Energy Scotland, 2015a). Community Energy Scotland, who had administered CARES previously have continued as a charitable body offering advice, service contracts, networking opportunities and act as a lobbying and representative body for their members (Community Energy Scotland, 2015). Community Energy Wales, although established in 2012, did not have adequate funding to be of recognisable standing at time of interview. They have since received Welsh Government funding to develop as a supportive body for the community energy sector, to employ one member of staff and develop a website. The CARES scheme in Scotland provides loans of up to £150,000 and Ynni'r Fro in Wales can provide up to £30,000 in grants for start-up costs of renewable energy projects with community participation. Both schemes also offer advice and guidance for communities.

These schemes appeared to play a pivotal role in the development of community energy projects in both countries and amongst the case study sites;

Walter: Community Energy Scotland

Gladys: Were excellent...

Walter: Were indispensable really.

(Walter and Gladys, Siabost)

Community Energy Scotland (CES), a charitable body that was running the CARES scheme on behalf of the Scottish Government up until 2013, had 30 members of staff working across Scotland guiding and learning how to effectively set up community energy projects. Their help was key for the Horshader Trust wind turbine project in Siabost,

“Community Energy Scotland did more for us than anybody else ever did. They’ve always been there, 100%, supported us all the way through. They’ve worked very closely with us - not just us...they do that with every group”

(Stephen, Siabost)

Stephen goes on to explain that the funding that was available to them through the CARES initiative was of paramount help, although the fact that grants were running low and that communities were now being offered loans (to conform to the criteria of receiving Feed in Tariffs) could pose problems,

“Community Energy Scotland again, they provided a lot of funding through the Scottish government CARES, it used to be grants, now it’s more loans I’m afraid, and people will be paying them back...”

(Stephen, Siabost)

Apart from very clearly giving practical help for the Horshader project to develop in Siabost, CES also had the capacity to help the community develop further, after establishing the wind turbine,

“They’re also heavily involved in things like energy conservation as well, not just the generation of it, and in an area like this where there’s a lot of old housing stock that’s poorly fuelled and poorly insulated, there’s a big role for those sort of services, advice, guidance, grants and so forth.”

(Walter, Siabost)

It became apparent through the interviews that CES were essential in helping Siabost in developing their project, through advice, grants (and later loans) as well as being approachable for support with the development of low-carbon projects in the future. The experience on Tiree differed slightly,

“Community Energy Scotland helped us in some ways, but I think, because we were ahead of the game compared to most other communities, they often didn’t actually have the specific answers that we needed – they will do now, because we’ve, we and others have gone through that route but...at the time, they were helpful and supportive but didn’t necessarily have the...the know-how and skills really to answer the questions that we were facing at the time.”

(Henry, Tiree)

It appears that CES were also in the process of learning about the renewable energy field and the development of community led schemes as suggested by Stephen in the excerpt below,

“...we had a long difficult road. I mean it was, it was probably about eight, eight years...I think eight, nine years the development work that we had to do and jumping through the hoops and over the hurdles and it was constant. Like you would get something out of the way, and something else would come up, and something else would come up and through that experience, Community Energy Scotland were learning as well in that time, and through our experience”

(Stephen, Siabost)

Similarly CES was learning alongside earlier developments such as the Tiree wind turbine project. Tiree had an educative role for CES as they went through their stages of development,

“CES have learnt a lot from Westray<sup>19</sup> and Tiree, and I don’t know, there must be twenty other projects up and running now, so they have starter packs that people can now follow, and HIE, Highlands and Islands Enterprise have packs as well...so I think, I mean it’s much easier now, you’ll need less help now”

(Jane, Tiree)

Despite not having possibly received much help at the beginning of setting up the Tiree community wind generating project, it seemed that interviewees believed that CES’ help was essential to other community groups, allowing for these groups to develop with guidance through the Community Renewable Energy Toolkit (Community Energy Scotland, 2011) that had been developed by CES through the commission of the Scottish Government and The Energy Saving Trust. The Tiree scheme was also in a position (at the time of interviewing) where they felt that they no longer needed much guidance or help from a body like CES. Although external support structures might be necessary during earlier stages of setting up and delivering a community energy scheme, such projects can reach some form of self-sufficiency

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<sup>19</sup> Westray Development Trust are based on Orkney in Scotland. They use income generated through their 900kW wind turbine (owned by its subsidiary company Westray Renewables Ltd. ) to “develop the economic, social and cultural sustainability of our community by harnessing the quality of our resources, people and island environment” (Westray Development Trust, 2015)

and independence, as evidenced in Tiree's experience. The availability of CES (or Local Energy Scotland) was of comfort to some, in case help would be needed in the future,

“We operate day to day, week to week, month to month without any support from Community Energy Scotland... we get a visit from them every time they're sort of out and about this way, say maybe once every two to three years maybe somebody will come over and find out how we're doing and we've got contacts for a local, a development officer that covers Argyll and... we know that we can, if we've got any issues we can get in touch with them specifically to, to get support, so yeah it's a good, it is a good support network.”

(Thomas, Tiree)

Other support networks that were mentioned included the Big Lottery (both Scottish projects having received some of their funding from the lottery), and Oscar, the Scottish Charity Commission.

In Wales, the grant funding and support given through Ynni'r Fro officers could be seen as the equivalent to CES;

*“[Mae] Ynni'r Fro wedi bod yn gefn mawr”*

“Ynni'r Fro have been of great support”

(Rhys, Llanaelhaearn)

Ynni'r Fro, and their officer in North Wales, covering both Ynys Môn (Anglesey) and North Gwynedd where the case studies are located, were seen as crucially important for both groups interviewed. All of the interviewees spoke highly of Ynni'r Fro and were pleased with the level of support given by the officer overseeing the area and the personal commitment and effort that he applied to his role. It was however mentioned that it was impossible for *one* person to know everything about the sector, and that his work load was overwhelming. This is particularly pertinent when recalling that CES had 30 members of staff across Scotland during its delivery of CARES and Local Energy Scotland currently has 18 members of staff. This is in comparison with 7 members of staff for the Ynni'r Fro programme across Wales, with only one officer covering the whole of North Gwynedd, Anglesey, Conwy, Denbighshire, Wrexham and Flintshire together. Nevertheless, it was felt that the Ynni'r Fro officer was able to help groups with skills that were lacking, in particular with technical knowledge,



“I think one thing that ...we feel - we don't have in our ranks a tech...you know an engineer of the right kind that, you know that's competent to drive it through, that was one thing that we discovered... but Dewi<sup>20</sup> has been really helpful...in making it possible.”

(Gerald, Llanaelhaearn)

Owain in Llanaelhaearn also described how the local Ynni'r Fro officer had helped with technical matters as well as offering guidance on how to project manage their scheme, despite the community having employed an official project manager. The officer also helped whilst the Ynni Aelhaearn community group were searching for a company to develop their scheme, and was present in both the tendering interviews and in the final interviews with their chosen company.

Financial support was also of significant help for both Welsh community energy scheme examples. Small grants from Ynni'r Fro allowed the project in Llanaelhaearn to fund the initial phases of their project. These small grants also enabled the group to commission Dulas (a renewable energy company in mid-Wales) to complete a feasibility study on behalf of the community. The ability of the Ynni'r Fro officer to find grants from different places through his own personal contacts, was especially useful,

*“Mae Dewi yn gweithio'n ofnadwy o galed yn y cefndir, achos mae [Ynni'r Fro] di ariannu lot o'r brosiect. Mae Dewi wedi ffeindio rhyw grantiau i ni o wahanol lefydd. Mae [o] yn un dda i gael cysylltiadau. Os bod na rhyw broblem, oedd o'n nabod rhywun fasa'n sortio'r broblem.”*

“Dewi has worked terribly hard in the background, because [Ynni'r Fro] helped us fund a lot of the project. Dewi has found us different grants from different places. [He] is a good one at getting contacts. If there are any problems, he knew of somebody who could sort out the problem.”

(Selwyn, Llanaelhaearn)

However despite the help that Ynni'r Fro offers, according to some interviewees, these grants were seen as being insufficient in the face of the multitude of other challenges that each group faced.

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<sup>20</sup> Pseudoname for Ynni'r Fro officer

Other supportive groups that were mentioned in the interviews included The Wales Coop Centre who helped Ynni Talybolion in Llanfechell to register their company, along with drawing up their mission statement. The Wales Coop Centre also helped with the constitution of Ynni Aelhaearn in Llanaelhaearn, giving legal advice and helping them rephrase parts of their constitution. Share Energy, Gwynedd Werdd, Ynni Glân, Cadw and Snowdonia National Park were also mentioned as being of support in the Llanaelhaearn case study. Share Energy helped with the IPS model (Industrial and Provident Society model) that Ynni Aelhaearn would adopt, along with clarifying in writing the relationship between the Antur and the landowners.

It seemed that there were a number of bodies offering help in Wales, but the lack of money available to help develop projects, along with over-reliance on one Ynni'r Fro technical development officer seemed overall to be a less efficient model when compared to experiences in Scotland. The disparity in numbers of facilitators available for communities in Scotland and Wales is also stark. Ynni'r Fro had seven officers covering the whole of Wales, while CES had thirty employees (now nineteen) and Local Energy Scotland have eighteen members of staff able to give advice and help community projects. The success of the CARES programme in Scotland compared to the apparent 'lack' of success of Ynni'r Fro in establishing up and running community schemes would suggest that the support structure in Scotland is more advanced. At time of writing, Scotland has over one hundred and thirty- six energy generation projects completed or in development (Local Energy Scotland, 2015b). This is in comparison to some fifty groups that are being supported by Ynni'r Fro (Ynni'r Fro, 2015), with a more recent account shows that there are only 12 community energy groups generating energy in Wales, and these at most are small solar projects (Community Energy Wales, 2015). This has led to the harsh critique of the Ynni'r Fro scheme being seen as 'a waste of money' by the Welsh Conservatives in 2014, although Community Energy Wales' founding director Chris Blake explained that delivering community energy projects was akin to 'wading through treacle' (BBC, 2014). It would be an over-simplification then to suggest that Ynni'r Fro and CARES are the only influencers on the success or seeming failure of the development of community energy in the devolved nations. Other externalities, which contribute to the sense of 'wading through treacle' should also be taken into account.

## 6.3 BUREAUCRACY

“...the amount of hassle and effort and just all sorts to make this happen just seemed unbelievable...”

(Caitlin, Siabost)

The bureaucracy surrounding the development of community energy was one of the most profound and often discussed difficulties facing all four case study sites, summarised by the excerpt below,

*“...rhwystyr mwya i mi yn bersonol...yw jyst yr holl biwrocratiaith sydd yn perthyn i'r peth – mae'n rhyfeddol...[yr] ymchwil mae rhywun wedi gorfod neud... mesur sŵn...edrych ar ecoleg, adar yr ardal, archaeoleg yr ardal, y ffordd at y safle... y ffordd gorau, mwy nag un ffordd – dewis pa ffordd, cael y peth wedi ariannu wrth gwrs...”*

“...the biggest obstacle for me personally...is just the whole bureaucracy related to the thing - it's astonishing...the research that somebody has had to have done...measuring sound...looking at ecology, the birds of the area, the archaeology of the area, access to the site...the best way, more than one way - choosing which way...getting the thing financed of course...”

(Rhys, Llanaelhaearn)

This bureaucracy could seem overwhelming, and entailed a heavy workload (on a voluntary basis) for all the case studies. The bureaucracy that communities had to face could have a detrimental effect - deterring individuals from committing to any further projects. Paperwork for planning, funding and progress reports for funders stacked up and were time consuming,

“Vast amounts of time...were spent on paper work, and legal fees and insuring that what we were doing was correct. I mean, I can't remember the number of...I mean maybe thirty...huge documents that all had to go through to different solicitors and you pay them every time and they look at these things and I mean [it's] just, just ridiculous.”

(Henry, Tiree)

The amount of work needed at the initial stages of a project - scoping for even the possibility of establishing a community wind project - also demanded a lot of voluntary time. This is

illustrated by the recollection of Stephen in Siabost who would regularly visit a council officer working from an outreach office in the village of Barvas to fill in a number of planning consent forms for the council,

“I used to spend hours and days down there, him and I going over it and you know, change this change that, um, and then you submit, then it would come back you know, ‘we need more information’ and all...oh Jesus! And so we got...and it’s no different now...but anyhow - that was a real difficulty - getting through that part of the process”

(Stephen, Siabost)

## **6.4 LOCAL GOVERNMENT SUPPORT**

Below is a discussion concerning the support given to the four communities by their local authorities. The four case sites were each in different local authority areas: Tiree within the jurisdiction of the Argyll and Bute council, Siabost within the Western Isles Council, Llanaelhaearn in Gwynedd and Llanfechell within Anglesey Council. Each project’s experiences of council support will be discussed separately below.

### **6.4.1 Tiree (Argyll and Bute Council)**

“I think the support from the council I would say is quite limited, and maybe sometimes feel like - we’re way far out here and kinda’ like just on our own sort of thing. Sometimes I think they forget about us.”

(Jessie, Tiree)

The above extract reflects a feeling that was quite common about the Argyll and Bute council from the perspective of Tiree interviewees - a feeling of having been forgotten and of being isolated,

“...the isolation factor...we’re part of a mainland council, and you know the Western Isles, Shetland all these people there, they’re part of the Islands Council, their councillors understand their position and their needs, whereas Tiree is, and Coll<sup>21</sup> as well, you know, we’re part of a mainland council, and we’re very much on the

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<sup>21</sup> A neighbouring island to Tiree

periphery, and...we quite often feel that a lot of the policies and that sort of thing, don't reflect the fact that we are...an island."

(Thomas, Tiree)

There was also concern that council responsibilities could be passed on to the Tiree Trust, the body handling and distributing the money from the income stream created by the community wind turbine. Already there were some misunderstandings between what the council *should* be providing and what money from the turbine *could* offer, particularly in respect of supporting the islands school,

"...that's the worrying part is things like the school 'cause it's just... [we] don't fund things that the council should be funding if that makes sense, so and that's been an interesting point as well. It's come up a few times, people trying to get funding for things when it's actually the councils job to pay for it, and the council being like, 'oh you've got your turbine – pay for it if you want it'... that's the only place where it's going to be a problem I think in the future...if the school gets any quieter, and we can't put any money, you know, we can't put money in the school, to have teachers or whatever...that's where the issues are going to be...and that's what's making families leave..."

(Juliet, Tiree)

Support for communities pursuing locally owned renewable energy projects was an area that some thought was improving within the Argyll and Bute council. This could possibly be down to the fact that the council were themselves becoming more familiar with the sector, along with receiving direction from the Scottish government,

"I think they are doing a lot more now actually, and I think there's much more liaison with the local councils as well so Argyll and Bute council now have a much more hands on approach to renewable energies in Argyll, and we've got a plan in place, and that's obviously gone through government circles as well, so I think it, I think it's more joined up now. Perhaps when we started, whenever that was...8, 9 years ago, it was less joined up, so it, I think it's caught up now..."

(Henry, Tiree)

However, Tiree's experience with the council *during* their period of establishing a community energy scheme was more troubled. Relationships with the planning department in particular were challenging, despite the democratic way that the Tiree group had gone about choosing their site for the community wind turbine 'Tilly',

"...it went to planning and they objected... on landscape grounds I think it was... I mean the way Tilly was done I thought it was brilliant in that right from the outset – everyone was asked you know – where should it go, and not go... everyone had had a chance to kind of say where it couldn't go. So [it] ended up in a place where... by and large we thought it should be ok, and then... there was quite a lot of research done at the site to make sure... it was ok in terms of being close to a grid line... also... [it was] an area that was being used by lots of birds that we didn't know about, and it proved that it wasn't, so went through all that and then it went to planning, and it was rejected by the council, and then it was a lot of lobbying by lots of different organisations to get the council to reverse that decision so... we went to a local MP... Scottish Natural Heritage were very much in favour of it, cause they could see that it was going to assist with the long term kind of viability of Tiree and then the crofting and everything else that's so important for all the wildlife on this island, the RSPB put in a letter of support as well, so... just trying to get support from lots of organisations, and in the end that worked, and that – we got that, and the decision reversed and it went up, but that was another 11th hour thing that could have scarpered the whole project after you know five years of toil."

(Henry, Tiree)

However, showing that there was a collective, community ownership model to their project did entail that the planning procedure for Tilly, Tiree's turbine, was faster in comparison to other private wind turbine developments on the island,

"...there are two smaller turbines across there... and they took twice the time we took to get permission for theirs, because it's private ownership and the one thing we got permission for really was cause it was for a community asset [it] would generate income for us... and they almost overlooked the fact that it was a tall thing on a flat island, because it was a greater benefit... but it's still really quite hard for community projects here, for any project, any small project to get permission for a turbine."

(Jane, Tiree)

#### 6.4.2 Siabost (Western Isles Council)

“I find it really, really disappointing how not supportive of local communities they are, despite the fact that *that* is what Lewis is.”

(Caitlin, Siabost)

The above extract shows how some interviewees believed that the Western Isles council were unsupportive of communities on the Isle of Lewis. These remarks were in relation to many school closures that had happened over the past decade, as well as the seemingly unresponsiveness of the council in focusing on improving prospects on the island and attempting to halt depopulation and outmigration of young people from the Isle of Lewis. There were also complaints that the council were not supportive of other community initiatives in Siabost such as the community’s intention of buying a local building to house a community museum. However, others in Siabost were more sympathetic towards the council. The Western Isles is relatively a young local authority body and was still finding its feet,

“...the Western Isles didn’t exist as a local authority until something like twenty, twenty-five years ago. Before then, different parts of the archipelago were attached to mainland counties. So Lewis, the administrative centre was in Inverness, so it’s not only on the mainland, it’s on the other side of the country, and there was a real sense of – this was something of a backwater, and anybody who had ambitions to be a leader in the community, my guess is that they would migrate East, and so the people who had roots here, tended to be those who were inexperienced in managing something like a local authority, and I don’t think that it’s any coincidence that not long after the Western Isles was created, as a...a coherent administrative unit, it got very badly burned in the BCCI<sup>22</sup> scandal, because that’s where they had seen fit to invest local authority funds.”

(Walter, Siabost)

Despite some inexperience and their relative infancy in comparison with other established County Councils, there was a feeling that councillors and public sector workers within the Western Isles Council were at least representative of the people who lived on Lewis,

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<sup>22</sup> Bank of Credit and Commerce International

“...they represent the communities that they come from, quite genuinely – they... make much of their own island roots, so you don’t get people representing the area who’ve been parachuted in because it’s a safe seat or something like that, and I think that’s actually a good thing, and the sort of skills and experience that we tend to think of local authorities as having from our time down south<sup>23</sup> will come, but it’s just a very slow process.”

(Walter, Siabost)

More practical support was also available for the community during their process of establishing the community wind turbine project, through the help of dedicated officers working within the community,

“...fortunately the council have... got an officer in each area, that’s there purely to help communities with things like this...community support officers...they are in place, and they gave us a lot of help, especially with applications for funding.”

(Stephen, Siabost)

Despite this help however, there were some who thought that the council, in the end, were overplaying their involvement in the community energy project,

“Well we had an official opening... for the turbine, and the great and the good came, you know, everyone who was involved...all the directors were there, and the community ...it was a very good turnout, and the council was there, and the chief executive of the council got up and spoke, and all he did was praise the council’s involvement...And I was just thinking, ok...but they...I suppose they...I don’t know If they helped...I don’t think they supported us, they didn’t...they had to accommodate...not accommodate us, but they had to give us planning permission and building warrant and all that...and I suppose there was a partnership of some sort, but they were no...of no assistance...they didn’t kind of...phone ‘a aye, are you alright...would you like a...’. Cause for example, bridge service you know, we’re having problems with this route and councils are supposed to service bridges every year, they hadn’t done it for ten years, and they wouldn’t do it, and they wouldn’t do anything about it and we had to pay this and all that...you’re just thinking...pffft! you know?...and they’re quite happy to come over on the day though...and say how good

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<sup>23</sup> Originally from the south of England.



they were and how they supported us and how we support that....I don't see them support much....and I thought the planning department being quite pernickety about certain things..."

(Ciaran, Siabost)

It seems that the community had a very mixed experience and assessment of the Western Isles Council support for their community energy project, with the biggest sticking point, reflecting Tiree's experience with Argyll and Bute Council, being with the planning department.

#### 6.4.3 Llanaelhaearn (Gwynedd Council)

*"Dwi'n meddwl bod Cyngor Gwynedd yn dda iawn. Heblaw am ei adran cynllunio nhw - sydd yn warthus"*

"I think that Gwynedd Council is really good. Apart from their planning department - which is disgraceful"

(Mark, Llanaelhaearn)

Some believed that the relationship between local people and their council had changed in present times. Whereas there had been a much closer bond between people and their local government body, this relationship has become more passive, with people taking less interest in their local government and community councils;

*"Dwi'm yn credu bod na berthynas fel y dylia na berthynas fod rhwng y Cyngor Sir a'r pentre a thrigolion y pentra'...oeddau ni yn cysylltiad a'r Cyngor Sir yn amal iawn am hyn a'r llall [yn y gorffennol]...ond dwi'n meddwl erbyn hyn...bod nhw di pellhau oddi wrth y Cyngor Sir. Fasach chi'n mynd i Lanaelhaearn rwan a gofyn i pobol pwy ydi aelodau'r Cyngor Cymdeithas... sa nhw'n fedru deutha chi pwy ydyn nhw?...wedyn hwnw ydych haenen gyntaf chi o Lywodraeth Leol a hwnw ydych cysylltiad uniongyrchol chi efo'r Cyngor Sir. Ond does na ddim cadwyn fel y dyliai hi fod yna."*

"I don't think that there's a relationship as there should be between the County Council and the village and the people of the village...we were in contact with the County Council very often about this that and the other [in the past]...but I think by now...they've become distanced from the County Council. If you go to Llanaelhaearn today and ask if people know who their Community Council members are...would they be

able to tell you who they are? ...that is your first layer of local government and that is your direct contact with the County Council, but there is no direct chain as there should be.”

(Tudur, Llanaelhaearn)

Apart from this distancing between the community and the local Council, and the apparent fraying of the democratic structures of local government, the main critique that the interviewees had of Gwynedd Council in relation to support for the proposed community energy project was aimed at the planning department of the council. There appeared to be a lack of trust in the planning department, whereas the councillors themselves on the whole were supportive towards the Ynni Aelhaearn community scheme and its aims. This was a clear frustration in Llanaelhaearn. Despite three different departments having shown support towards their aims and aspirations, the most crucial department - the planning department - were willing to block the project based on the visual impact of the wind turbine. The planning department of Gwynedd Council lacked consideration of the economic benefits of the proposed project,

*“Dwi ddim yn amau bod chi’n gwbod, mae adrannau cynllunio yn gorfod edrych ar pethau o safbwynt ym, canllawiau cynllunio yn tydyn, a dwi ddim yn siŵr os ydy’r dimensiwn cymunedol o rheidrwydd yn digon gry, neu digon dealladwy ella yn y coridorau...mae lle, yn hynny o beth, mae na le i Lywodraeth cyflwyno gwell arweiniad falla.”*

“I don’t doubt that, planning departments have to look at things from the perspective of planning regulations don’t they, and I’m not sure that the community dimension is necessarily strong enough or understood enough in their corridors...there is room, in that sense, there’s room for the Government to introduce better leadership maybe.”

(Rhys, Llanaelhaearn)

There were many grievances amongst the interviewees regarding the planning department, who had seemingly not taken into account the possible social and economic benefits of the community energy scheme.<sup>24</sup> It seemed to some that the planning department were actively working against them during their planning application for the turbine,

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<sup>24</sup> Ynni Aelhaearn’s planning application was later refused in November 2014, on the grounds of visual impact. However this is due to be contested in an appeal in autumn 2015.

*“[Mae’r] cais cynllunio mor anodd i gael drwadd...dyna be sy... a’r adran gynllunio ‘ma - os na wyt ti di ticio pob un bocs ddwy waith, mi ffeindian nhw rhwbath a’i daflid o’n ôl.”*

“[The] planning application is so difficult to get through...that’s what’s wrong...and this planning department - if you’ve ticked one box twice, they will find something to throw back”

(Mark, Llanaelhaearn)

Indeed a letter from the Minister for Natural Resources, Carl Sargeant to all Welsh local planning authorities was sent to emphasise the way that community energy projects deliver local economic benefits – and the need for local authority support (Welsh Government, 2013). However, at time of interviewing, individuals within the council were seen as hindering this apparent national appetite to support community energy projects. It was assumed by some interviewees that the viewpoint of any individual within a planning department who was against or indifferent to a renewable energy project could trickle down and influence the opinion of a whole department.

Beyond Gwynedd Council, many of the interviewees spoke of the support that they were receiving from some members of the Welsh Assembly, most notably Dafydd Ellis Thomas (who had been the chairperson of the Environment and Sustainability Committee in the Welsh Assembly) and Leanne Wood, leader of Plaid Cymru. John Griffiths (the previous Minister for the Environment and Sustainability for the Welsh Government) and Jane Davidson were also named as having been supportive. There was local support by the only Liberal Democrat councillor, the Labour chair of the committee (that were considering the planning for the wind speed mast) and Plaid Cymru councillors. Llais Gwynedd<sup>25</sup>, a local political party, were not seen as being supportive. However, despite the range of support from different political parties, there was a sense that the council was still quite ‘parochial’. It was suggested that national planning guidelines were needed to avoid a series of dysfunctional councils across Wales according to Owain;

*“Ma ‘na adranau cynllunio ceidwadol ofnadwy, sydd efo’r feddylfryd 80au bron ‘ma, o gadw’r lle ma fel postcard heb ddim datblygiad o gwbl...mae o’n mynd i lladd y wlad ‘ma, yn enwedig yn cefn gwlad. Dwi’n weld o’n wallgo.”*

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<sup>25</sup> Translated as ‘Voice of Gwynedd’

“There are terribly conservative planning departments, who have this 80s mind-set almost, of keeping the place like a picture postcard without any development at all...it’s going to kill this country, especially rural areas. It’s madness.”

(Owain, Llanaelhaearn)

Interviewees such as Selwyn were hard pressed to understand how any members of the Gwynedd council or any other county council could be against such projects as the scheme in Llanaelhaearn could, “ease a great financial strain from them”. The interviewees were in agreement that there was a need for further clarity and consistent support and that community owned energy projects should be treated differently compared to commercial ventures during planning application procedure. Currently, there is no clause that stipulates that community energy projects should be seen in any different way to commercial developments. They are treated as equivalents despite obvious differences in capacity, aims, objectives and outcomes. Problematically, this treatment is unlikely to change (unless there is a concerted political will to do so), regardless of how the potential income will benefit the community, as this would be seen as ‘paying for planning permission’ (Strachan and Jones, 2012). Nevertheless, suggestions were made that councillors needed more direction and specifically an underlying policy that would allow them the ability to commend community renewable energy applications,

*“...mae rhaid i’r aelodau [cyngor] cael sail polisi dyddiau yma, neu fydd na judicial review a bod ‘na bob math o bethau...Mae rhaid i chi gael sail polisi i ganiatáu o llu. Ond dwi’n meddwl basa sail polisi ni ydy’r budd economaidd i’r pentra”*

“...the [council] members have to have a policy basis these days, or there will be a judicial review...you have to have a policy basis to allow it...I think our policy basis is the economic benefit to this village”

(Tristan, Llanaelhaearn)

There was also a distinction made by interviewees between community ventures and single turbines being erected in Gwynedd and Anglesey by individual farmers – which, according to Tristan below, had no beneficial consequence to communities. He suggest a more radical plan for Gwynedd council would be to allow a single community owned turbine for each local community,

*“... rhown ni ddim ond un [tyrbein] ar gyfar bob cymuned...ag mae’r rhaid i’r budd gael ei rhannu rhwng y gymuned hono.”*

“...we’ll give only one [turbine] for each community...and the benefits have to be shared among that local community.”

(Tristan, Llanaelhaearn)

#### 6.4.4 Llanfechell (Anglesey Council)

*“...mae gan Cyngor Sir Ynys Môn hanas anffodus, a deud y lleia de...”*

“...Anglesey Council has got a very unfortunate history, to put it lightly...”

(Huw, Llanfechell)

Developing a community owned wind turbine project on Anglesey was quite problematic according to the interviewees. Prior to the inception of the scheme in Llanfechell, there had been a number of issues to do with in-fighting and inefficiency on Anglesey Council, whose executive power was seized in 2011 by the Welsh Assembly (BBC, 2011). This recent history has left the interviewees sceptical of its efficiency, trustworthiness and vision. There was also open opposition by council members towards the development of more turbines on land,

*“Rwan...y Cyngor sydd newydd ei ethol de, fasa nhw’n cael cathod bach, tasa rhywun yn mynd atyn nhw...[a gweud] helpwch ni sefydlu tyrbine wynt cymunedol – fasa nhw...Na... mae nhw’n elynaethus iawn”*

“Now...the Council that has just been elected, they would have kittens if somebody went to them...[and said] help us establish a community wind turbine - they would...No...they’re very hostile”

(Bedwyr, Llanfechell)

Although receiving some support during one meeting with the planning department of the council (who gave advice on where to locate the community wind turbine) – there was not much confidence amongst interviewees that they would receive any further support from the council. In fact many of the interviewees felt distanced from their council, possibly more so due to the previous corruption charges held against the council. Also, despite Anglesey being

an ‘Energy Island’<sup>26</sup>, the interviewees felt that they did not have much active support from that particular venture,

“They haven’t been...we haven’t had any...active support from them no. I mean Energy Island is a, you know it’s within the business development side of the County Council... and there are some, it’s mainly about nuclear development or large scale other, you know...the tidal developments.”

(Gerald, Llanfechell)

Apart from lack of support from Energy Island, there were also concerns about how Westminster instigated austerity measures would further effect the efficiency of Anglesey council,

*“Dwi’m yn meddwl bod na llawer o gefnogaeth yna, nagoes, a dwi’n meddwl mai llai fydd na achos mae gynnon nhw fwy o her ariannol”*

“I don’t think there’s a lot of support there, no, and I think that there will be less because they have more of a financial challenge.”

(Siân, Llanfechell)

To summarise – there are similarities between all four case sites in regard to the role of their Local Authorities in supporting their community energy projects. It appears that planning departments within each county council do not yet consider the economic benefit that a community wind turbine can incur. Local Authorities clearly aren’t necessarily intermediaries of national policy – they can block or slow down national policy too. This is surprising given the economic and social benefit that can be accrued through the establishment of community renewable projects. Furthermore, it has been argued that “local councils are well placed to begin to both invest and financially benefit from community energy projects.” (Harnmeijer, 2013, p.6). It would seem however that Local Authorities are slow in realising the potential of the community energy sector in this sense, and a clearer, coordinated approach of facilitating

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<sup>26</sup> Energy Island is “a collective effort between several stakeholders within the public and private sector working in partnership to put Anglesey at the forefront of energy research and development, production and servicing, bringing with it potentially huge economic rewards.” (Energy Island, 2015)

councils to be able in turn to help communities within the renewables sector should be developed.

## **6.5 SUB-STATE (DEVOLVED) GOVERNMENT SUPPORT**

The feeling of isolation from and frustration with local government bodies was a feeling applicable to sub-state governments too. Some interviewees spoke of their feeling of isolation and of being forgotten by their devolved governing bodies. The four case studies are geographically far away from their seats of governance (be it from the National Assembly in The Senedd in Cardiff Bay, the Scottish Parliament in Holyrood in Edinburgh, or from the centralised government in Westminster in London). This isolation was felt in relation to their devolved governments, but also towards some settlements within their geographic area. For example, Stornoway, the main administrative centre, was seen as a drain on the Outer Hebrides resources by residents of Siabost. Beaumaris and Holyhead were seen as the local drain of Angleseys resources by residents in Llanfechell. The communities in the study, at times, considered themselves as being treated marginally and as peripherally unimportant. However, others felt that their devolved governments were more democratic, within shouting distance and furthermore, were listening,

“It’s very helpful to be devolved and have a parliament that is...within shouting distance. I think it has made Scotland feel, I don’t know whether it’s made Scotland more together as a country, but we have a focus point in our own country, for making decisions, and in a way feel control over what’s happening in our own country, which I think is a good thing.”

(Martha, Tiree)

During time of interview, there was a Labour led government in power in the Welsh Assembly, and an SNP led government in the Scottish Parliament. The Conservative-Liberal coalition was in power at Westminster.

### **6.5.1 Policy and Support in Wales**

In Wales, there were calls by many of the interviewees for a clear national policy for community energy that was consistent and that filtered down to local authorities more

efficiently. Despite there being a policy on larger wind energy projects in strategic areas under TAN8<sup>27</sup> (Parkhill and Cowell, in press), there has remained little strategy to guide the community energy sector. The disconnect between what was said by the Welsh Government and how local government dealt with applications for community energy projects was frustrating. The temporal rhythms, what was said and done between the process of policy/guidance and practice seemed to be stark within the Welsh context. There were critiques that planning departments of local authorities focused too narrowly on visual impact without an understanding of local economic gain, and furthermore without knowledge of a recommendation by the Welsh Government that both aspects should be a consideration in planning. This caused particular frustration in Llanaelhaern,

*“Be ydi’r pwrpas o gael polisi genedlaethol pan mae adrannau cynllunio lleol yn mynd i fethu cymunedau trwy peidio a gwybod am y polisi...Da ni di gorfod codi ymwybyddiaeth swyddogion cynllunio Gwynedd o fodolaeth y cynllun cenedlaethol, a dwi’n gweld hwna’n anghrediniol”*

“What’s the purpose of having a national policy when local planning departments fail communities by not knowing about the policy...We’ve had to raise awareness of planning officers in Gwynedd to the existence of the national strategy, and I see that as being unbelievable.”

(Owain, Llanaelhaearn)

This disparity was causing confusion as to whether or not the sub-state government, in Wales particularly, was supportive of renewable energy, and community energy within that sector. The function of a sub-state government was also questioned, if councils were seen to ignore the elected governments apparent desire to support community energy schemes. The story of Cwm Arian, a community energy project in Ceredigion, was used as an example to show where there was a disjointed relationship between Welsh Government (and the National Assembly in general) support for community energy and local councils refusal of projects based on visual impact,

*“Yn genedlaethol, mae’r Cynulliad yn gefnogol iawn i bethau cymunedol, ond pan mae’n dŵad i penderfyniadau yn lleol, ‘sw’n i’n licio gweld fod y Cynulliad yn camu fewn ac yn deud - be cythraul sy’n mynd ymlaen fan hyn? Fel ddigwyddodd yn Cwm*

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<sup>27</sup> Technical Advice Note 8: Renewable Energy.



*Arian, lle gefon nhw ei gwrthod [â chaniataâd]. Mi ddylsa yn fy marn i, Carl Sargeant gamu fewn ar y pwynt yna, ac yn deud – be da chi’n neud fan hyn – mae hwn yn brosiect cymunedol, mae’r cymuned yma’n mynd i gael £400,000 yn ôl yr achos yn Cwm Arian y blwyddyn, tydi hynna...mae hynna’n negyddu yr effaith gweledol, diwadd y stori, ma nhw’n cael planning.”*

“Nationally, the Assembly are very supportive of community things but when it comes to local decisions...I would like to see that the Assembly steps in and says – what the hell is going on here? Like what happened to Cwm Arian, where they were refused [planning]. In my opinion Carl Sargeant should have stepped in at that point, and said – What are you doing here? This is a community project. This community here are going to have £400,000 per annum back in the case of Cwm Arian, that’s...that negates the visual impact, end of story, they’re having their planning.”

(Owain, Llanaelhaearn)

There were concessions that the general stance of members within the Welsh Assembly was progressive and innovative, with many Assembly Members named as being particularly keen on the development of the sector. There was also a belief that the Welsh Government would accept the project in Llanaelhaearn if planning was denied by Gwynedd council. However, this was not the ideal pattern of development, and a more coherent policy was desired. One suggestion was that the government should give preferential treatment to community wind turbines, and that there should be a benchmark that helps define community energy projects,

*“...be fasa nhw’n gallu neud...fasa i rhoid rhyw fath o meincdod o beth sydd yn cael ei ddehongli yn gymunedol neu ddim...bysa rhaid i’r budd fod beth bynnag – hanner cant, 50% ...timbod iddo fo gael ei glassifeio fel [prosiect] gymunedol, achos y peryg fasa i rhai drïo ddod a nhw mlaen efo llai[o fudd] yn de”*

“...what they could do...would be to set a benchmark of what can be interpreted as being community or not...the benefits must be whatever – fifty, 50%...you know, for it to be classified as a community [project], because the danger is that some would want to bring some through with less [benefit]”

(Mark, Llanaelhaearn)

The local officer for Ynni’r Fro played an important role as a go-between for interviewees in Llanfechell and government agents. They would also be updated on developments through

Ynni'r Fro. There were however some doubts that the Welsh Government were evading supporting renewable energy,

*“dwi’n meddwl fod Llywodraeth Cymru hefyd, run fath a Cameron, yn camu nôl o [ynni adnewyddadwy] rhyw gymaint de...”*

“I think that the Welsh Government are also, in the same way as Cameron, stepping away from [renewable energy] a little...”

(Bedwyr, Llanfechell)

The consensus amongst many of the interviewees in Wales seemed to be that more legislative powers for all energy developments should be devolved to Wales. The Welsh Government have the legislative powers for on shore energy developments under 50MW (Strachan et al, 2015) so *are* able to focus on smaller, community energy developments such as the 500kW developments that both case studies have under development. It could therefore be argued that the current Welsh Government is not focusing sufficiently on smaller distributed community energy projects, or that at least more could be done to facilitate the sector. Whether or not more powers were to be devolved might not necessarily lead to a more successful community energy sector, if there is a lack of initiative by a government in administration. Another argument within the theme of further devolution of energy matters concerned the actual energy needs of Wales as a country, exposing an argument needing clarification on the relationship between energy generation and supply between separate nations of the UK, and the UK as a whole,

*“Ddylai pethau felna cael ei datganoli i Gymru wrth gwrs, ond mae huna’n mynd i creu problem arall. Petai Cymru’n annibynnol, mi fasa yn naturiol wedi ei ddatanoli, ond fasa angen Cymru am ynni yn fychain iawn, ac mi fasa ni’n medru, run fath ac yn yr Alban mi fasa ni’n gallu cyflenwi hyna i gyd o ffynhonnellau adnewyddol naturiol, fysa ddim rhaid i ni ystyried ynni niwclear o gwbl.. sa ni’n ystyried y peth o safbwynt Cymru fel un gwlad.”*

“These things should be devolved to Wales of course...If Wales was independent, it would naturally be devolved, but Wales’ need for energy is very small, and we could, in the same way as Scotland, we could supply all of that from natural renewable sources, we wouldn’t have to consider nuclear energy at all...if we considered the thing from the perspective of Wales as one country.”

(Bedwyr, Llanfechell)

### **6.5.2 Policy and Support in Scotland**

In Scotland, there seemed to be more confidence in the vision of the Scottish Government for developing the community energy sector and for renewable energy in general,

“I believe the current Scottish Government is very much into renewable energy, they’re very much into boosting the economy of Scotland, and from that point of view I think we would have a much easier journey with the Scottish Government than we would by a Westminster Government.”

(Stephen, Siabost)

This support was shown through the initiatives that had been put together by the Scottish Government specifically to support community energy. Introduced by a Labour Scottish Government in 2011 and continued under the SNP Scottish Government, CARES is the scheme representative of the Scottish vision for increased community energy generation. Apart from CARES, there are also a number of initiatives and announcements made by the Scottish government to illustrate their vision for renewable energy, including former SNP leader Alex Salmond’s desire for Scotland to be a renewable energy ‘powerhouse’ (Royles and McEwen, 2015, p1042). Interviewees were not only supportive of the CARES scheme, but vocally supported Scottish MPs and Members of the Scottish Parliament,

“Well, they’re certainly pushing, I mean Scottish Government are always – they’re keen on local community groups doing their own thing, and particularly with renewable energy, so I think, maybe that’s channelled through CES rather than directly through Scottish Government. We certainly had the local MPs and MSPs there if we needed them to provide support. I mean they’re all supportive of this kind of thing”

(Henry, Tiree)

However, despite this belief in the ability of the Scottish Government to develop community renewable energy and show continuing support for the sector, there were also concerns about technological realities – particularly the relationship between the Scottish Government, the grid and DNOs (the district network operators),

“The big sort of conflict at the moment...is that the Scottish Government are encouraging renewables projects but the grid capacity isn’t available, so it’s a bit of a

contradiction, where the energy companies I think [are] passing the buck onto the Scottish Government to upgrade the finance, the upgrading of the grid system, cause they're saying...it's our grid yes, but you run through encouraging all these projects so know... you have to support the upgrade of the network system as well...I think it's a common problem throughout the Western Isles, the West coast of Scotland that it seems on one hand the Scottish Government has been very supportive in pushing through these projects and on the other hand they're not investing in the grid."

(Thomas, Tiree)

During the time of interviewing, the Scottish independence referendum was on the horizon (the following autumn of 2014). The implications of further legislative powers for the energy sector had been considered by some of the interviewees as not being overly significant,

"I think the Scottish Government has the power as it is to provide incentives for local communities to...put in renewables and in fact they do so I think, I don't think it's going to change hugely, if it goes one way or the other frankly."

(Henry, Tiree)

Some however, believed that independence was symbolically and practically important, and could encourage a sense of self-reliance and confidence for communities within Scotland,

"I think independence would be beneficial for Scotland...and by extension beneficial for Tiree as part of Scotland...I think any group, any community, when it feels that it has a bit more control over what's happening, and has more of a say in what's happening, I think, I think that makes communities stronger, so I think by implication, independence for Scotland will strengthen smaller, rural communities I would hope, but there are no guarantees."

(Martha, Tiree)

The sub-state governments of Scotland and Wales have therefore shown and given support for the community renewables sector. This was illustrated through the interviews, although there was a much greater sense of sub-state governmental support in Scotland than in Wales. Despite the apparent support given at devolved level however, it has been argued that "the devolved governments have broadly supported the maintenance of conventional, large-scale electricity development...rather than destabilizing them" (Strachan et al, 2015, p.107). The focus on

viewing large scale energy developments as the answer to delivering energy needs within the energy transition to renewables has not shifted it seems. There is also an argument that the apparent pursuit of renewables and narratives at devolved level to do with natural resource ownership might not only be for the generation of clean energy in itself. Presenting this narrative of resource ownership and use within the renewable energy sector should be viewed within the wider context of territorial politics and the pursuit of more devolved powers,

“...demands for further powers are intertwined with broader claims to greater control over the political and economic future of the nations they represent, and are thus best understood as a feature of the territorial politics in which the UK state is embroiled.”

(Royles and McEwen, 2015, p.1049)

## 6.6 UK GOVERNMENT SUPPORT

The interviewees' responses in accounting for the support given to them and the community energy sector in general by the UK government were subdued. In general, most of the interviewees did not think that Westminster were sufficiently supportive of community energy.

At the time of interviewing, the 2010-2015 Conservative-Liberal coalition were in government in Westminster. They were viewed with caution and considered to be a government that avoided supporting the renewable energy sector and incentivising carbon reduction, as it would harm them politically. Many interviewees also believed that the wind energy sector in particular was being targeted by the Conservative members of the government, who failed to differentiate between community and commercial developments, despite their advocacy of community participation through the 'Big Society'<sup>28</sup>. This stance has been somewhat solidified since time of interviewing with the new Conservative Government's (elected in May 2015) moratorium on onshore windfarms, the rejection of wind farm applications in Powys and the withdrawal of renewable subsidies.

*“Mae'n amlwg iawn, wel yn Westminster, mae'r Tories yn dechrau rhoi biliau yn erbyn ynni gwynt, wel mae nhw'n rhoi biliau yn erbyn ynni adnewyddol full stop de. Mae nhw'n meddwl taw ynni niwclear yw pob dim, ond yn sydyn reit mae nhw di ffeindio*

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<sup>28</sup> Launched in 2010, the 'Big Society' concept that had been included in the Conservative party's pre-2010 election manifesto, was an attempt to 'encourage greater volunteering and philanthropy' in society, although also criticised for attempting to justify cutting public services and spending (BBC, 2010)

*bod Hinkley Point – mae niwclear yn mynd i gostio iddyn nhw, a dy hynny ddim yn rhad chwaith.”*

“It’s obvious, well in Westminster that the Tories have started putting bills against wind energy, well they’re putting bills against renewable energy full stop. They think that nuclear energy is everything, but suddenly they’ve found that Hinkley Point - nuclear is going to cost them, and that’s not cheap either.”

(Huw, Llanfechell)

Huw’s view above was an opinion shared in Scotland, with a particular critique of Westminster’s energy department (Department of Energy and Climate Change – DECC), and the governments inconsistencies in changing rules and regulations in the renewable energy field, thereby creating confusion and the need for community energy groups to adapt quickly. Small changes at governance level seemed to ripple down and cause great upset at community level,

“It was very typical of the UK Government they never, ever seemed – like DECC for instance, Department of Energy and Climate Change...they never seem to have their finger on the pulse, you know, everything was done in a panic, things will change, but small changes for them, were massive - had a massive impact on people like us you know, because you had to quickly adapt, and comply with what they had, you know your...usually when you’ve got a project, but I don’t suppose it’s always the same but, you have it all in your head – this is how we’re going to go about it, we’re going to do it, blah-blah-blah...all these government departments make it, not working in conjunction with each other, but working separately, and making up their own rules as they go along.”

(Stephen, Siabost)

This complaint by Stephen was also supported by others in Siabost who were a part of developing the community energy project. Changes to the Feed in Tariff were seen as especially challenging;

“There were small [changes] all along the way... the Feed in Tariff, the government not deciding till a certain point to what the Feed in Tariff would be and they actually changed the rule part way through on whether you could or couldn’t have Feed in Tariffs – that caused us huge complications.”

(Gladys, Siabost)

It is clear that such perceived ad-hoc changes made at central government level to FIT tariffs could have a damaging and off-putting effect on community energy projects on the ground. It was clear that communities wanted more consistent policy for community energy from the UK Government,

“I would like to see a bit more stability, you know so that you have a clear route and that you’re not constantly dealing with obstacles and changes and you know because that, that really, it loses loads of time, cause all of a sudden you’re not...all of a sudden you’re thrown into a wee bit of chaos because somebody suddenly said, oh by the way, you can’t do this anymore – why? Well somebody changed their mind, and they decided that you were....so you’ve got to start again and work through it all.”

(Stephen, Siabost)

There was also an air of caution amongst some interviewees, that Westminster might not have the interests of communities truly at heart in the long term, but were conceding some community wind energy projects, for a different purpose;

“There is a certain feeling as well, because of there...there’s so much offshore wind going ahead, you always feel like it’s... there’s a sort of, you know, a sop being thrown at communities to say right, we’ll help you cause you’re going to also have to put up with some big projects as well...so I don’t know there might be a bit of I don’t know – window dressing or something you know, to sort of soften it for that...”

(Jane, Tiree)

This reflects on what Strachan et al (2015) conclude in regard to the UK Government being entrenched in aiding and expanding large-scale energy providers. Apart from the waning and inconsistent support that the coalition government in Westminster seemed to have for the renewables sector, there were also concerns about the physical distance between these communities and the centralised government. This was brought into greater focus by the independence referendum that was on the horizon in 2014, and how it presented the potential of better representation for communities in Scotland;

“I don’t think that this area is well served or even really known about...I think if there was a yes vote, I think, I would hope that there would be better representation for an area like this”

(Gladys, Siabost)

However, despite this desire for constitutional change, there seemed to be quite a close relationship between some of the community members with their local MPs in Westminster, particularly in Siabost. As the excerpt below shows, the MP (along with the MSP) for the area had managed to get a set date for a grid connection from Scottish and Southern Electricity (SSE);

“...we did get involved with the MSP and the MP to point out this difficulty and they did write letters on our behalf...In the end it was the MSP and MP who made SSE talk to us, and agree what was going to happen and agree a connection...at one point [SSE] weren’t even communicating with us, they weren’t even talking to us.”

(Gladys, Siabost)

This quote above gives insight into the difficulties for a community to deal with DNOs - in this case SSE. The ability of MPs and MSPs to influence these large companies, could, as seen above, be critical for community energy groups. However, for a more streamlined process, a policy that ensured that DNOs *had* to ensure a connection for community energy projects without exception could be implemented. This would mean of course improving the national grid – which could be improved through investment, or re-nationalisation as some suggested.

Finally, the role of Westminster was questioned in ethical and financial terms. Community energy projects were receiving much less support for development than private projects,

“...there was a time, and I think it’s still true where offshore wind - big projects - get much bigger subsidies than community projects. Why’s that? It’s going to private ownership and very often privately owned international, multi-national companies, so the UK Government is using its power – money, to help a Spanish company to generate profits – by giving them double ROCS for off-shore wind, why not give double ROCS or FITs to community projects? And it will cost them a tiny fraction of the money. But just think of the PR – how good that would be?”

(Jane, Tiree)



The above excerpt suggests that community energy should be seen as more beneficial than privately owned energy projects, whose economic nature and structure entail that profits leave the local community. A commitment to overhaul the traditional model of generating energy, moving away from old ownership models and investing in a dispersed, locally owned energy system would be needed. This is a commitment that would encourage the energy sector to become more democratised and communitarian. This, according to some, is where the crux of the matter of community energy diffusion lies;

“Instead of focusing on the scope for niche expansion, the prospects of such systems depend on the extent to which core actors – central governments, major corporations – continue to believe in the efficacy and deliverability of hard energy paths”

(Strachan et al, 2015, p.107)

## **6.7 DISTRICT NETWORK OPERATORS, THE GRID AND SUB-CONTRACTORS**

“...there’s [a] lack of urgency from SSE.”

(Jane, Tiree)

For rural areas in particular, the cost of grid connection for potential energy generating projects is a hindrance (Yadoo et al, 2011). This was certainly the case for the four case studies in question, particularly the two Scottish case sites that had gone through the process of ensuring their grid connection. The hidden cost of having to buy static synchronous compensator (STATCOMS)<sup>29</sup> to regulate the energy that they aimed to generate was also an unforeseen and expensive obstruction. DNOs for the case sites under observation were SSE (Scottish and Southern Energy) in the north west of Scotland and SP Networks (Scottish Power and Manweb) in Gwynedd and Anglesey. The case study sites in Wales had not reached the point where there had been much contact with their grid operators (although availability of access and cost of access was a concern). The Scottish case study sites however had been through the process and the difficulties faced through trying to cooperate with these entities.

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<sup>29</sup> Static Synchronous Compensator referred to as STATCOMs regulate electric currents on electricity networks

According to some interviewees, there was an underlying problem with the way that the grid worked on the islands, including Lewis and Tiree, which entailed that there was not much flexibility on how community energy groups could connect, as the extract below portrays,

“From the point of view of the island, there is no reason we believe why the island cannot be self-sufficient in electricity, with...you don’t need a huge array of wind turbines, you just need a sprinkling of ones like, up on the hill there. But SSE have a lot of money invested in a connection which starts in Skye, goes under the sea, comes up in Harris and then goes overland to Stornoway. It’s a stupid way to deliver electricity to the islands. But SSE won’t invest in order to, in alternative generation measures on the island – they are not interested...This is the market for you, except that SSE have a monopoly, so there is no competition.”

(Walter, Siabost)

This reflects a desire that reoccurred in many of the interviews, the desire to have their community wind turbines generating energy for the community, rather than it being exported;

“...it’s all for export, and that’s the downside of the windmill actually, the community windmill I mean it’s only to generate income, it’s not to be sort of locally self-sufficient or anything.”

(Gerald, Llanfechell)

Keeping the energy for the use of local residents would entail of course a new type of grid, a micro-grid, or a local-grid for the community itself. Such a vision deviates from the current model of relying on a centralised grid, and the desires of some to create a European wide super-grid (Strachan et al, 2015). However, decentralised, small grids serving a local community would allow localised energy projects to supply their own communities,

“What I do find sad is that it’s not directly providing energy to Tiree, to the best of my knowledge, and I would love it, if we had four or five up there that were generating all the electricity Tiree could need and that the community basically powered itself. That to me would be true community energy. That would be awesome.”

(Martha, Tiree)

Getting a connection to the grid was also a difficult process. As well as the costs for connection, unforeseen additional costs for STATCOMS was a shared experience in both Scottish case

study sites. In Siabost, the Horshader group had attempted to find out if a STATCOM, an expensive piece of equipment which regulates energy flows onto the grid, was completely necessary for their connection. After a long drawn out, and expensive process (paid for by Community Energy Scotland) to find a cheaper price for a STATCOM, and whether or not it was absolutely necessary in the first place (which a consultant based in Glasgow had deemed was not), SSE ignored the alternatives offered,

“They [consultant group] come up with different... suggestions as to what we could do rather than buying this expensive piece of equipment, but SSE just completely ignored it, it was like it never happened”

(Stephen, Siabost)

This was understandably a great frustration for the community in Siabost, and shows how much influence DNOs can exert, as described in more detail in the excerpt below describing the need for a STATCOM for the community turbine in Siabost. It seems that SSE had the final word,

“And when it came to...plugging this turbine into the grid...SSE said that because of the state of the grid, which was very weak and unreliable we needed a STATCOM, which means that when the turbine starts turning, it doesn’t blow the whole thing up, and we were a bit surprised by this, partly because Enercon, the company that manufactured the turbine said, it shouldn’t be a problem, partly because electrical engineers who worked for Community Energy Scotland said, it shouldn’t be a problem, and partly because an independent consultants that we employed said ‘oh no there’s ways around this’. But SSE said no, we have to have a STATCOM.”

(Walter, Siabost)

Similarly on Tiree, the community eventually had to ‘give in’ to SSE, and install a STATCOM that would regulate the energy flow from their wind turbine ‘Tilly’,

“SSE said – well you need that, so we’ve, we had to pay for it, we had to give into them...[we] had to buy a box essentially to iron out the ups and downs in the grid, ostensibly for Tilly but actually I think the grid needed it anyway, and we payed £400,000 for this box, huge amount of money which the community had to pay for.”

(Henry, Tiree)

There were understandable frustrations with the grid which had driven some volunteers to pull out of their community energy project, such was their disillusionment with the current structures of the energy system which alienates community energy projects. The DNOs, in the Scottish case studies were also viewed as taking advantage of small community energy projects, as illustrated in the conversation below,

Walter: Yeah they have the last word, and if we didn't have this STATCOM, they wouldn't allow us to connect to their grid. Having got the STATCOM; that means that they sort out the problems of the weakness of this section of the grid. So the community has bought half a million pounds worth of equipment, and have been compelled to give it to Scottish Southern, and Scottish and Southern then don't have to go to Ofgem and say... 'I'm awfully sorry we haven't invested enough money in our grid, can we operate it under a derogation<sup>30</sup>?'... and Ofgem for years have been saying yes. Nobody knew about that.

Gladys: So we got caught up in all that, and basically had to pay, pay for the privilege of attaching to the grid.

Walter: So a local community charity has paid a multi-million pound company that's listed on the stock exchange, who couldn't be bothered to pay 300,000 pounds for a piece of kit so that people who lived here could have a reliable electrical supply. And its things like that that make me so angry, and after a while I thought, this isn't doing me any good, so I stopped being a director.

(Walter and Gladys, Siabost)

As evidenced in the extract below, the Scottish DNOs showed apparent goodwill towards community energy projects in public and in community energy conferences. It is quite obvious however that this apparent amity was not reaching communities in any practical ways on the ground,

“Do you know...dealing with a big mega organisation and one little project...was a nightmare, and it used to be annoying going to conferences and presentations with the boss of SSE would stand up and say ‘we support community groups - we’re doing...’

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<sup>30</sup> Exemption

you think...well why don't you tell your guys on the ground that? - and that was really frustrating.”

(Jane, Tiree)

The problem of the grid infrastructure, coupled with the DNOs apparent unwillingness to facilitate community energy groups, had a detrimental impact on the willingness and capacity of communities, especially in rural areas to pursue their schemes, not to mention their trust of such entities and even the ombudsman Ofgem. Frustrations with the DNOs and the grid infrastructure would unfortunately continue after the set-up of both Scottish projects, with disturbances due to unscheduled maintenance causing a loss of income for the community turbine on Tiree,

“We had to shut down our turbine for a few... a couple of weeks it was in the end in a really windy period, and that's money we'll never get back again because SSE didn't have it on the maintenance schedule. It's just, you know it's just – they just don't appreciate how important it is.”

(Jane, Tiree)

Although some of the money could be claimed back on insurance, premiums were going up, causing further problems for the community group on Tiree,

“We've had problems...to do with the interconnector that, that takes the power from Tiree to Coll and then to Mull. That's broken three times I think in the last five years, since Tilly's been up and running, and every time it goes down, we lose production. We can't produce [electricity] on the island. We can claim it back through insurance but the insurance premiums keep going up of course...”

(Henry, Tiree)

Siabost and Llanaelhaearn also experienced difficulties with subcontractors that they had employed to oversee and project manage certain aspects of their community wind turbine schemes. In Llanaelhaearn a cooperative group in mid Wales were commissioned to deliver a noise study, which progressively became more and more expensive. It seemed that despite being a community energy project, there were no preferential or sympathetic treatment of the community – who were non experts and who possessed little capital to develop. This is particularly surprising given the cooperative ownership model of the sub-contractors that Ynni

Aelhaearn had intended to use, which one would assume to practice a code of corporate social responsibility. There were also examples of the company not delivering their tasks on time, a lack of communication and expecting too much from the community, not only in financial terms but in practical terms too in regards of finding out technical and topographical information. None of the community members were experts in the renewable energy field and had understandably expected the company to manage and deliver upon their agreed contract. These frustrations were exasperated by the fact that planning permission for such a scheme was so awkward. There were a number of unforeseen obstacles arising continuously, which had moved the group in Llanaelhaearn to employ a project manager.

One of their funders for the Siabost community renewable scheme, the Big Lottery Fund, through money given to the group, had demanded that the community hire a project manager. However, the relationship with the project management group was more of a hindrance than a help,

“...about half way through the project, they went belly up... they were owing the taxman a lot of money and, the taxman bankrupted them. So...they started another company, and they said that they were going to finish the contract, and the Co-op bank being an ethical bank<sup>31</sup>...said that they would not work with someone who had been bankrupted by the inland revenue, so then the bank said to us, well, we’d like you to use this other company, and it wasn’t a case of going to find another company, it was, we’ve got this company and you will use them, I mean the bank called the shots all the time, they’re sat on the 2million quid [pounds] that you want, and so they said, you will use this company, and it was mega expensive right, but we just had to agree to it - they weren’t much better!”

(Stephen, Siabost)

The quote above reveals how some decisions were taken out of the hands of the community groups themselves, and they had to respond to the demands of either the bank, or as seen earlier, the demands of planning departments and DNOs.

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<sup>31</sup> Stephen was aware of the ethical dilemma of the Co-operative bank being now partly owned through hedge funds

## 6.8 FINANCIAL SUPPORT

There seemed to be agreement amongst the interviewees in all case sites, that money in general, was becoming scarce - be it through the abilities of councils to maintain services in the face of austerity driven cuts, funding opportunities for community development and the community energy sector itself. Developing a community wind turbine was a way of plugging that gap and generating a local income,

“I think what people have to grasp... is getting away from this notion that central funding government should be provided for us, cause that ain't gonna happen...it's happening less and I think for communities to have their own means to, to sort of plug that gap I think that needs to be grasped... A community like this has to use every resource that's available to them, and shouldn't just be expecting the government to fund it...the council to fund it...I don't feel that bridge has been crossed and I feel that's important that it is crossed.”

(Claire, Tiree)

However, finance is needed for the initial stages of a renewable energy project development for scoping studies as well as payment for the renewable energy technology itself. Further finance is needed for feasibility reports, expert advice and consultation, preparation of planning forms in some cases, insurance and continuing maintenance costs post-project. Costs were avoided when certain aspects of the process were done on a voluntary basis however there were certain costs that could not be avoided, and other costs that were unexpected (buying a STATCOM on Tiree and Siabost for example). Finance was also key in order to buy the wind turbines in order to get the Feed in Tariff. New regulations for the Feed in Tariff mean that the tariff is not paid to any project that received grants to finance their renewable energy technology,

*“...mae o'n egwyddor gan Lywodraeth gyfan Ewrop, na chewch chi ddim subsidy o fwy nag un ffynhonnell, wedyn os da chi'n cael subsidy drwy FiT, mae'n anodd iawn i Lywodraeth Cymru na neb arall rhoid capital grant i chi rhoid y tyrbein i fyny de...mae rhaid chi – unai bod y pres gynnoch chi, neu mae rhaid i chi menthyg y pres”*

“...it's a principle amongst governments across Europe that you can't have a subsidy from more than one source, so if you get a subsidy through FIT, it's very difficult for

the Welsh government or anyone else to give you capital grants to put up a turbine...you have to – either you have the money or you have to borrow the money.”

(Huw, Llanfechell)

These complicated legalities were even more difficult to grapple with on the ground - to understand as to whether or not communities were eligible for FITs if they had been given particular grants. Being able to respond to these changes was a skill that communities developed, and experiences that they circulated through networks (particularly in Scotland) amongst other community groups,

“Big Lottery Fund couldn’t fund TREL to put up a turbine, it could fund the Trust to put it up, and then it was put up through TREL – it’s a complicated legal structure ...there were all kinds of issues I mean, because we were funded by Big Lottery Fund then there was this issue could we still get the FITs... and uh, yes you can because it was TREL who put it up and not the Trust or something – you know ways and means of getting round. There’s other communities that have faced that issue... and it’s something that we’ve kind of been quite good at letting other people know how to go about this in the future, so we’ve helped a lot of other communities...develop that model, so that they can do the same.”

(Henry, Tiree)

Bank loans were needed so that communities could be eligible to receive this FIT payment. Raising upwards of a million pounds for a community energy project was an arduous challenge, as the excerpt below shows,

“The turbine cost... between one and two million to put it in, and we had to buy this STATCOM which was 400,000 – so that’s a huge investment for a small community upfront really, and I think we did amazingly to get that money together and the costs escalated...more than you budget for originally, the groundworks cost a lot more than we thought it was going to be, but we managed to get extra money. The Co-op bank I have to say were extremely helpful. When we needed extra money then the Co-op were...incredibly helpful actually, and it’s just such a pity that they’re no longer in position to do what they were doing.”

(Henry, Tiree)



The Cooperative Bank was the source of loan funding in Tiree and Siabost. However there was a lack of expertise in dealing with such big bank loans. Each group in Scotland had managed to get volunteers with finance expertise on board to help. Although some financial help (loans) had been available through the CARES scheme the process of getting larger bank loans remained a long and arduous task. There was, in general, a lack of understanding amongst banks about the community energy sector and how individual projects were set up and operated,

“We needed a bank loan...and the banks, were sort of saying... ‘What’s going on...we don’t understand your project?’...Banks are really used to lending to farmers or commercial organisations, not to community groups, and not to community Trusts with subsidiaries and being involved with the lottery and how...who has first call in the whole commercial setup was a real struggle”

(Jane, Tiree)

According to interviewees the Cooperative Bank was the only UK based bank that could be approached for community energy funding apart from another ethical investment group, the Dutch bank Triodos. Having such scarce options for finding loan funding means that the community energy sector is quite limited in its capacity to grow. This is especially the case as loans from the Cooperative had ebbed since the financial crisis and their own organisational challenges in 2013<sup>32</sup>. More funding opportunities and alternative finance could allow for more community energy projects.

The Big Lottery fund was another source of funding that had been drawn upon, although their grants could only be used under certain rules. Funding from the Big Lottery allowed Siabost to employ a member of staff for administrative purposes which ultimately contributed towards moving their project forwards. The Lottery was also of central importance for structural and administrative developments for the community turbine on Tiree.

The Community Generation Fund (CGF) was another source of funding which Llanaelhaearn was successful in obtaining, alongside grants from Ynni'r Fro;

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<sup>32</sup> The Co-operative bank had a deficit of 1.5bn capital shortfall in 2013 and was subsequently bought out by hedge funds and other shareholders. No longer a cooperatively owned bank, its ethical priorities have been compromised.

*“...da ni wedi bod yn llwyddiannus iawn yn cael arian – da ni di cael arian gan Ynni’r Fro ond hefyd gafon ni arian CGF, fuon ni’n llwyddiannus yn cael yr arian yna a doedd hwna ddim yn hawdd, oeddau ni mewn cystadleuaeth - oeddau ni mewn cystadleuaeth um cyffredinol, dim yng Nghymru, ond...dros Brydain, felly oedd hwna yn uh success mawr i ni ennill yr arian yna, a mae di caniatáu i ni fynd i uh, ymlaen yn eitha’ rhwydd.”*

“...we have been very successful in getting money - we’ve had money from Ynni’r Fro but we also had money from CGF. We were successful in getting that money, and that wasn’t easy, we were in a competition - we were in a general competition not in Wales, but... across Britain, so that was a great success for us to win that money, and that’s allowed us to move forward quite easily.”

(Mark, Llanaelhaearn)

Being in competition with other community energy groups as mentioned above shows how the sector is forced to compete with others for funding. Perhaps a more strategic funding plan would alleviate the need for communities to be put into this situation of having to compete amongst each other for funding. Rather than being seen as quaint participants for competitions, community energy groups could be invested into in earnestness, particularly due to their proven ability to answer linked sustainability goals (Walker and Devine-Wright, 2008; Warren and McFadyen, 2010).

Private finance was also another important finance source, specifically in Llanaelhaearn, where landowners were offering a private investment in the community project. Funding from within the community and alternative finance, were also thought to be a possibility for their project, as it was going to be cooperatively owned (with all members of the community being shareholders through membership with Antur Aelhaearn),

*“...da ni’n rhoid, rhyw fath o sicrwydd i’r Antur trwy’r lease, a trwy’r rhoid lwmp o gash iddyn nhw, achos mae o’n job cael arian parod i gychwyn prosiect llw...Fuon ni’n meddwl ei fod o’n help mawr iddyn nhw gallu fynd at banc hyd yn oed, a rhywun a deud mae gennon ni lwmp o bres fan hyn rwân, ac mae gynnon ni shâr, pobol yn mynd i brynu shâr hefyd, a da ni isho benthyg y gweddill er mwyn glirio fo i ffwrdd y gynta fedrwn ni er mwyn i ni gael budd mwya’ ohono fo llw”*

“...we have given, some sort of security to the Antur through the lease and by giving a lump of cash to them, because it’s difficult to get ready money to start a project... We

were thinking it would be a great help for them to be able to approach a bank even...and say, we have a lump of money here now, and we have a share, people are going to buy shares too, and we want to borrow the rest so that we can clear it away as fast as possible so that we can get the most benefit out of it...”

(Tristan, Llanaelhaearn)

There was a general consensus amongst the interviewees across the case study sites that financing community energy projects should be made easier,

“It should be made easier...I don’t know where people would go to now. I mean Big Lottery fund is back up and running but there are these problems with not being able to get FITs if you go down that route so... there might be a model for developing [to] get round that...whether the government can help in those areas more, I think they probably can yeah.”

(Henry, Tiree)

## **6.9 UNCERTAINTY**

Risk is also another downside to community energy ownership. In the case of wind technology, this could arise if the wind turbine fails to perform as expected, or as there are changes in electricity prices (Munday et al, 2011). Technological barriers, particularly the lack of technical knowledge and expertise in the area of renewable energy technologies also hinder developments in the field (Bomberg and McEwen, 2012).

Uncertainty manifested itself in the way that even wind turbine manufacturers viewed community energy projects. It seems that community energy groups were seen as marginal, insignificant and supporting previous research, seen as ‘not worth the effort’ (Kellet, 2007). The need for communities to constantly hound wind turbine manufacturers, is a reflection on how marginal the sector is viewed by some,

“Turbine manufacturers don’t want to sell one...they want to sell fifty, because they come with a commitment to maintain them for a certain number of years, so they don’t want to have a commitment to maintain one turbine when they could be flying off somewhere maintaining twenty so it was a real battle...there was only Enercon left...I

used to badger the UK Enercon rep every week or every fortnight...and finally, I remember it was on my birthday, and trying to remember the year, it was probably 2009...it was a Friday night, and he said – I’m so sick of saying no to you, I’m going to say yes”

(Jane, Tiree)

This again reflects how entrenched incumbent actors (Strachan et al, 2015) are in the traditional, large scale energy sector. There seemed to be a real unwillingness for manufacturers (similarly to the DNOs) to engage and facilitate community energy projects with their developments. How to tackle this engrained traditionalist approach to the energy sector is a challenging task to say the least. Community energy groups in Scotland have had to labour through an arduous set of obstacles to establish their community energy groups. Welsh groups are still in the process of wading through treacle to get their projects off the ground. There was a desire for a simplification of processes,

“I would like to see a bit more stability, you know so that you have a clear route and that you’re not constantly dealing with obstacles and changes and you know because that, that really, it loses loads of time, cause all of a sudden... you’re thrown into a wee bit of chaos because somebody suddenly said, oh by the way, you can’t do this anymore – why? Well somebody changed their mind, and they decided that you were....so you’ve got to start again and work through it all.”

(Stephen, Siabost)

This frustration of things changing constantly in the sector was also a frustration for Tiree,

“The actual getting there was, was like pulling teeth, I mean really – some of the things. Number of times we’d done a lot of work and then, boom – something’s come in as if that’s going to stop this project in its tracks, and trying to get through that, and the next hurdle and then something else comes in and it literally every two or three months there’d be another massive hurdle – you’d think – oh my goodness, that’s sort of stopped this, we can’t get round that, and then... a huge amount of work to...get round it...”

(Henry, Tiree)

In Wales there was a tangible concern that due to the time it took for development, the Feed in Tariff was becoming lower and lower. This is exasperated even further with recent intentions by central government to address Feed in Tariffs in the future – with the possibility of additional cuts to the payment in 2016 (Gani, 2015 and Vaughan, 2015). What these changes in the Feed in Tariff and lack of stability for the sector had ultimately caused the group in Siabost was a loss of what the initial calculations for their income stream would be. This is a devastating blow for a community who had worked at developing their scheme for a number of years based on a fixed financial outcome in their projections,

“Suddenly they [Westminster] come along and pull the carpet out from under your feet. All of a sudden, you’re borrowing 90% of the money, repayments are going up, therefore the money you get at the end of the day is going to be less, and you’re actually being put on the same, you know rather than being – getting a special, getting special treatment as a community, you were on the same playing field as commercial operators.”

(Stephen, Siabost)

## 6.10 FUTURE SUPPORT

*“Basa rhywun yn licio gweld mwy o cefnogaeth wrth gwrs. A falla, nid jyst mwy o gefnogaeth ond cefnogaeth mwy cyson”*

“A person would like to see more support of course, and maybe, not just more support but more consistent support”

(Rhys, Llanaelhaearn)

Interviewees across the four case studies were in agreement that their community energy projects were of great local benefit, whether their projects were up and running (Siabost and Tíree), or under development (Llanaelhaearn and Llanfechell). From their hands-on experience of seeing projects through to completion or attempting to establish community wind turbine project, interviewees were in agreement that more support was needed for their sector. Below are some of the suggestions that the interviewees outlined.

Firstly the amount of time it took to develop a community energy project was alarming;

“Ten years it took...that’s a long haul...”

(Ciaran, Siabost)

A community owned wind turbine will currently take up to a decade to be developed from inception to implementation. In Welsh cases, for example Awel Aman Tawe<sup>33</sup> and Cwm Arian<sup>34</sup>, the timescale is even longer, with the former still in the process of developing since 2001 (Awel Aman Tawe, 2015). This is not a realistic venture for many communities to adhere to, as the timescale for community energy project development according to some interviewees could cause community burnout. Many of the interviewees were left incredulous with the amount of time it took for them to get their projects off the ground, and believed that more support and preferential considerations for the sector would allow them to develop faster.

A few of the interviewees believed that the sector was also in need of a more focused lobbying body, enabling them to get their viewpoints and demands through to government bodies. There was also an appetite for those who had influence to ensure that DNOs would work with communities. Part of this particular problem of representation and lobbying lies in the failure of the UK government to nurture “actors that are willing and able to challenge the power of major, incumbent energy businesses and policies that constitute the dominant socio-technical regime” (Strachan et al, 2015, p.105). Pressure on suppliers and DNOs - these ‘incumbent energy businesses’ - was crucial;

“Where we needed help was with...the suppliers or with say SSE, we needed somebody to go – ‘Oy! Get your act together’...and promote our interest in that way rather than actually telling us how to do it, cause we knew how to do it. It’s just the other side wasn’t playing ball, you know the supplier would supply us a turbine or we could get connection, we knew what we needed, we just needed somebody to basically kick ass and say – help them...”

(Jane, Tíree)

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<sup>33</sup> Community Wind Turbine project in the Amman Valley of south-west Wales

<sup>34</sup> Community Wind Turbine project in north Pembrokeshire, west Wales

There were also calls, more so by the Welsh case study sites, that more practical and advisory support was needed, possibly because it seemed that Welsh communities were not as well serviced by supporting bodies as their Scottish counterparts were;

“What you want is more enabling entities, and if that’s financial or advisory or technical, those are the, those are the things that one...we need”

(Gerald, Llanfechell)

This differed to some comments made in Scottish examples where support was much more readily available for communities. An awareness campaign was also desirable – i.e. that there was a need for communities to become more aware of the possibilities laid open to them through community energy. This would entail a campaign to raise awareness and to educate communities of the possibilities offered to them through the community energy sector. If communities wanted to pursue such projects, it was the role of government, according to some, to support this desire – although the call must come from the bottom up,

“I think the government, whoever the government is...needs to think more [to] increase support for rural communities to do this kind of thing. But the government can make all the funding in the world available, but if the community is unwilling to apply for it or put in the graft - make it happen, it will never happen. So, at the same time, communities can lobby as well for things to change so I think change happens at a grassroots level. I’m a big fan of bottom up as opposed to top down...it’s definitely up to the community here to lobby and to fight and to find ways to sustain itself, but when it does that it needs support from council and government level as all communities across Scotland do.”

(Martha, Tiree)

However, whether or not Westminster will continue with its support of community energy – particularly through the process of Feed in Tariffs will be revealed in 2016. The fact that the consultation paper on Feed in Tariffs over the summer of 2015 included the intention of “restricting small-scale renewables support to particular groups, such as householders and community groups” (DECC, 2015, p.15) is in itself a disconcerting blow to the sector (Jones, 2015; Hopkins, 2015). Although the consultation purports to build upon or replace Feed in Tariffs for communities – how and to what extent this will be done, is currently held in the balance.

## 6.11 LAND OWNERSHIP AND COMMUNITY ENERGY

“...if you’ve got a piece of land, if you’ve got water, land or some good natural resource –you should be making the most out of it...it’s crazy not to...”

(Jane, Tiree)

Access to land is fundamental to the success or failure of any renewable energy project that seeks to install a wind turbine. However, community wind projects are faced with significantly less capital and power of purchase compared to larger more developed companies. Although all four case studies had managed to ensure access to land for developing their projects, it was recognised that finding land and appropriate land at that, could be a hurdle. This was particularly the case on Anglesey, where houses are scattered across the island in such a way that finding an appropriate place for developing a wind turbine project was particularly difficult,

*“Mae Sir Fôn yn le od - er bod o’n gefn gwlad...ewch chi ar draws y sir...tydi pellter rhwng ffermydd, tyddynnod, tai...mae’r lle wedi cael ei wasgaru’n gyson llw...efo anneddau a wedyn mae o yn lle reit anodd mewn ffordd i feddwl os dach chi iso rhoi tyrbin i fyny...toes na’m llawer o lefydd ar Sir Fôn, er bod gyda ni gwynt cythreulig yma a bod na’r adnodd yna yn, yn ffantastig, mae cael safleoedd yn anodd de...oherwydd natur y boblogaeth a sut mae o wedi cael ei wasgaru ar draws y sir...”*

“Anglesey is odd - despite being rural...if you go across the county...the distance between farms, homesteads, houses...the place is spread out constantly with...dwellings and so it is a difficult place if you’re thinking of putting up a turbine...there aren’t many places on Anglesey, although we have terrible wind here, and that resource is fantastic, getting the sites is difficult...because of the nature of the population and how it is spread across the county...”

(Bedwyr, Llanfechell)

There were also difficulties after acquiring the land. The example below shows that communities have difficulties with local landowners and acquiring wayleaves<sup>35</sup> on land where

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<sup>35</sup> The legal rights given for utilities to develop across private land.



cables from the turbine would pass, who would call for financial settlements for the rights to do so,

“..like when people were playing silly beggars with the wayleaves, you know it all gets really depressing and you think–‘oh we’ve only just got our turbine and now we’re going to lose it’ – and you think ‘ohhhh’...”

(Jane, Tiree)

Interestingly in Scotland, with the Land Reform Review underway more land could be opened up to communities who would want to develop community energy projects. The Land Reform could,

“Assist with the acquisition and management of land (and also land assets) by communities, to make stronger, more resilient, and independent communities which have an even greater stake in their development”

(Land Reform Review Group, 2015)

Estate owners in Scotland, in the case of Siabost *were* more supportive of their community led project compared to a private enterprise that was also being suggested in the area,

“[The estate owners] said that they would be much more supportive that you guys, if you do it yourself”

(Stephen, Siabost)

However, it would be interesting to see if the anticipated Land Reform Review and follow on policies in Scotland will have any impact on the development of community energy projects. Similarly in Wales, and indeed the whole of the rest of the British Isles, land rights issues and community energy development would be an interesting avenue for further research.

## **6.12 CONCLUSIONS**

Energy has historically been resourced, created and sold on a large scale and from a centre of power. Small, community renewable projects have not been the norm and have only lately been considered as viable possibilities for sustainable energy production. However, Strachan et al (2015) suggest that the community renewables sector remains an under-funded, under-supported subdivision of the energy sector. This chapter has supported this view. It has become

apparent that the community energy sector is operating within an energy system (and a planning system) that does not appear to want to see the growth of community owned renewable projects. Interviewees depicted their experience of developing their community energy projects as a battle rather than a process. Furthermore, it became apparent that communities are adverse to working with and having to bow to the demands of certain energy incumbents – especially the DNOs in the case of the Scottish examples. This was also the case with planning departments of each local authority in Wales and Scotland – where procedures were cumbersome and highly administrative - particularly for a group of volunteers. The mammoth task of wading through the levels of bureaucracy at planning stages and chasing after finance to fund projects clearly caused frustrations. Compounded with this were the difficulties of navigating relationships with wind turbine manufacturers, sub-contractors and gaining access to the national grid through the DNOs.

In policy terms it has been suggested that Westminster, along with the sub-state governments (despite a number of Welsh and Scottish specific community energy support structures), on the whole, continue “to favour large corporations and major facilities” (Strachan et al, 2015, p.106). Centralised, large-scale power generators, electrical energy distributors, the national grid, and the ‘Big Six’ utility companies continue to be the main actors within the energy system. Lack of support from local government, Westminster and, albeit to a lesser degree, the devolved governments of Scotland and Wales, was a central theme that emerged through the interviews.

Support is reflected in the official policies of the national devolved governing bodies, evidenced through their investment in the CARES scheme and Ynni’r Fro programme. CARES has more funding available to support Scottish community energy projects, albeit that they are distributed through a loan structure rather than through grants like Ynni’r Fro. CARES and the two bodies that have overseen the programme, CES and Local Energy Scotland, have created a national network, are actively campaigning and lobbying on the behalf of the sector and have more resources (such as staff) to establish a more coherent community energy sector. They are also working within an environment where they have a clear target for the sector, the 500MW target set by the Scottish Government. Interviewees in Wales, despite their praise of the work of Ynni’r Fro, and a number of individual Assembly members and local councillors (in Gwynedd), spoke of the lack of resources and capacity that the scheme had, and also the lack of a coherent, streamlined policy and target for the sector set by the Welsh Government.

However, it would be an over-simplification to suggest that Ynni'r Fro and CARES are the only influencers on the success (or failure) of the development of community energy in the devolved nations. It has become evident through this research that there is a conflict between what the apparent sub-state nations' visions are for the sector and how incumbent regimes of the energy system can block such visions. Examples of regimes that overshadow community energy developments are the DNOs, whom none of the interviewees portrayed as supporters or facilitators in their developments. As one interviewee puts it, the DNOs 'weren't playing ball' with community energy projects.

In relation to moving away from the traditional energy generation 'regime', the sub-nation governments in Wales and Scotland have "broadly supported the maintenance of conventional, large-scale electricity development pathways" (Strachan et al, 2015, p.107). Whether or not this is an ideological decision by the sub-state nations or a by-product of having limited legislative powers in the field and being carried along with the will of the Westminster government is something worthy of further investigation. Nevertheless, it seems that the communities themselves had more trust in their devolved nation's government in this field than Westminster.

The ingrained centralist approach to energy generation and distribution has created a number of socio-technical limitations for community projects in the field of sustainable renewable energy (Yadoo *et al*, 2011). Such limitations include lack of access to the grid and an authentic working relationship with DNOs as evidenced through this research. Previous research has suggested that such limitations have created uncertainty within communities as to the viability of creating successful schemes in their locality (Rogers *et al*, 2008). Evidence presented here supports these claims, although communities have shown tremendous ingenuity in the face of these challenges. However, uncertainty within the sector remains a concern.

It also became apparent through interviews that there was a strong desire amongst communities to generate energy for their communities, rather than feeding into a national grid, and in the process having to bow to the demands of the bodies in control of the current energy system. Adapting energy generation methods in order to allow for a more sympathetic, decentralised, local energy system that is inclusive of citizens, is a rarity. For the community energy sector to prosper, it seems that there is need for a dramatic shift in the way energy is generated and distributed. There is also a need for a radical change to the traditional patterns of energy governance. A first step in achieving this aim would be through increased support of the

community energy sector. In practical terms, this could be done through a commitment that community energy be seen in a different light to corporate energy producers. A legal definition of the sector, and a commitment to continue with an exclusive *community* Feed in Tariff (or a strong equivalent) would be indicative of support. More research into the possibility of developing local, community grids could also be a development that would genuinely seek to accommodate the growth of community energy practices.

## CHAPTER 7

### THE VALUE OF OWNERSHIP

“Had it not been community owned, you know, it would just be there and there would be no benefit whatsoever...”

(Màiri, Siabost)

#### 7.1 INTRODUCTION

This chapter will look at the similarities and differences concerning the significance of ownership of community renewable energy projects. Building upon the previous chapters, this chapter will compare how communities symbolically view the importance of ownership. As explored in the literature review, there are many benefits that can be accrued from having local, community ownership of a project. It appears that there is growing sensitivity (particularly with wind power developments in rural areas) regarding the disproportionate distribution of economic benefits and costs of renewable energy deployment (Munday et al, 2011). Concerns from local government and local communities are usually centred on the financial and environmental impact of energy developments (Li et al, 2013). A significant correlation between ownership and support of wind energy has also been documented in a case study in the south-west of Scotland. In this study, Warren and McFadyen (2010) suggest that a change in the patterns of ownership in renewable energy projects could lead to an increase in support for renewable energy as a whole. It also draws a parallel with survey based research in southeast Germany, showing a marked difference in levels of tolerance between two case sites with on one hand a community owned energy project and on another a private energy project. Comparisons between both showed that the first community were regularly responding in the positive about renewable energy compared to the second (Musall and Kuik, 2011).

This chapter seeks to look at the importance of obtaining ownership for community energy groups, and explore the ways that ownership can lead towards the community's future viability, social resilience and sustainability.

## 7.2 A SMALL YET SIGNIFICANT ECONOMIC BENEFIT

“I guess the community wouldn’t get any money from it if it was privately owned, so yeah - it would suck.”

(Juliet, Tíree)

Despite arguably being dismissed by the energy sectors incumbent actors as being of marginal importance and ‘not worth the effort’ (Kellet, 2007) community renewable projects were seen by participants of this research as contributing a significant change and providing significant benefit to communities. All of the interviewees saw the potential positive impact that a new income stream generated from their community wind turbines could create. Although a small sum of money in relation to what large energy projects generate for private gain – the income generated through the community wind turbines was a significant and sustainable income for the rural communities under study. There was also the potential to use this new income as a lever for obtaining more money for development - through match funding. There was also a sense that the community was more in control of how the money was being invested, despite some charity law rules and administrative pressures described in earlier chapters. This new income into the local economy has created a sense of confidence in future possibilities,

“...a community turbine that earns a £100,000 a year in a general economy, it’s relatively small be it compared to fishing, crofting and tourism...but it has certainly, it punches above its weight in terms of its effect on community morale and resilience and I think... I’m totally confident in the future of Tíree.”

(Robert, Tíree)

Furthermore, in areas like Llanaelhaearn on the Pen Llŷn peninsula, it was believed that the wind turbine was building on community developments that had already been established in the area, such as the Nantgwrtheyrn Welsh Language Centre. The excerpt below shows how developments of its kind contributed to the economy but also to local pride, as the community turbine was expected to do,

*“Mae [Nantgwrtheyrn yn] rhwbath pwysig yn yr ardal erbyn hyn, a falle cenedlaethol hefyd, ond o rhan gwaith yn lleol, mae’n bwysig. Mae’n rhoi hyder a balchder rwy’n credu, yn yr ardal, ag yn lle bod yn rhyw le sy’n gael ei anghofio, mae’n ffocws ar gyfer diddordeb pobol... wedyn mae’r economi yn yr ardal yn gyffredinol rwy’n credu yn*

*dipyn iachach 'swn i'n deud, um, ond nid da lle gellid gwell – megis y bwriad yma i godi y tyrbîn ynde.*

“[Nantgwrtheyrn is] something important for the area by now, and possibly nationally too, but for local work its important. It gives confidence and pride I think in the area, and rather than being a place that gets forgotten, it’s a focus for the interests of people...so the economy in the area is generally, I believe is a bit healthier I would say. But, there’s always room for improvement – which is why we’ve the intention of raising a turbine.”

(Rhys, Llanaelhaearn)

Llanaelhaearn also used the services of a mid-Wales company during their application for a community wind turbine, thereby *contributing* to a local economy. Similarly, local Scottish companies were used for guidance and project management in Scotland. This was not the case with procurement of technology and finance (apart from Ynni Aelhaearn – who hoped to raise part of their funds locally), but where local companies could be used, the communities had used them. Whereas a privately owned energy project might have outsourced expertise from outside Scotland or Wales it seemed that community energy groups were procuring expertise locally. There could therefore be wider economic benefits created by community energy groups, as there was a desire, in Llanaelhaearn particularly, to

*“...cefnogi cwmni lleol de, o Gymru....”*

“...support a local company, from Wales...”

(Owain, Llanaelhaearn)

### **7.2.1 Protection from austerity**

“It is...an exciting time for the island, with our windfall money from Tilley, our community turbine... It is such a great achievement for a small island, to have our own funding for projects, especially in this current economic climate and we should be proud of this. By having this independent income stream on our island we will be less reliant on grant funding from outside bodies especially when we are faced with funding cuts during this time of financial hardship.”

(Tiree Trust, 2011, p.5)

Actual and expected service cuts as a result of austerity measures were repeatedly referred to as one of the most significant challenges facing rural communities. Ownership of a community energy project, and the income that could be generated through being renewable energy producers was viewed as a means of protection against future austerity, as intimated above in Tiree's 'Community Growth Plan'. The ability of the turbine to plug the gaps in public money cuts and create a new funding stream for communities, was one of the aims of many of the projects as described in the excerpt below,

“Essentially [the purpose is] to provide a sustainable income stream for the community, so that its aspirations could be met. I think it was known that council funding for various things was always dropping away and other funding streams were getting harder particularly when the Olympics<sup>36</sup> were ongoing and all the Lottery Funding just evaporated basically, so it was trying to get some extra funding in place so that community groups could keep doing what they do and they do very well, and...which includes employment, so they employ quite a few people.”

(Henry, Tiree)

Despite pressures on councils to deliver services and funding for regeneration schemes in the face of cuts and looming austerity measures (and the potential community energy posed in alleviating some of these financial pressures), there were expectations that Gwynedd Council would refuse the Ynni Aelhaearn scheme on the grounds of visual impact<sup>37</sup>. The community were aware that public money was drying up, but believed that their project was addressing this crisis and offered an alternative means of self-finance for regeneration purposes,

*“Dyw arian gyhoeddus ddim ar gael heddiw...Dyna sut ddoth syniad y tyrebin. Baswn ni'n codi tyrbein gymunedol i fyny, a bod rhywun yn defnyddio'r arian hwnw i bwmpio fo nol i'r pentra er mwyn trio adfywio bach ar y pentra.”*

“Public money is not available today...that's how the turbine idea came about. We would build a community turbine and then we could use that money to pump back into the village so as to try and regenerate the village a bit.”

(Selwyn, Llanaelhaearn)

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<sup>36</sup> London Olympics, 2012.

<sup>37</sup> Indeed Ynni Aelhaearn's scheme was refused planning in November 2014.



There were others who believed that communities had become over reliant on public money, and needed to shift away from this dependency. There was a consensus that money was getting more and more difficult to find for maintenance costs of public amenities and delivering essential public services. Community energy was posed as a means of breaking away from these dependent forms of finance,

“You go and ask people for money and they’ve...the council – ‘oh, no, we haven’t got any money just now’, and it’s like you’ve gone begging for money, whereas now, we are in a position where we’ve got money, and if you’ve got money, it’s easier to get more money, you know as a lever.”

(Stephen, Siabost)

### **7.2.2 Alleviating fuel poverty**

“...fuel poverty is a huge problem in the Western Isles, so we wanted to look at it in our own community, and we wanted to try and do something to, not alleviate it, but to try and reduce it, because you just can’t alleviate fuel poverty here.”

(Molly, Siabost)

Fuel poverty was another social affliction facing communities in rural areas of Scotland and Wales. The cost of fuel for transport and the cost of heating homes were felt acutely in these areas. Addressing fuel poverty was central to all four community energy projects, not only through energy efficiency approaches such as installing insulation, but also through pursuing different means of generating energy for individual households using photovoltaics and solar panels and reducing energy use within the home. Ownership of a community wind turbine, and generating a local income was a way of trying to help combat fuel poverty.

One direct way of targeting fuel poverty was a plan to give households money per annum for energy bills, from the income of the wind turbine - a proposal being discussed in Llanaelhaearn. 20% of the income generated from their proposed wind turbine would be shared directly with individual households in the area to contribute towards energy bills. They also proposed to establish a grant system which individual households could apply for - capital to help install solar electric and solar thermal systems for their homes. There were also desires in

Llanaelhaern to develop new, affordable, purpose built and efficient housing in the area. One idea was to develop housing through Tŷ Solar - a company in Pembrokeshire who make affordable, efficient and low carbon housing<sup>38</sup>. It was suggested that money from the community wind turbine along with resources in the form of the Antur Aelhaearn workshop could allow the village to develop new energy efficient housing for the village. It was a concrete goal, to alleviate fuel poverty,

*“Os oes modd ac fel sydd yn bwriad - chi’n gwbod da ni’n son am cryn dipyn o incwm fan hyn os ydy’r peth yn mynd yn ei flaen...helpu bobol hefo’u biliau trydan, biliau tanwydd...sicrhau fod neb yn dioddef efo tlodi tanwydd”*

“If there’s means and as is the intention – you know, you’re talking about a significant sum of income here if the thing goes ahead...helping people with their electricity bills, fuel bills...ensure that nobody suffers from fuel poverty.”

(Rhys, Llanaelhaearn)

### 7.3 OWNERSHIP, DEMOCRACY AND INCLUSIVENESS

“...if it was privately owned...I’d probably think, structurally it was quite beautiful. I’d probably resent it being there. I don’t resent it because it belongs to the community. But...if some company came in and... put one up there and the island was getting nothing from it...Yeah I wouldn’t...I’d probably would have a very different relationship with it.”

(Martha, Tiree)

All of the interviewees, when asked about the benefits of having or the potential of having a renewable energy project owned by their community, were positive about the meaning and consequence of this. Ownership seemed synonymous with self-determination and self-reliance, and was used as a positivist term. Comparing the difference between traditional ownership structures and community ownership was a recurring concept.

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<sup>38</sup> £75,000 for a three bedroom house with a solar system.

### 7.3.1 Relationship with energy ownership models, past and present

“A lot of the power generation is still very centralised and vested in very large companies. But I think you know a diverse approach in many fields of life is probably healthier, more flexible. Concentrations, monopolies generally are not a good thing and I don’t think are a very good seed bed for quality thinking either.”

(Calum, Siabost)

Many of the interviewees viewed ownership models of the past as being defunct and that their community owned wind turbine projects were a pre-cursor to new ownership models for future renewable energy development. Interviewees described their community owned projects as being more equitable and fair in comparison to private developments of the past and present. This insight contributes to the emerging concept of energy justice. It seems that ownership of a renewable energy project contributed to feelings of equity and fairness. Comparing their community energy project with a Western Power development on Anglesey, Rhys below sees a ‘genuine’ difference in both developments,

*“Mae rhan fwyaf, mae’r budd wrth gwrs yn mynd i’r cwmni, a dwi yn gwahaniaethu rhyngddyn nhw a be da ni’n trio neud fan hyn yn Llanhaearn felly. Dwi ddim yn credu mod i’n siarad yn rhy chi’n gwbod rhy rhagrithiol, dwi’n meddwl bod na gwahaniaeth gwirioneddol rhwng y ddau.”*

“Most of the, the benefits of course goes to the company, and I do differentiate between them and what we’re trying to do here in Llanhaearn. I don’t think I’m speaking too, you know hypocritically, I think that there is a genuine difference between the two.”

(Rhys, Llanaelhaearn)

This genuine difference between a private or corporate energy development and a community energy project was echoed across other interviews conducted in Wales and Scotland. At the time of interviewing, there had been a proposal for a large off shore wind farm array on the coast of Tiree. The excerpt below reflects what many islanders thought of this project and how large energy infrastructures were viewed in general,

“I think I have a basic objection to...[laughing] big companies, international conglomerates coming in and riding roughshod over small communities. I don’t think

the array as far as I know is really about trying to secure a long time future in renewable energy, it's more about making money and, yeah... that doesn't sit well with me"

(Martha, Tíree)

Historical comparisons were also drawn, particularly in how ownership models of renewable energy could create a break with the past that could lead to an overhaul of ingrained energy ownership and societal patterns. This again contributes towards energy justice discourses – and the way that community energy breaks the mould of energy generation of the past,

*“Mae hwnw yn beth arall efo'r cynllun cymunedol - mae o'n un o'r chydig diwydiannau, lle mae'r budd yn aros yn lleol de. Os wyt ti'n meddwl am lechi a glo a carreg gwenithfaen a diwydiannau er'ill sydd wedi bod yma... Wylfa, bob dim, mae na fudd cymunedol oes, ond dim i'r canran yma... lle mae gwrthdroi patrymau cymdeithasol da ni wedi arfer efo fo ers degawdau bellach...dyna dwi'n gweld – dyna di'r potensial fan hyn dwi'n meddwl – gwrthdroi hynny tingwbod?”*

“That's another thing with the community scheme - it is one of the few industries, where the benefits stay local. If you think of slate and coal and granite and other industries that have been here... Wylfa, everything, there is a community benefit yes, but not to this extent...where we could see the reversal of social patterns that we have become used to for decades...that's what I see – that's the potential here I think - reverse that, you know?”

(Owain, Llanaelhaearn)

The above excerpt contributes to our understanding of rural peripheral resource areas. Granite and now wind were the resources that could be drawn upon for development of the area, however with wind posing a chance for communities to own and benefit from its utilisation. Historical parallels were drawn between how a local resource, granite in the case of Llanaelhaearn had been used to create and sustain the communities of the area, and how the local wind resource now presented the potential for the community to benefit and the area to be sustainable,

*“...yn yr un modd oedd pobol canrif cyn dwetha yn gweld...gwenithfaen yn yr ardal fel modd i creu gwaith ar gyfer y cymunedau, [mae'r] cymunedau i gyd yn yr ardal yna wedi datblygu oherwydd y chwareli...fersiwn yr oes yma os lychi chi, ydi defnyddio y*

*gwynt sydd yn adnodd naturiol yn yr ardal i cynhyrchu ynni i cynhyrchu incwm i diwyallu yr anghenion”*

“...in the same way that people from last century saw...granite in the area as a means of creating work for communities, all of [the] communities in that area have developed because of the quarries...the version for this age if you like, is using wind as a natural resource in the area to generate energy to generate an income to meet local needs”

(Rhys, Llanaelhaearn)

It seemed that there was a desire amongst communities to see a break in this tradition of having energy infrastructure and privately owned projects enforced upon communities rather than developed according to the needs of the community. As the excerpt below shows, it is a matter of deciding what is acceptable and what is not,

*“...be sy’n dderbyniol a beth sydd ddim - dwi’n meddwl mae rhywbeth sydd mond yna er mwyn elwi cwmni mawr heb unrhyw fantias i’r gymuned...yn rhywbeth sydd yn adnodd ei cyfiawnhau, ond rhywbeth fel sydd gynnon ni yn Llanaelhaearn lle mae na budd uniongyrchol i’r cymuned ac yn galliogi’r cymuned i neud y gymaint yn fwy i helpu eu hunain... yn rhywbeth llawer haws ei gyfaianwhau.”*

“...what is acceptable and what is not – I think that something that is only there for the gain of a large company without any benefit for the community...is something that is difficult to justify, but something as we have in Llanaelhaearn where there’s direct benefit to the community and allows the community to do so much more to help themselves... is something much easier to justify.”

(Rhys, Llanaelhaearn)

Similarly on Anglesey, it was believed that the traditional ways of generating energy through wind, without any regard to local communities, was an occurrence that was being increasingly challenged, as people started to question their rights in developmental matters,

“When the original Rhydygroes windfarm went up there were no, nothing, no benefit to the community. The landowners got royalties...it was only the landowners that were benefiting, but now, there’s much more awareness in... particularly there’s been

controversy you know that, you know there should be a quid pro quo you know...the idea of community benefit has become you know...sort of established”

(Gerald, Llanfechell)

Community benefit from local private energy projects was something that was becoming quite common in the area of north Anglesey. One such example practicing this community benefit scheme was a local two turbine wind farm at Ysgellog<sup>39</sup> that aimed to give £13,800 of community benefit to the local community per annum “...and with an additional sort of sweetener of an extra fifty thousand for the first year” (Gerald, Llanfechell). The area also had access to a community benefit fund from private developers of the wind turbine project close to Llyn Alaw. However, those involved in steering Ynni Talybolion realised that there would be much more financial benefit for the community through fully owning a wind turbine project,

*“Yn lle boch chi efo pum mil, ella bysa ganddoch chi pumdeg mil yn Llanfechell yn de a pumdeg mil yn Gemaes de. A wedyn yn sydyn reit, gynnoch chi lot mwy o bres de...”*

“Instead of having five thousand, maybe you’d have fifty thousand in Llanfechell and fifty thousand in Cemaes, and then all of a sudden, you’d have much more money...”

(Huw, Llanfechell)

This reflects a finding made through research by Bomberg and McEwen (2012) comparing the financial benefits imparted by two case sites on the Kintyre peninsula of Scotland – one under full community ownership and the other a collection of privately owned projects delivering community benefit packages. The research showed an enormous disparity in the amount of income that was delivered to the local community between both models, with the small community owned wind turbine project on the isle of Gigha delivering triple the amount of income to the community compared to the combined community benefits delivered by three privately owned projects on the mainland (Bomberg and McEwen, 2012).

Understanding differences in financial outcomes through *complete* community ownership (rather than part ownership or community benefits), in some areas of Wales in particular, had not been fully comprehended according to some interviewees. This can be attributed to the assumption that the very idea of ownership in the community is a relatively new concept, and a break with the ingrained ‘norm’ of ownership of energy generating projects in the sector.

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<sup>39</sup> A partnership between local farmers and energy developer Airvolution

This reflects upon the idea of the Multi Level Perspective model used to describe socio-technical transitions. The model recognises three levels of influencing ‘actors’ within such transitions: the niche, the regime and the landscape (Geels, 2002). The regime refers to the incumbent actors that perpetuate the status quo – in the case of the energy transition, the traditional, large, private energy generators and providers. The niche is a “locus of radical innovation” – an emergence of a different way of doing things in comparison to the status quo, an innovative movement which emerges with the provision of a “window of opportunity” (Eames and Hunt, 2013, p. 51). The landscape can refer to societal changes, changes in political trends and values, and economic changes (Geels, 2011; Eames and Hunt, 2013). The window of opportunity for communities in the case of the energy sector is renewable energy technology – and the ability of communities to become owners of projects that make use of such technology. However, this window of opportunity for communities was being missed in the opinion of some, as the excerpt below, in reference to a development in Blaenau Ffestiniog in Gwynedd suggests. The privately owned project there entailed that the community of the small rural town would receive an annual benefit package. It was argued, that the community would receive a tiny amount of income compared to what the community would get if they had been the developers and owners of such a scheme,

*“Mae na gynnig i neud ffarm wynt o fewn ...gweithfeydd llechi yn Blaenau Ffestiniog...unarddeg o dyrbeini sydd yn lot fwy na un ni. Mae nhw tua 1.2MW, neu 1.5MW yr un. A mae nhw di cynnig yn barod i dre Blaenau Ffestiniog £130,000 y flwyddyn, ag oedd y dre fel, ‘Waw!...£130,000 y flwyddyn!’. Ond da ni’n dod a tyrbein hanner, neu llai na hanner o faint [500Kw] ac yn cynnig run faint i pentra Llanhaearn mewn ffordd o fudd de...petai hwn yn cymunedol yn Blaenau Ffestiniog sa nhw’n son am wchi be 2.6 miliwn y flwyddyn o hynna... dyna’n union be di’r gwahaniaeth llw...hon di’r ffordd sy’n adfywio, sy’n gneud gwahaniaeth mawr i gymunedau de...a dwi’n meddwl bod ni’n Nghymru, dim di gweld, cweit dallt hynna eto.”*

“There are plans to establish a wind farm within...the slate works of Blaenau Ffestiniog...eleven turbines which are much bigger than our one. They’re about 1.2MW or 1.5MW each, and they’ve already offered to the town of Blaenau Ffestiniog £130,000 per annum, and the town was like ‘Wow!...£130,000 per year!’. But we’re bringing a turbine half, or less than half the size [500kW turbine] and are offering the same amount to the village of Llanhaearn in the way of benefits...if this was community owned in Blaenau Ffestiniog they would get, what £2.6 million a year from that...that’s

exactly the difference...This is how we can regenerate in a way which makes a big difference to communities...and I think that we in Wales haven't seen, or quite understood that yet."

(Tristan, Llanaelhaearn)

Amongst the interviewees in Wales and Scotland, there was a desire for the community energy sector to diffuse and spread so that all villages had a similar resource that would pay back into the community. The interviewees believed that other communities could benefit from pursuing such projects, despite all of the obstacles and difficulties discussed in previous chapters. Interestingly community energy groups had a wider communitarian view as to how community energy could contribute towards the viability of other communities, not just their own,

*"...swn i'n lico bod o'n digwydd mewn bob pentra os lici di, bod ie, dim tyrbein gwynt ella ond bod gen bob pentra rhyw, rhyw broject sydd yn chwistrellu arian nôl i mewn i'r gymuned de."*

"...I would like to see it happen in every village if you like, that, yes, not a wind turbine maybe, but that every village has, has a project that injects money back into the community."

(Selwyn, Llanaelhaearn)

Furthermore, discourses arose to do with the need for a radical power shift in the energy generation and distributing model or the status quo. In explaining the drivers for community energy ownership, interviewees intimated there was a sense of 'taking power back' from the traditional 'owners' of energy as illustrated in the excerpt below,

*"Dwi'n meddwl... mynd allan i tynnu, tynnu grym y 6 cwmni mawr, um, tynnu grym wrthyn nhw, a datblygu yn lleol ydy'r ateb yn de. A hyd gallai weld beth bynnag, mae math o lefel o ynni fyddan ni'n cynhyrchu yn Llanhaeran mwy neu lai yn cyfateb i ofynion yr ardal beth bynnag, so mae'n digwydd bod ym yn ffitio, nid bod ni'n tapio fewn iddo'n uniongyrchol, mae'n mynd yn syth i'r grid wrth gwrs, ond mae rhywun yn gwybod wedyn bod y, cyfraniad yn un priodol."*

"I think...go out and take the power of the Big 6 companies...take the power from them and develop locally is the answer. And as far as I can see anyway, the level of energy that we generate in Llanhaearn will more or less correspond to the calls of the area



anyway, so it happens to be fitting, not that we tap into it directly, it goes straight into the grid of course, but somebody knows then that the contribution is appropriate.”

(Rhys, Llanaelhaearn)

The difference between the old mode of generating energy and the new model of energy generation was seen as an empowering shift,

“I love the fact that the community is getting something from it and it’s not putting money in the pockets of the big energy providers...well to an extent it is, but, the payoff is, is that the community benefits, and I think if there was another two turbines next to Tilly doing the same thing, community owned, I’d be delighted about it because I think it’s important for individuals to take responsibility for where their energy comes from, um and I think that you can do it on a community basis is great.”

(Martha, Tiree)

Interestingly, in Siabost and Tiree; their turbines has also been named, Cuibhle an Fhortain and Tilly respectively – and personified as female by a number of interviewees. This personification is a possible symbol of there being a stronger bond between the community and their wind turbine, compared to private energy generating projects not owned by the community.

### **7.3.2 Inclusiveness**

“There’s a couple of people...who’ve said that they’ve never been involved in anything who are now being involved in things...but it’s really slow; a slow progress, but any progress is great I guess...”

(Molly, Siabost)

Community energy not only entailed a sense of breaking away from a traditional means of energy generation. It also offered a different, more inclusive way of community development. Although, as discussed in previous chapters, there were certainly difficulties in encouraging participation - community energy projects, as Molly suggests above, were slowly becoming more inclusive. As the above excerpt suggests, the community energy project in Siabost was managing to pull in people who had not previously been involved in community development

projects in the past. In Tiree, community members felt more confident in applying for funding from the wind turbine fund, as it was, in essence, theirs,

“Maybe they don’t feel as, as nervous or as off putting as filling out maybe like a massive big application... I mean we do try to make it as simple as possible.”

(Jessie, Tiree)

Democracy within each community wind turbine development seemed to be important to all groups, allowing and encouraging community members to become part of the steering group, or with visions to encourage membership in the future. Interviewees believed that they had set up their projects in a democratic way, although it was also conceded, as touched upon in Chapter 5, that not all of the community might feel completely involved with the development, although this was put down mostly to the indifference of some local residents,

“I do regard it as a community group because it was set up through a very democratic process of asking people to stand, to be board members and then be elected by the community, so I know that there are some people who think that it doesn’t...represent some of the community, then that’s because they didn’t get involved or don’t get involved in the democratic process... in the first place so I do think it’s a community group, I just wish more people would get involved with it and show some interest.”

(Helen, Tiree)

This democratic process of appointing directors and members also allowed the opinion and voices of local people to be voiced and conferred,

“You’re going to have folk with differing opinions, but you need these opinions to try and move, decide what’s going to be best for the community...At least this way people get a chance to have their say what they think you know, like I say whether it’s for or against which is, which is important...it’s...community consulted”

(Bridget, Siabost)

This inclusiveness on Tiree, was present from the beginning of establishing their project as well as being a part of how the Trust now distributes the money through the Windfall Fund – the money generated by the wind turbine,

“There was a big vote, in order to find out whether people wanted the Trust to proceed with some kind of programme involving a wind turbine ...[there] was overwhelming

support that they wanted this to happen, and then we go back to the community every year and tell them – this is what we’ve been doing with the money, what else do you think we should be doing, and that – that changes all the time but it’s got to come from the community – it’s not us telling them what they want, it’s them telling us what they want and how they want the money to be spent, and a big thing now is they want quite a lot of money to be kept back, as a kinda’ big pot for a big project, and we don’t know what that project might be”

(Henry, Tiree)

Although some members of the community in all could, in theory, participate and play an active role in their locally owned and developed energy project (or conversely choose not to), there remained a financial benefit that would remain and be invested locally,

“The community planned it, fought for it. Certain members of the community did...but whether everyone supported it or not, it’s owned by the island, by the community itself, and it puts money back into the community and the community benefits from it.”

(Martha, Tiree)

Inclusiveness was also important for the longevity of each project. Despite frustrations in getting local people involved and volunteering for each development, there was a realisation that inclusiveness of opinions was key, particularly for the ongoing success of each project,

“I think these things can only survive if they’re inclusive of everyone...”

(Molly, Siabost)

Inclusiveness was also dependent on trust, and the ability of community members to be able to trust and approach those that were at the helm of development, be they project officers, directors or affiliated. This trust can be lacking for private development of renewables (Rogers et al, 2008; Warren and McFadyen, 2010). Having local ownership and an approachable steering group or project officer was perceived as better at ensuring inclusivity,

“Because it’s a rural area, and being as I live in the area I think it’s easier because you know people, I think that always makes it easier...you kinda know people’s strengths as well it’s easier to kind of, to speak to people and kind of encourage them that this is an area of their expertise you know, and to come forward, and also because, I’m local I think that’s different, cause they trust you know...I can speak to them in both

languages, the elderly like that....so I think it's easier, I think it's definitely easier, I think it's...easier for them to also say to me what kind of projects they want... and to speak in both languages.”

(Molly, Siabost)

However, there were some reservations, as highlighted by Martha below, that having a Trust, and paying people to administer projects, could very well be reverting to old patterns of project development – where people are paid to deliver project aims,

“I think, yeah, the islands sort of taken its future in its own hands so kind of devolved in a way...we've got a Trust and we're going to get on and do things. But at the same time, rather than maybe have residents, crofters, people who have other jobs doing these things, we've taken that power and centralised it into a little trust...and we don't have to do it, because they pay people to do it.”

(Martha, Tiree)

Practical ideas on how to avoid this centralisation, and the dominance of a few within a community (as touched upon in Chapter 5) in the delivery of community benefits that Martha refers to, were not however proposed.

### 7.3.3 Compromise through ownership

*“Os [mae'n] ymharu ar eu golygfa, neu ymharu ar eu mwynder mewn rhyw ffordd, oleuaf mae nhw'n cael mantais arall.”*

“If [it] disturbs their views, or disturbs upon their amenities in any way, at least they have another benefit.”

(Rhys, Llanaelhaearn)

There was also a compromise being made as a result of having ownership on community energy projects. It seemed that some interviewees were more accepting of the visual impact that their wind turbine would entail. If they had community ownership of a wind turbine, then the visual impact could be tolerated and justified,

*“[Wrth] rhoid y cyfan i mewn i'r 'equation', yn fuan iawn nes i darbwylllo fy hun... bod...yn teg cyfiawnhau datblygiad o'r fath yma, un tyrbein, incwm i'r ardal, yr ardal*

*yn cael y budd o'r ynni ag mae'n rhwbaeth fedrith rhywun tynnu lawr beth bynnag mewn pum mlynedd ar ugain os dyna 'dy'r penderfyniad, ag erbyn hynny siawns bydd 'na rhyw photovoltelics yn bob man, y tai diddos ac yn y blaen. Bydd pobol wedi dysgu ffordd gwahanol i fyw falle."*

"By putting everything into the equation, very soon I convinced myself that it was fair to justify a development of this type – one turbine, income for the area, the area getting benefit from the energy and it's something that somebody can take down anyway in twenty five years if that's the decision, and by then possibly there'll be some photovoltaics everywhere, comfortable housing and so on. People would have learnt of a different way to live maybe."

(Rhys, Llanaelhaearn)

This is further evidenced in Llanfechell, a village which is presently encircled by large energy developments in the form of wind turbines, pylons and the Wylfa nuclear plant. The quote below shows how there had been a shift within how wind turbines in particular were viewed in the area – in terms of the financial (and consequently social, environmental and cultural) benefits that could be gained by the community,

*"Yn fy marn i, os da ni gorfod rhoid i fyny efo'r holl melinau gwynt, then, waeth ni cael un ein hunain ddim. Achos os 'dy pawb arall yn mynd i neud arain allan ohonyn nhw pam na chan ni fel cymuned ddim neud."*

"In my opinion, if we have to put up with all these wind turbines, then we might as well have one ourselves. Because if everybody else is going to make money out of them why can't we as a community do so."

(Ruth, Llanfechell)

The excerpt below contributes to this apparent 'gear-shift' in perceptions, and how wind turbine technology eventually came to be loved by some interviewees – most notably on Tiree where developments and projects funded by the turbine were already underway,

"I love the turbine, I love it, and it's done a lot of good. Definitely, yeah, yeah – I think it's great. I think they did well to get it, and I hope that they put another one there when it dies!"

(Juliet, Tiree)

This confirms the conclusions of previous research which suggests that there is a growing sensitivity towards how benefits are distributed by wind turbines in rural areas (Munday et al, 2011) and that communities are more accepting of renewable energy if they have ownership (Rogers et al, 2008; Warren and McFadyen, 2010), although as seen from evidence in Chapter 5, this does not apply to all community members. The rejection of opposers in Llanaelhaearn towards Ynni Aelhaearn's wind turbine project however, seemed to be more in relation to a lack of shared views, commonality and culture that give a community grounding (Parkhill et al, 2015) and a general objection to wind turbines and their visual impact. In Llanfechell, wind turbine *saturation* seemed to be the core reason for opposition, along with a number of ill-timed announcements and communication difficulties by the steering group (as in Llanaelhaearn). However, the Welsh case site interviewees retelling of such contestations might soon dissipate, as the community ownership model becomes better understood. This appears to have happened on Tiree, and is predicted to happen in Siabost,

“I think the fact that it's a community project is amazing – I just think not enough people know about what it really means, or what the potential is. I think if you were to come back in five years time, people would be a lot more positive, but at the moment I think people don't get it...”

(Caitlin, Siabost)

#### **7.4 OWNERSHIP AND A NEW INCOME STREAM**

“It's satisfying just to see how well the turbine's doing and seeing the benefit that's coming in, the cash benefit that's coming in, and also being able to help”

(Thomas, Tiree)

One of the topics that was associated most with ownership and being the owners of a renewable energy project was the potential (and actuality in the case of Tiree) of an income stream for community development use. The Feed in Tariff (FIT) allowed communities to generate money through selling electricity back into the national grid. This was at a favourable rate when Tiree had established their community wind turbine,

“We’re getting more money in than we thought we’d do...originally we were going to get something called ROCS<sup>40</sup> I think, and then they went to FITs which was even better rate and could manage to get back, and so our income stream is higher than we thought.”

(Henry, Tiree)

Although start-up costs were high and capital had to be sourced through financial institutions, grants and loans; finally establishing a community energy project allowed communities the potential to fund, or match-fund their regeneration projects in the future. It was also a means of moving away, especially in the case of both communities in Wales, from grant funding and dependency,

*“Dydwi ddim yn gweld fy hun fod na...ffordd arall i gymunedau gwledig ar y funud cael incwm o’r math yma yn y dyfodol...Dod yn ôl i’r grantiau yma. Dwi’n teimlo bod ni di bod yn or-dibynol arno fo. Mae na ffordd i ni gael incwm sefydlog, na welwyd o’r fath o’r blaen i grwpiau cymunedol a deud y gwir...sydd ddim yn dibynol ar lenwi ffurflen a mynd a cap in hand a gofyn plîs syr gown ni chydig fach mwy o bres genoch chi, i gynnal y gwasanaethau yma... ‘swn i’n dadlau ei fod yn rhoi cyfle i gymdeithas deimlo yn falch yn ei hun de, bod nhw yn edrach ar ôl buddiannau eu hunain a bod nhw’n rhedeg hwn fel busnes – dyna ydi o – busnas ydi o ar ddiwedd y dydd.”*

“I don’t see myself that there’s...another way for rural communities at the moment to get an income of this kind in the future...Coming back to these grants again. I feel that we have been over dependent on them. Here’s a way for us to have a secure income that’s not been seen before for community groups...that’s not reliant on filling forms and going cap in hand and asking ‘please can we have a little more money from you to sustain the services here’...I would argue that it gives the chance for a community to feel proud of themselves, that they’re looking after their own benefit and that they run this as a business – that’s what it is – a business at the end of the day.”

(Owain, Llanaelhaearn)

On Tiree, the income stream generated by their community turbine ‘Tilly’ allowed for more leverage in finding other finance,

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<sup>40</sup> Renewable Obligation Certificates

“If something comes along we really need, we can put a big chunk of money towards it, not necessarily paying for the whole thing, cause having money, generates extra money - there’s no doubt having; that you know Tilly, can help us bring in extra funding streams.”

(Henry, Tiree)

Ownership also entailed not only generating an income stream but having the ability to control how that income stream could be spent in the way that the community saw fit,

“Well, if it’s community owned then, the money that it generates has got to be used for the community...and the community have a say in how that money is distributed.”

(Fergus, Tiree)

This was in contrast to being *told* how to spend it, as is the case with some community energy benefit packages if the project had been privately owned (Bristow et al, 2012). Ownership, ultimately meant control,

“I think if it was, if it was a private development, you know we were told about how to spend the money then... it would defeat the purpose of having it really. So the fact that it’s owned by the community ...the benefits are kind of it’s kind of self-explanatory it’s...the community can decide how it wants to spend the money basically...”

(Thomas, Tiree)

How the money was divided amongst the community on Tiree, through the Tiree Trust administering the Windfall Fund was designed in a way that allowed community groups and small businesses to apply,

“There’s a pot of money which is business start-up loans, but that is quite easy to get anyway, you know the five-hundred here and a thousand there...as long as it generates employment opportunities, promotes Tiree and all those sorts of things...but it’s difficult to give community public money to a private enterprise.”

(Jane, Tiree)

The Windfall Fund on Tiree had been divided into funding categories - for building maintenance, small projects and large projects. Geared towards the people of Tiree, it was also a more straightforward way for citizens to seek funding for developmental projects. The fact



that applicants knew the staff at the Trust, and that there wasn't a slow application procedure meant that the process worked more efficiently according to Martha,

I think it's a more straight forward process, definitely. You're applying to local people who know you or know the project or who know the needs and the money is available and it's not a particularly closed application process. It's something you don't have to wait another you know, twelve months before you can apply again...so yeah I would say there's less hoops to jump through and it, it is easier to do it that way I would think."

(Martha, Tiree)

#### 7.4.1 Economic Autonomy

Economic independence and self-sufficiency seemed to be an ideal that many of the community energy groups aspired to as illustrated in the excerpt below,

*"Petai ni'n medru [llwyddo] da ni ar ein traed ein hunain de, yn hytrach na bod efo llaw allan de...mae hynna'n dyhuno ysbryd pawb dwi'n meddwl. Dyna pam mae o wedi bod yn greiddiol i'n cyfansoddiad ...i sefydlu incwm ein hunain de. Da ni ddim yn dibynnu ar bobol erill i rhoi pres i ni – grantiau na dim byd. Os rhowch chi dibyn bach o bres i ni jyst cael i ddod ar ei draed...dyna'r cyfan da ni isho mewn ffordd..."*

If we could [succeed] we are then on our own two feet, rather than being with our hands out...that wakes the spirit of someone I think. That's why it's central to our constitution...to establish our own income. We will not rely on other people to give us money – grants or anything. If you give us some money for us to just get on our feet...that's all we need in a way..."

(Bedwyr, Llanfechell)

Despite being in an area dense with energy developments it was believed that there was still a need for a community energy project in Llanfechell as it allowed for a certain feeling of economic independence. Even with community benefit packages coming in from local private wind farms, the economic benefit of the Rhiannon off shore wind farm (scrapped since time of interview) along with the promised economic legacy being left by the Nuclear Decommissioning Authority, and the second nuclear plant Wylfa B, it was believed that there was still a need for a community energy project as an enabler of local autonomy,

*“[Mae’r] ymdrech gymunedol ‘ma yn ganol yr holl bethau yma sy’n mynd ymlaen de...a mi dwi yn dal i meddwl bod o’n rhwbath â gwerth ynddo fo, oherwydd mi fyddan ni’n annibynnol, da ni ddim yn mynd i ddibynnu ar pres mae’r pobol eraill yn mynd i rhoi allan i ni de...a, ag ella’ os fod o’n llwyddiannus mi fasa ni’n gallu ennill llawer mwy na fasa nhw yn debyg o rhoi iddyn ni beth bynnag.”*

“This community effort here is in the middle all of these things going on... I still think that it’s something with worth in it, because it will be independent, we’re not going to depend on other people giving out...and maybe if it’s successful we could earn much more than they are likely to give out anyway.”

(Bedwyr, Llanfechell)

Community energy, on Tiree was already seen as an important component of the local economy,

“I think community energy...is an important part even though in number terms it’s [a] relatively small part of the economy.”

(Robert, Tiree)

## **7.5 OWNERSHIP AND JOB CREATION**

“It’s handy for young people that want to start a wee business up and will give them a hand with it”

(George, Tiree)

Through ownership of a renewable energy there was also the possibility of increasing employment within the communities. This could be in direct or indirect ways. For example, George’s excerpt above suggests that the turbine could help young people with starting businesses, creating employment through doing so. It was also mentioned that investing in the community and its services would make these areas more attractive places for outward investment that could see the creation of further employment. In the case studies in Scotland, increased employment had already been achieved. In Siabost at time of interviewing, their community energy project employed two local people in the Horshader Trust offices. In

addition, through organising a local bus service taking children to and from the school and the local *croileagan* (nursery) a drivers post had been created. A polytunnel project<sup>41</sup> plus a variety of other opportunities they were hoping to implement were also means of creating local work,

“This polytunnel project will bring 1.5 jobs, the park<sup>42</sup> will bring another job, another full time post...The other one that I didn’t mention was we applied for Lottery funding for another two posts for like a citizens advice outreach advisor and a recycle hub, so again another two jobs so you know if you add them up you’re already got 4.5 jobs that would never be here, or that would never have the opportunity to come here if it wasn’t for an organisation as this...”

(Molly, Siabost)

Although not all of the money used to pay for these posts came directly from the turbine, having the wind turbine did allow the community to apply for further money. This leveraging power discussed above and described again in the excerpt below meant that the community, in reality were bringing more money into the area through match funding,

“we’re generating money...that allows you to access other money...so potentially, we could get the polytunnel project for nothing...£400,000 worth of funding for nothing, because we’ve got a track record of delivering...We could make a £100,000 a year profit just now until we’ve paid off the loan, but we could be spending £500,000 just by match funding and being smart about it...”

(Ciaran, Siabost)

This was a similar story on Tiree. Having proven their ability to develop a community wind turbine on the island allowed them to find further funding through other funding bodies,

“In the past these groups really struggled to get funding together and now they can get quite a big chunk from us and what we try to do is help use our money to lever money from elsewhere as well... through having Tilly has encouraged all this other money to come in as well...It’s not just a cash cow it’s actually helping a lot of other money streams coming in, so it’s proved I think very good actually, it’s been really helpful”

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<sup>41</sup> Since time of interviewing, the polytunnels have been built, employing a member of staff and growing vegetables for the local community

<sup>42</sup> A playpark in the middle of Siabost

(Henry, Tiree)

There was also an explicit desire by the community on Tiree (and Siabost) to ensure that money being invested from the windfall income, would genuinely benefit the community. In Tiree's case, a checklist was produced that scored applications for funding,

“We wanted the money to go out immediately to community groups, that were struggling to get their funds together, and I think we've done that through this Windfall Fund... [there are] various criteria that we want the projects to hit, and it's - involving young folk, involving Gaelic, involving sustainable environmental things, involving old people, and...it's just a scoring thing that we have...All that obviously has to benefit Tiree, and if it's going to help create a job then...all these things, you know get a good scoring ...most projects from community groups are well thought through and the way we've done it now is that people have got an idea come and talk to... Trust staff, and mould the project into a project that's going to work, and so that we don't have rejections, or very few rejections.”

(Henry, Tiree)

## **7.6 OWNERSHIP, GROWTH AND COMMUNITY DEVELOPMENT**

*“‘Swn i'n deud bod o'n un o'r ffynhonellau incwm saffa ymhlith unrhyw cymuned cefn gwlad i obeithio amdano fo yn yr oes yma...”*

“I would say that it's one of the safest income sources that any rural community could wish for in this age.”

(Owain, Llanaelhaearn)

Many of the services that underpin the social aspect of communities in all four case study areas were under threat or had in fact already been discontinued. Shops, garages, pubs, post offices, schools, public transport, chapels and churches were all under threat due to a cocktail of factors including a decrease in population, cultural hegemony (discussed more in Chapter 8) and cuts in public funding. Many spoke of how ownership of a local wind turbine could contribute towards reinforcing and protecting these amenities for the community. In Llanfechell, there was already an initiative to save the local shop (that was being sold by its previous owners) and run it as a community shop. Having income from the turbine would enable the community to

raise sufficient funds for its purchase, and to keep the service open for the village. The process of acquiring the shop would be made easier through ownership of a wind turbine,

*“Mae’r siop rwan ar fin cau, eto does gynnon ni ddim cyfalaf i rhedeg honno yn de...ond oedddwn i’n gweld Talybolion fatha y cwmni fasa’n medru generatio cash i ni fedru gneud ...tasa Talybolion yn cynhyrchu’r arian ‘na ar hyn o bryd fasa cymryd y fenter y siop llawer iawn yn haws yn de.”*

“The shop now is about to close, and yet we haven’t got the capital to run that...but we saw Talybolion as a company that could generate cash so that we could do that....if Talybolion was generating cash at this moment in time, taking over the venture of the shop would be much easier.”

(Huw, Llanfechell)

Developing or protecting existing amenities and services of the islands and villages under study would in turn make them attractive places for younger people to live in. This was also a strategy that would combat the challenge of depopulation in rural areas, as was the intention for those steering the Ynni Aelhaearn community renewable project. As Owain puts it, they wanted,

*“Er mwyn datblygu gwasanaethau newydd...ag [i]cynnal y gwasanaethau sydd gynnon ni’n barod, a hefyd gwella y pentra a’i neud o’n bentra deiniadol i bobol fyw ynddo fo, yn enwedig pobol ifanc, lleol, a bo ni’n trio newid y trend o di-bologi.”*

“To develop new services...and sustain those services that we have already and also to improve the village and make it an attractive village for people to live in especially young people, local, and that we try and change the depopulation trend.”

(Owain, Llanaelhaearn)

Some services that needed development in Llanaelhaearn included childcare services that would be delivered in part through the development of a nursery on the site of the Pabell Chapel (purchased by Antur Aelhaearn community cooperative). Money generated from the turbine would contribute towards avoiding any financial strain that this proposed nursery could potentially face. The plan was to make childcare sustainable and affordable for local families, subsidising the nursery if there were less children than expected attending each year. There were also plans to develop a historical centre in the village within the Pabell Chapel that would

also serve as an interpreting centre for Tre'r Ceiri<sup>43</sup>; develop offices in the Antur Aelhaearn community centre and open a community shop. Improving Broadband services was another aim that would allow businesses to work more efficiently from the village and surrounding area. In fact there were a whole host of initiatives that Antur Aelhaearn wanted to develop in the village, published online as the 'Llanaelhaearn Development Plan' (Llanaelhaearn, 2015). However, money remained the problem – and the community wind turbine was seen as an effective way of raising money in able to protect and develop social amenities in the village,

*“...ti angen metihrinfa, ti angen canolfan dehongli Tre'r Ceiri... ond y tebyg ydi bydda fo'n cymeryd llawer iawn fwy o amser neu dibynnu ar llawer iawn fwy o grantiau, sydd fatha ddim mor hawdd i gael dyddiadu hyn. So, yn hynny o beth mae o'n fodd i pobol helpu'i hunain yn gynt ac mewn ffordd mwy effeithiol”*

“...you need a nursery, you need an interpreting centre for Tre'r Ceiri...but the probability is that it would take much more time or you'd be dependent on many more grants, which aren't easy to get these days so, it's a way of allowing people to be able to help themselves in a way that is more efficient.”

(Rhys, Llanaelhaearn)

The above observation was mirrored in other communities. On Tiree, without the funding that was already coming into the community through their community owned wind turbine, their newly built boat house, which served as an important building to house the traditional Tiree fishing boat as well as teaching residents and visitors about the islands sea-faring heritage, could not have been constructed,

“Tiree Maritime Trust probably couldn't have afforded to build that boat house without the support from the Windfall Fund. They might have managed to get a grant, or a lottery grant or something to do it, but that would have taken a huge length of time. The Windfall...is a sort of ongoing application process, which is much easier to access on a community basis...It's giving something back to the community, its providing shelter for two boats that is part of the cultural heritage of the island, which might have been far harder to find or secure funding in any other way.”

(Martha, Tiree)

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<sup>43</sup> Iron-Hill fort on the Eifil mountain above Llanaelhaearn

It was evident that amenities, culturally important artefacts (and their interpretation) and local services could be protected by the income stream from the wind turbine. Protecting these varieties of community features contributed towards making these places liveable. As shown in Siabost, the Horshader Trust's intention was to make the area a more attractive place to live,

“Well the idea of it is that in time...if we provide infrastructure here and make it a good place to live, then that'll attract people to come here and say start a business and therefore creating employment within this area - that's the sort of thing we're looking for.”

(Stephen, Siabost)

Attracting young people to an area was not the sole focus. Although there was a recognition that there was an ageing population in the four case sites and that there was a need to attract younger people as a way of ensuring the viability of their communities for the future, there was also a desire to tend for the needs of elderly residents too,

“[The turbine] could make an extremely significant contribution...we're in a township where as with other villages on the Western Isles, there's an increasingly elderly population, and if we can provide something that helps the quality of life for the elderly and at the same time make it a more attractive and especially viable community for younger families to settle in, then I think you've got something that could be said to be a township that's worth living in.”

(Walter, Siabost)

Tigh a Rudha, Tirees only care home was facing an uncertain future having been put out to private tender by the Argyll and Bute Council. Many of the interviewees spoke about how the turbine could combat this threat to such a core service by using income from the turbine. There were a number of further plans for enabling the future viability of the island set out in the 'Community Growth Plan' written through consultation with Tiree's residents with the following vision,

“In 2025 Tiree will continue to be a thriving and economically viable community sustaining a high quality of life for all whilst safeguarding our remarkable environment, heritage and culture. By making the Island more attractive to young people and families

we will work towards a slow, sustainable population growth, preventing a population decline.”

(Tiree Trust, 2011, p.7)

Residents and communities were at the core of the development plans that had been set out by each community. For future viability, communities needed amenities, services and an income stream of their own, supplied by their own renewable energy project. This entailed a gear-shift in the way that rural areas were seen as being merely picture postcards, as Owain explains,

*“Gall pobol ddim byw ar olygfa hardd yn unig, mae’n rhaid i nhw gael rhywbeth arall – mae’n rhaid i ni neud y lle ma’n fwy ddeiniadol i...iddyn nhw fyw ynddo fo ac mae’n rhaid i ni symud i ffwrdd o’r meddylfryd ma sydd gynon ni o gadw’r lle ma fel rhyw fath o ‘postcard’ i blesio ymwelwyr a pobol sy di ymddeol dod yma i fwynhau yr olygfa – dim dyna ydi...Os da ni isho cymuned ffyniannus mae rhaid i ni fentro weithiau, ag creu creithiau cynnydd – ag os di hynny yn golygu tyrbein gwynt, wel ...bydda’n bris bach iawn dwi’n meddwl i dalu er mwyn cael dyfodol i’r lle ‘sw’n i’n ddeud.”*

“People can’t live on a beautiful view only, they have to have something else – we have to make this place more attractive...for them to live in and we have to move away from this notion that we have of keeping this place as a sort of ‘postcard’ to please visitors and people who have come here to retire to enjoy the view – that’s not what....If we want a thriving community we have to venture a little and create scars of progress – and if that means a wind turbine, well...it’s a small price to pay to ensure a future for this place I would say.”

(Owain, Llanaelhaearn)

Already on Tiree, there was a feeling of vibrancy that had returned to the island, and a revaluing of the resources on the island,

“I think maybe the folk that left Tiree are now beginning to really value what is here as well. And also they are returning because it has become more vibrant again, and it’s turned that corner...there’s a lot more optimism on the island now. For a while people were just leaving, and thinking that was the end of it...There are a number of definite business opportunities here. Empty opportunities here, which just require the right people with the right training and motivation...the young folk from Tiree some of them



will say, ‘oh there’s no jobs here’ but if they wanted to and get the motivation and the training, come back and start a business here from the community windfarm.”

(Helen, Tiree)

There was a sense, on Tiree especially, that a breeding ground had been created for innovative developments (reflected in the variety of plans set out in Tiree’s ‘Community Growth Plan’). The funding, resources, training and support mechanisms that were becoming available through Tiree Trust, and through the funding from the wind turbine seemed to breed more confidence, certainly amongst those interviewed;

“I think...and I was younger then, before the turbine was here. But, there didn’t seem to be a lot doing... [there] didn’t seem to be new initiatives...but since then with more funding available and more projects and certainly with the advent of the Trust, yeah I think, I think there is, there is hope. There is a group of people who’re paid to fight on the islands behalf and I think that can only be a good thing.”

(Martha, Tiree)

## **7.7 OWNERSHIP, LOCALISM AND SUSTAINABILITY**

Apart from creating a new income stream, ownership also entailed for many a sense of local empowerment, and a sense that planning and vision for a sustainable future was determined from a localised perspective, rather than imposed upon their community. This is evidenced through looking at the community plans or constitutions that each case study group had produced. As discussed in Chapter 6, across all case studies, people felt distanced from decisions being made regarding renewable energy generation, and how small decisions in Westminster could have massive repercussions on community energy projects. The impact of these decisions only served to create a greater distance between communities and the centralised government,

“If a decision is made about Tiree in you know, mid-Argyll you know in Oban or Dunbeg or somewhere we feel far enough from that... so if it’s made in Westminster then you can imagine how far we are from that”

(Thomas, Tiree)

The autonomy and sense of generating local answers to local problems, embodied through their community wind turbines was empowering. On Tiree, the process and reality of now being in ownership of a community wind turbine was described as having established another level of devolution, having through their project transferred decision making power to the island,

“By having the turbine and creating an income for the island, or creating a job post out of it, or creating projects and funding where we don’t have to look elsewhere...we’re creating our own sort of devolution and giving ourselves the power to make decisions about what happens in the community. I think that’s a good thing.”

(Martha, Tiree)

Apart from having ownership of a wind turbine and ownership of a new income stream, community energy groups were also looking towards their futures in terms of sustainability. Some economic sustainability could be achieved through their new income stream (and subsequent leverage power for further funding) and by investing in local amenities and attracting and supporting local businesses. It was supposed that investment and development would create a cyclical economy, where wealth circulated within the community itself. However, community wind turbines were not seen as the be all and end all of achieving rural sustainability, but they were certainly viewed as contributing towards that aim,

“I don’t think this turbine alone will create a secure future for the island, no. I think what the turbine does is important and it supports local communities and projects. But the only way to have security for an island like this, to sustain and grow its population is to develop the economy. One turbine alone can’t do that. Maybe five would be a way towards it.”

(Martha, Tiree)

Cultural sustainability (discussed in Chapter 8) could also be achieved through ownership of a community turbine. There were also descriptions of how communities could achieve environmental sustainability, as illustrated in the general vision of Talybolion’s proposition below,

*“Pan da ni’n meddwl be da ni’n mynd i neud efo’r arian de... da ni isho defnyddio’r arian i prosiectau eraill efo ynni adnewyddol, oherwydd un o’r bwriadau ydi gwarchod yr amgylchfyd, a ar y theme o warchod yr amgylchfyd, mi ydan ni hefyd isho gwarchod*

*yr, y gymuned...ei diwylliant...basan ni'n cefnogi unrhywbeth fydd yn gwella yr bywyd pobol sy'n byw yn yr ardal."*

"When we think about what we want to do with the money...we want to use the money on other projects with renewable energy, because one of the objectives is to protect the environment, the community...her culture...we would support anything that improves the lives of people who live in the area."

(Bedwyr, Llanfechell)

This supports the supposition that community energy schemes have a multiplying effect in regards to developing more renewable energy schemes on the back of earlier successes (Walker et al, 2010; Willis and Willis, 2012; Seyfang et al, 2013). This was certainly the intention for Ynni Aelhaearn who aimed to create a 'dref werdd (a green village), and that money from the first community wind turbine, would be invested in helping to install more green technology for the existing houses in the community. There was also the desire to build new, sustainable housing in the village. In Tiree's Community Growth Plan, there was a clear aim to pursue other initiatives, such as further income generating renewables, electric cars and aiming to be a carbon neutral island by 2025 (Tiree Trust, 2011). One of the projects under development in Siabost aimed at creating a sustainable food supply by creating community poly-tunnels to encourage year round local fruit and vegetable supplies for the village and district,

"The poly-tunnels going up just now...that'll be something that'll be really, really good in the community once it gets underway as well because we'll be getting our fresh vegetables on the doorstep. Rather than going to the supermarket and buying vegetables that have been lying there for, or travelling towards our supermarkets for days."

(Emma, Siabost)

Involving the community, making them owners and putting them in charge of local development was something that was crucial for sustainability according to the interviewee below,

"Whether it's local economy or global economy...and climate change and all of these problems... communities are important for helping, so people can help one another if things get tough, and they may well get very tough. You know having sources of serious

income for the communities...ought to improve resilience, and that is the big you know, that is the big challenge ahead.”

(Gerald, Siabost)

## **7.8 CONFIDENCE AND PRIDE**

“Yeah, I’m proud to have Tilly on my doorstep you know. Yeah, I do feel ownership of her really, yeah”

(Martha, Tiree)

Apart from the income stream that was created, there was also a sense of an increased confidence, particularly in the Scottish case studies who had achieved their aim of establishing their community wind turbines. They had become empowered due to the process of project development. Not only did the community have money as a safety net, but new skills – a social capital – that could arm them in achieving future battles and goals. The experience of developing a community energy project had been a learning experience, that has upskilled the communities under observation, and given them capacity to be able to manage projects. As the excerpt below reveals on Tiree, there are a number of skills that have been acquired by the community,

“It’s definitely given us...not security, but, a very strong hand of cards...so if something is threatened ...not only money – if something is threatened we’ve got the money to support that but also... we’ve learnt how to battle to get something...so we’ve got a body of probably thirty people now who are used to a battle, getting things done and how you do things and how you form a committee and how it runs properly and how you talk to banks and how you talk to lawyers, and that’s given a really you know, we’re...We can do things now.”

(Jane, Tiree)

Not only did the experience of setting up a community renewable scheme equip the steering group on Tiree with expertise and the ability to manage their project, but they also gained significant practical knowledge, and a realisation of how the current energy system is dominated by incumbent actors. Opposing a proposed off shore wind-array on the coast of Tiree, was possibly a reflection of this.

Ownership had certainly spurred a feeling of pride in many of the interviewees, particularly for the case study sites in Scotland where their community wind turbine had been established,

“I am very strongly in favour of community energy widely, and I think obviously we see the benefits coming to the community but I think, I just love the fact that it’s owned by us you know [it] has made a huge difference to our sense of locality, pride.”

(Robert, Tiree)

Apart from a sense of achievement and pride, confidence was an issue that was also being imparted within the communities of the case sites observed. This was done through actively trying to pull local community members into activities,

“I think by the end of it, or by the end of my time, I would like that the community were more confident...especially native people...that they were more confident in having their voice being heard, being on committees and feeling they had something to give, rather than leaving that to other people... taking an active role in shaping their community...so really empowering them if possible...”

(Molly, Siabost)

The impact of this directive were already taking shape,

“there’s a couple of people...who’ve said that they’ve never been involved in anything who are now being involved in things...”

(Molly, Siabost)

This is also reflected in the quote below, explaining that community reticence can be partly combated, if the community have a sense of ownership and responsibility of a community development such as a wind turbine, and through being actively listened to as Molly suggest above. Combating reticence and encouraging quiet confidence is an admirable unforeseen benefit of local community energy developments,

“We were talking about reticence and so forth... that it is a rather long suffering patient reticent community, then I think having something like this can quietly spur and give, provide this sense of optimism that I think can only help.”

(Walter, Siabost)

There was a sense that this ‘reticent’ community were being awakened by the possibilities offered to them by the community energy project. There was certainly a tangible amount of pride and excitement in being owners of a community energy project, and taking responsibility, as reflected below,

“Oh, it’s amazing you know cause, I mean I’ve been involved in business for a long time, and, but it’s always been other people’s money...and it felt different this way.”

(Ciaran, Siabost)

Similarly, the meaning and symbolism behind the ability of communities being able to stand on their own two feet was a point of pride,

“It makes me feel proud. I think it’s something about... it’s about a community finding a way about not only to provide renewable energy, but a community finding a way of providing an income for itself that doesn’t rely on government or council, or EU, or the Big Lottery. It’s a community finding a way to generate income to support its own projects and to, to develop ideally the island, and I think that’s an incredibly positive thing so it makes me very proud.”

(Martha, Tíree)

Despite not having finished their community energy project (and in fact being in the very early stages of development), communities in Wales were also anticipating that their visions of community energy ownership would breed a sense of pride and inspiration,

*“Mae o yn eu hun, mae o’r fath o beth de sydd yn ysbrydoli chi o’r safbwynt de, dwi ddim yn eistedd nol a gadael i bob peth rowlio drosda i, dwi’n gneud rhwbath fy hun neu mi fedran ni greu rhwbath ein hunain...wedyn, mae o yn... codi ysbryd rhywun o’r safbwynt yna de.”*

“In itself, it’s the kind of thing that inspires you from the perspective of I don’t sit back and let everything roll over me, I’m doing something myself or we can do something ourselves...so it... raises somebody’s spirits from that perspective.”

(Bedwyr, Llanfechell)

Confidence also manifested itself in hope for the future. The possibilities that presented themselves for the future development of each community inspired hope,

“I’ve definitely changed [my] point of view about here although, I like living here anyway, you sort of feel there’s a wee bit of hope... now you’re sort of thinking - now is our chance of some really excellent stuff here that we’ll be living right in the centre of it sort of thing you know, so that’s quite exciting.”

(Bridget, Siabost)

Many of the interviewees spoke of ownership in terms of pride and hope but also happiness, particularly on Tiree and in Siabost, where they had reached the end of the tunnel in regards to establishing their wind turbines. Projects developed through the wind turbine could possibly contribute towards social cohesion and wellbeing within a community, particularly in the social and communitarian sense by encouraging people within a community to come together again, as suggested below,

“I think it goes part way into bringing people back together in a communal sense, partway there... So if you ask us in a year’s time, we’d be able to tell you what the effect of having the poly-tunnels or having the playpark...there’s possibilities there...”

(Gladys, Siabost)

The cultural aspect of bringing people together through a community energy project, and the social worth and social cohesion that this entails is discussed in more detail in the following chapter. Furthermore, the sense of happiness and pride was multiplied through ownership and a sense of achievement,

“I think the fact that the turbine money is...our money - makes people happier... I think that the community generated money from the turbine [has] got a different feel to it, and I think...I think it’s funding in a much more empowering [way] than it is getting it from a fund from Scottish Government or...I think it’s injecting resources but it’s also injecting... a feeling of empowerment as well.”

(Robert, Tiree)

## 7.9 CONCLUSIONS

“It’s good to have the freedom to do stuff, quite quickly and easily in your own community.”

(Juliet, Tiree)

Ownership of renewable energy projects was a central characteristic of the community energy projects in Scotland and Wales. It is clear that the significance of having ownership and a sense of self-reliance was something that had an impact on the confidence and self-worth of each community. The linked economic benefit was also considered essential in the face of actual and looming austerity measures that entailed a drop in public spending for rural communities and the provision of core public services that supported them. Security and future viability, and being in possession (or hopefully in possession) of a safety-net that was created by ownership of a community wind-turbine was also of valued importance in the case sites. Interviewees even felt that the visual impact of a wind turbine could be more readily accepted if ownership was local. Furthermore, most interviewees felt that local community energy projects should be developed in all communities. This is a significant finding – showing that the potential of community wind projects was such that participants themselves hoped that other communities could pursue such projects.

Through having ownership of a community turbine, local people were able to plan for the future be it through the creation of a ‘Community Growth Plan’ in Tiree, or the vision of a ‘dref werdd’ (‘green village’) in Llanaelhaearn. There was a real sense of confidence and determination and self-reliance about what could be achieved in the future. This was felt most prominently in the Scottish case study sites, due to the fact that they had implemented their wind turbines, and were beginning to see the financial return that full ownership of a turbine could yield. In Wales however, stagnation with planning procedures and garnering community support had created a more reticent mood, although there was quiet determination amongst a number of interviewees in their pursuit. Whether or not planning procedures will dampen their spirits further (e.g. Llanaelhaearn’s appeal for planning permission in autumn 2015) will have to be seen. It can be assumed that more recent threats to the Feed in Tariff, along with the moratorium on onshore wind turbines announced by the Conservative Government (Vaughan and MacAlistair, 2015), would have shaken the confidence and amplified the concerns of the two Welsh case sites.



Policy measures, as discussed in Chapter 6, were certainly needed to facilitate the ownership and development of more community energy projects. A clear definition and distinction between community run and private renewable energy projects was suggested by interviewees – due to the fundamental differences between such developments. More constant support for community energy was deemed necessary, due to the array of benefits gained through ownership, as evidenced in this chapter. This chapter has also evidenced the potential of community ownership of renewable projects - including job creation, a more resilient local economy, the ability (and desire) to support local amenities and facilities and even the ability of such projects to combat community reticence and encourage feelings of wellbeing and confidence. Again, this was a trend more prevalent in the Scottish case sites, where they had succeeded in installing their wind turbines. In Wales it was perceived that a lack of confidence remained amongst communities to pursue full ownership over a renewable energy project. This reflects somewhat on the ingrained way that society has relied and been dependent upon an energy system which is distanced and large and furthermore is a system that will “sustain incumbent actors and structure the scope for change” (Strachan et al, 2015, p.97) if left unchallenged. If the scope for change is limited by these incumbent actors’ interests, then there will be little chance for communities to deliver on the benefits evidenced here. Such projects will remain few and far between, unless the whole energy system is challenged.

Apart from the demonstrable economic benefits that ownership entails, which allow communities to protect vital services and guard against actual and looming austerity measure cuts, there was also an overwhelming response to the ways that community ownership of a renewable energy project could contribute towards the social and cultural resilience of these geographical peripheral, rural communities. Chapter 8 will look in more detail at how cultural and social aspects of each community stood to gain from their community wind projects.

## CHAPTER 8

### SOCIAL AND CULTURAL RESILIENCE AND SUSTAINABILITY

“[there’s] a sense of connectivity with the landscape and wildlife and the people - the culture and history”

(Helen, Tiree)

#### 8.1 INTRODUCTION

“Being able to support, financially support projects that promote the language, the culture the agriculture, crofting, fishing, all these things that are part of the way of life of Tiree - being able to financially support them as well as the Trust giving them other forms of support...is a big thing for us.”

(Thomas, Tiree)

The aim of this chapter is to look in depth at the cultural context in which community energy groups had been established in the case sites under observation in rural Scotland and rural Wales. The chapter will also look at how community energy, and the income stream that it creates, can be a means of bolstering cultural aspects within these communities. Achieving new levels of economic and social sustainability as a result of community energy schemes are topics that are discussed within recent policy papers such as the 2014 Community Energy Strategy (DECC, 2014). However, in comparison, there has been little if any research or recognition within policy contexts regarding the ability of community energy to support and promote cultural sustainability.

This research chapter will engage with the possibility that culture can be a force that drives rural communities to pursue community energy projects, as a means of sustaining their social and cultural resilience. Rather than being a force for opposing development as discussed by Murphy and Smith (2013) and MacFarlane (2015), culture might also play a role in propelling communities to *pursue* energy projects. Culture and cultural identity can be difficult to define, simply due to the myriad of components that the term can cover. For the purposes of this thesis,

it is recognised as an umbrella term that can include a people's relationship to place, a language, dialect, the traditions of working the land, religion, history and heritage (Murphy and Smith, 2013). Rural west Scotland and rural west Wales have some cultural similarities. Most obvious of these are that Cymraeg<sup>44</sup> and Gàidhlig<sup>45</sup> are community languages in both areas. These languages are depositories within which historical and cultural practices; poetry, song and image, are encapsulated.

This chapter will look at different elements of culture and place and how these are evolving as described by the interviewees. To give an in depth understanding of these issues, half of the chapter will be designated to describing the cultural context within which each community wind project operates. A closer look will then be taken as to how these cultural attributes play a role in spurring on community energy projects, and the practical ways that community energy projects aim to support the cultural aspects of the Western Isles of Scotland and the north west of Wales. As Tiree is the most advanced of the four case site studies, quite a lot of focus in the second half of the chapter focuses on how they have been using their income from their community turbine to invest in tangible projects that benefit the cultural heritage of the island.

## **8.2 BACKGROUND TO PLACE, TRADITIONS AND CULTURE**

“...it has more of the aspects of a real, live, cultural island, divorced from the mainland in the sense that...while the economy is typical of the mainland the twenty mile of sea<sup>46</sup> over centuries has led to a more distinctive identity and culture which has been largely expressed through the Gaelic language. In recent years, obviously, there has been dramatic changes”

(Calum, Siabost)

Emotion towards place, meaning a strong sense of feeling towards a geographic place, its people, culture, common history and language - was acutely felt amongst many of the interviewees. These feelings included a strong bond with the history of the people (sea farers

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<sup>44</sup> Welsh language

<sup>45</sup> Scottish Gaelic language

<sup>46</sup> Also known as 'The Minch' – the stretch of sea that separates the mainland of Scotland and the Outer Hebrides

and captains in Tiree, granite quarry men in Llanaelhaearn), literature (the diarist William Buckley in Llanfechell, the Ballemartin bard on Tiree), artists and photographers (Dr Norman Morrison in Siabost), religious leaders (John Elias in Llanfechell), and the local dialect of a language. There were tangible links back to the early history of local saints, and even more ancient local standing stones and iron hill forts which were within or in close proximity to each community case site in this research. These communities were ‘old’ communities – with a history spanning back over millennia. These deep roots in the past were an intuitive part of the local culture. Culture was also described as glue that kept a community together and their relationship to a geographical place strong. Despite a desire to retain their knowledge of the past and maintain the bond with traditions passed on through history, the cultural glue that had kept a community together and their relationship to their place strong was seemingly wearing away,

“I mean culture really is the glue that is the sort of end result of people having...to live and work together and although we live in the same place, we no longer need each other nearly as much, we’re much more – technology had made us much more self-reliant.”

(Robert, Tiree)

The erosion of cultural life, such as the weakening of the traditional ceilidhs on Tiree (held in people’s homes rather than public buildings) and the tradition of calling on neighbours in Siabost, diminishing storytelling traditions and skills and the dwindling numbers of Welsh speakers in Llanfechell and Llanaelhaearn were repeatedly touched upon in the interviews. There was a recognition that cultural traditions, and the social bond created by these traditions, were weakening. However, there was also a strong desire to maintain and strengthen these cultural features. This desire to preserve traditions not only included preservation of language and music and poetry, but relationships with the natural world such as the practice of crofting on Tiree,

“that connection is obviously – it’s linked to the whole Gaelic culture as well so... it’s not just work, it’s not just kind of really good land management, but it’s also just a way of life...so for me, crofting underpins absolutely everything here...everything is intertwined...”

(Henry, Tiree)

The natural world was treasured amongst many interviewees and regarded as a valuable asset. Despite having a deep appreciation of the environment through living in rural parts of the Western Isles and North West Wales, there was also the concept that *communities*, not only the natural environment, deserved protection and support for the future. Environment constitutes not only the natural world, but the historical and the cultural world of the people who live there. Each component impacts on the other as described below,

*“Mae’r amgylchedd yn fwy na jyst yr amgylchedd ffisegol, mae’n amgylchedd economaidd, mae’n amgylchedd diwyllianol, cymdeithasol hefyd, a dyna lle mae’n bwysig edrych ar yr amgylchedd yn ehangach...fydda fo’n fuddugoliaeth peryg iawn tasa rhywun yn arbed y tiriogaeth o gwmpas a bo na neb yn byw [yna]...bo da chi cymunedau marwaid wrth godre’r mynydd.”*

“The environment is more than just the physical environment, it’s an economic environment, it’s a cultural environment, social too, and that’s where it’s important to look at the environment more widely...it would be a dangerous triumph if somebody saved the surrounding landscape and that nobody would live [there]...that you had dying communities at the foothills of the mountain.”

(Rhys, Llanaelhaearn)

Many of the interviewees spoke about attachment to their place, not only in geographical terms, but in cultural terms also. This place attachment and identity (Uzzell et al, 2002, Devine-Wright and Howes, 2010) was something that carried an emotional weight for some. The desire to develop their place was not done for financial gain, but was an emotional desire to give something back to their villages and islands,

*“...mae gennai rhyw ymlyniad i’r pentra’ ers wchi erioed llu, cael rhyw demlo o mae genai rhywbath sydd isho’i dalu nôl fan hyn llu...”*

“...I have some sort of attachment to this village since, well, forever - and have a feeling that I owe something back to this place...”

(Tristan, Llanaelhaearn)

This attachment to land and a feeling of *owing* something to your area was seen by Tristan as being a uniquely Welsh trait. However, a similar sense of attachment and duty was alluded to through case study interviews in Scotland. Community renewable schemes that generated a new, sustainable income stream was seen as a means of paying this ‘debt’ back to a place,

*“Wel mae na deimlad o ddyletswydd i gario ambell i traddodiadau yn ei flaen... mae na deimlad o ddyletswydd o edrych ar ôl y lle ma de, i’r genhedlaeth nesa...y pwyslais ar ym, aros ma a gneud y lle’n well a...gwella dy le dy hun de, a dyna da ni’n drïo ei wneud...”*

“Well, there’s a feeling of duty to carry on particular traditions...there’s a feeling of duty to look after the place, for the next generation...the emphasis on staying here and making the place better and...improve your own place, and that’s what we’re trying to do...”

(Owain, Llanaelhaearn)

Certainly a sense of being different and peripheral to a mainstream, homogenised, anglicised and globalised British culture was felt through visiting and conducting the interviews in the case sites. The sense of place is best left described by one of the interviewees, here describing the people of the western side of Lewis, who ‘live in’ that particular landscape;

“There are roots there that run intuitively back over centuries...there are people living in the landscape...they can relate themselves to people who lived there hundreds of years ago and know intimately the way you know the back of your hand and the appearance of one side of your face, they have that level of familiarity with the geography...the history and the folklore of the area they live in. Now there are areas, many other areas in Britain I’m sure where that is the case, but they are increasingly isolated and development and change is eradicating that probably at a continuing if not an increasing pace. So these places...where that is still visible and evident are in themselves very interesting.”

(Calum, Siabost)

Case study sites in the Inner and Outer Hebrides, on Pen Llŷn and Anglesey had an apparently strong bond with their cultural history and traditions. That the Gaelic and Welsh languages are still spoken at a community level (to differing levels of proficiency) is a reflection of this link with the past and place. These communities should not however be categorised or oversimplified as marginal, picturesque communities absorbed only with some remnants of quaint cultural practices, cultural history and language. They are areas where real human challenges are being faced. Poverty, perceived ineffective governance and threats to service provision abound as discussed in previous chapters. Added to these are additional threats towards their cultural, historical, linguistic and place identities. These threats are compounded by a rapidly homogenizing world, that could result in cultural poverty and a disconnect with a person or communities 'psychohistory' - our knowledge of our own history (MacIntosh, 2014).

However, the communities under study in this project were not passive communities that allowed these threats to triumph. Community energy, and the potential income stream that can be generated through this sector, were perceived to strengthen these indigenous communities. The fact that these areas are pursuing community energy projects is a working example of having *"one foot in an apparently dying indigenous world, and the other hard down on the accelerator of progress"* (McIntosh, 2004, pg3). That these are communities that are geographically (and culturally) peripheral (in the eyes of some) can be a factor that works in their favour. Positive change was perceived as being more manageable and feasible in a small community,

*"...dwi'n meddwl bod 'na...yn enwedig mewn pentra fel hyn, os ti'n fodlon gneud, mi fedri di greu newid hefyd... mae hynny'n rhwbath sydd yn, yn rhoi pleser i fi'n bersonol ym, hwrach na baswn i'n cael y cyfle cymaint a hynny hwrach mewn lle sydd yn fwy na pentre bach fel Llanhaearn."*

"...I think that there's...especially in a village like this, if you're willing, you can create change as well...that's something that gives me personal pleasure...possibly I wouldn't get the chance as much in a place larger than a small village like Llanaelhaearn."

(Owain, Llanaelhaearn)

Being rural, and being compact in size, seemed to be an advantage if citizens wanted to make a change. A similar interpretation was given in Tiree. The fact that the community are defined by the boundary of their island, it being remote and rural can be advantageous;

“One of the reasons why the community here are so practical compared to a lot of other communities [is] I think that the island thing really makes a difference... because we’re on this island and the boundary is so clearly cut, and everybody knows that they live here, and this is their island...we’re in the middle of nowhere, it’s remote and isolated, people know how to, you know...they just want to get on with it and...I think Tiree is quite proactive as a community... they’ve made the Trust themselves because they wanted to have a voice and get stuff done, and have this money and get projects done and I think it’s I think that’s one of the reasons why, it’s ...cause we are kinda like our little own country.”

(Juliet, Tiree)

### 8.3 LANGUAGE

*“...problem ni fel Cymry Cymraeg, mae’n diwylliant ni yng nghlwm efo’r iaith yn amal iawn, ac mae dirywiad yn yr iaith yn duheddol i weld dirywiad yn ein bywyd diwylliannol hefyd.”*

“...our problem as being Welsh speaking Welsh people, is that very often our culture is tied to the language, and deterioration in the language tends to see deterioration in our cultural life as well.”

(Huw, Llanfechell)

The Gaelic and Welsh language were of central importance when interviewees were asked to describe their local culture – the first cultural symbol used by most of the interviewees. Cultural life was often tied up with the language of the community, as Huw describes in the quote above. Many indications were made to the importance of both Cymraeg and Gáidhlig languages as bearers of other cultural practices, such as poetry, song, history, depictions of the natural environment and traditions, as described in the excerpt below from Tiree,

“...language is important in that it also links things like place names to history and culture and the natural history as well. There’s a really big overlap between the environment and the natural history and the cultural history, because obviously the crofting and farming created the natural environment, but the natural environment gave



the content for song and poetry and place names and...so if you read a translation of a really old Gaelic poem or song, the references to the wildlife is phenomenal and beautiful...”

(Helen, Tíree)

Not all interviewees were necessarily fluent in these languages as many interviewees, (particularly in the Scottish examples) had moved into the area. Many of these people were, however, sympathetic about the language and saw that “actually having Gaelic does help you with the community, because this is a Gaelic speaking community” (Gladys, Siabost). There was only one view that suggested that Scottish Gaelic was of no use, particularly for people who would be leaving a Gaelic speaking community. In Wales, the case sites under study had experienced more hostile attitudes towards the Welsh language. Hostile attitudes towards the language had been associated with the opposers of the community wind turbine in the case of Llanaelhaearn. It was felt that the people that were predominantly against the development of the community wind turbine were also ‘against’ the Welsh language, having used social media platforms to convey their feelings towards both issues. To the other extreme there was an enthusiastic positivity towards the Gaelic language in the case of one Tíree incomer, Robert, who had made language learning a lifelong pursuit. Robert, who had previously worked with aboriginal communities in Australia, had reached language fluency and had immersed himself in understanding the culture of Tíree. Culture in these case sites was therefore intertwined with the local community languages of Welsh and Gaelic, however, these cultural aspects considered so distinctive within each community, were being eroded,

*“Mae’n anhygoel fel mae’r ardal wedi newid o’r amser pan oeddwn i yn blentyn, hanner can mlynedd a mymryn fwy yn ôl, oedd hi, oedd Llanfellech yn enwedig yn ardal bron yn hollol Gymreig... wedyn wrth gwrs, mae newid ofnadwy wedi cymeryd lle a mae’r yr um ysgol leol rwan mae di bod tan y deg mlynedd ddwetha yn dal ei thir tua hanner a hanner Cymru a Saeson, ond mae hi rwan, mae y plant sy’n mynd i mewn yn - dros yr hanner yn dod o gartrefi di-Gymraeg, neu cartrefi lle mae un rhiant yn ddi-Gymraeg, a mae’r iaith yn newid wedyn - yn mynd yn Saesneg.”*

“It’s incredible how this area had changed from when I was a child half a century and a little ago...Llanfechell especially was an area almost completely Welsh... a dramatic

change has taken place...the local school now has been until the last ten years, holding her ground with half and half Welsh and English, but it is now, the children who are going in - over half come from non-Welsh homes, or homes where one parent is non-Welsh speaking, and then the language turns to English.”

(Bedwyr, Llanfechell)

The impact of incomers on local language and culture was recognised in all four case sites. Not only was the natural language of these areas changing in schools as described above, but within other settings as well. The language of volunteering was also changing, as committees had to accommodate English speaking members of the community by switching to speak in English. All of these factors had a cumulative effect on the stability and normality of Welsh and Gaelic language use.

Apart from the impact on language use, there was also a dramatic change in the make-up of these communities, who they were and how they functioned as touched upon in Chapter 5. Whereas communities seemed to be closer knit in the past there appeared to be less opportunities at present for community members to convene. Descriptions depicted that community members were becoming more distanced and estranged from each other. With all case sites suffering from local service closures, be it the local pub, shop, church or chapel, along with threats to close local primary and secondary schools – the communities as a result were losing focal points for meeting and socialising as a community. As a counterbalance to the lack of opportunities to congregate and socialise, a community energy project was seen by some to offer an opportunity for people to convene. This was certainly the case in Tiree’s experience - where a number of friendships were described as having been created due to the community wind project having brought people together.

## **8.4 THE OLD WAY OF LIFE? COMMUNITARIAN PASTS**

### **8.4.1 Crofting and Agriculture**

“...if the crofting disappeared then local people might not stay. The crofting is what ties people to the island. It’s like...if you can think of it as a family business; these crofts have been in a lot of people’s families for you know several generations for a

couple of hundred years in some cases, and I think that's what really ties people to the island. If they lost those people, then the language would go as well so. I think they are definitely closely linked."

(Thomas, Tiree)

When describing the nature of their places, crofting and 'amaethyddiaeth' (agriculture) were talked about as being integral components of identity to place. Crofting in the Scottish case sites, was not only central to the self-sufficiency of communities in the past, but modern crofting was seen as being a "glue that holds people together" (Gladys, Siabost). The heavy tasks involved with crofting was accomplished in many instances through cooperation with the community – which thereby entailed a socialising aspect,

"When I was young we [were] constantly involved in teams of people, doing farming and agricultural kind of work, which was, which had tremendous social...reward."

(Calum, Siabost)

However, this way of life, and the social reward linked to this way of life was no longer as prominent, as Calum goes on to explain;

"Those particular aspects that I'm talking about are massively eroded and barely exist currently. People aren't going out to manually dig up potatoes, manually cut peat, to manually tie up sheaths of oats and barley, they're not tending to cattle they're not feeding chickens, not that there's much social engagement in feeding chickens!...but when I was younger, there would be a massive gathering of people every time it came to sheep dipping, sheep sorting...these were massive...these were big, big days in the yearly calendar, and all that is entirely absent, none of that happens now..."

(Calum, Siabost)

Crofting was becoming less of an integral part of people's lives. Peat cutting had been a particularly important aspect of crofting in Siabost. The tradition of cutting peats was done on a communal basis, occupying the time of friends, family and neighbours across Siabost. The event of cutting peats entailed that it "was essential that people worked together because it was quite hard work...everybody used peat for their fuel then" (Màiri, Siabost). This tradition however was becoming uncommon due to a change in the type of fuel being used, as "it's not peat stacks that you see now, its green oil tanks at ever house almost" (Emma, Siabost). It is

more than just an energy source that has changed however, but the linked communitarian relationship that was bound up with peat cutting – the social side to that particular communal activity.

There were many suggestions as to how the community energy project could support the crofting community, such as supporting younger families that were interested in diversifying crofting practices, helping to vary species of vegetation and plants in the area but also “building on the crofting tradition” (Gladys, Siabost). There were similar suggestions that crofting land could be utilized and “developed into training opportunities for the younger people who might be interested in crofting when they’re older” (Iris, Siabost). Not only were there practical suggestions, but also a desire to protect the wealth of crofting history which could be achieved through using funds coming from the community wind turbine project;

“The idea is to restore that museum and that really does bring back, brings back to life if you like...crofting here as well as the language as well, so that’s a...that I hope will be supported by the turbine project, and be a vehicle for that”

(Gladys, Siabost)

The crofting tradition was under threat on Tiree too;

“...there are less of the crofters than there were without a doubt...fewer crofters are working a greater part of land, but even if you’re working two or three crofts, trying to make a good living from it is becoming increasingly difficult and very often you’ll find people trying to diversify...into other ways of herding an income, be that holiday lets, or bed and breakfast or whatever else... it’s certainly not a secure income”

(Martha, Tiree)

Similarly to other case sites, crofting, and the agricultural economy was seen to be a backbone to the community. Crofting also has a strong link with Gaelic speaking people on Tiree, with many native speakers connected to the land through crofting traditions. It was also seen as the industry that was the foundation to a specific cultural identity on the island;

“One of the main employee sectors on the island is crofting and that sort of brings its own cultural history to the island, and the language, the Gaelic language, you know the agricultural side of things and also the music and you know song and poetry”

(Thomas, Tiree)

The crofting tradition has an important role for the tourist industry also, as the type of sympathetic agriculture practiced on Tiree, maintained a natural environment that was attractive to visitors. For many reasons it was important amongst interviewees to support the small scale farming tradition,

“...the agricultural economy...underpins everything here, underpins the culture, history, environment and tourism...From a personal perspective, supporting the agricultural community is the first and foremost thing for the future of the island and for its history and culture and language and everything else ...it holds everything else up”

(Helen, Tiree)

Crofting not only plays a central social and cultural role but also does service to the natural landscape of the island, and its biodiversity had been “maintained that way by crofting” (Henry, Tiree). One of the most important habitats on the island is the machair, fertile grass and flower land which is maintained in the Hebrides through the traditional forms of small scale crofting, which in turn was an important habitat for Tiree wildlife, particularly the corncrake<sup>47</sup>. There was an appetite for there to be more opportunities, especially for younger people, to become a part of the crofting tradition across Scotland,

“I’d certainly like to see more support for crofters and I would love it if there was some way where young people could find it easier to come back and get work- job creation you know and get back and croft, or get hold of land. Those are problems that rural areas in Scotland, you have people coming back unable to afford rural housing, or be able to get their hands on land and...afford to get crofts ...”

(Martha, Tiree)

Agriculture was also an important industry and way of life amongst communities of the case sites in Wales. Whereas Selwyn in Llanaelhaearn remembers six working farms that had surrounded his childhood home, these had since been amalgamated into one large farm. This replicates a similar pattern in both Tiree and Siabost, where crofts were merging, and becoming larger. This seemed to be a necessity for farming families to survive. However with this amalgamation came the loss of a farming community. This was particularly worrying as many

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<sup>47</sup> A relation of the moorhen, abundant on Tiree

cultural aspects of these areas were locked into the farming community. The Welsh language for example was an intrinsic part of the agricultural sector on Anglesey,

*“Mae’r gymuned amaethyddol yn gymuned Cymraeg eu hiaith...Cymraeg di iaith – pan fyddwch chi’n mynd i’r ocshiwn i Gaerwen chi’n gwbod, Cymraeg sa chi’n disgwyl siarad yn fano, dim fod pawb wrth gwrs yn de, ond dyna di’r iaith y gymuned amaethyddol...”*

“The agricultural community are Welsh speaking... Welsh is the language – when you go to the auction in Caerwen you know, Welsh is the language that you expect to hear there, not that everybody does, but that’s the language of the agricultural community...”

(Huw, Llanfechell)

#### **8.4.2 Church and Chapel**

“Church was very strong here...just about everybody went to Church. That has changed...”

(Màiri, Siabost)

Religion, religious buildings and communities, although not mentioned with as much frequency as other components intrinsic to rural cultural life, were mentioned in the context of cultural identity and place identity, and worthy of consideration in contextualising communities and culture. The demise of religious faith and a religious community also had impacts on the functionality of communities. The main impact described in interviews was that this demise had led to a situation where there were less opportunities available for the community to convene and socialise at regular, weekly intervals, as they would have in the past.

In Siabost and Lewis as a whole, the church was also a repository for the Gaelic language, as many of the “Gaelic psalms are sung in church” (Caitlin, Siabost). The Calvinist tradition of observing the Sabbath (on a Sunday in the case of Lewis) also continued, although to a lesser degree as had been in the past. Shops were still closed on a Sunday, and some also continued with the observance (such as not hanging washing out). According to some “Church still remains important” (Calum, Siabost). However, numbers of regular church goers were falling. Although recognised as playing an important role on Tiree, also as a means of bringing people together, the Church was seen as less strict compared to practices in Lewis.

There had been three chapels in the area of Llanaelhaearn with only the Church remaining as a place of worship. This was also seen as a repository for the Welsh language, as there were Welsh language services conducted there every Sunday, with some members of the closed Chapels meeting in the vestry. In Llanfechell however, the language of the Church was changing in accordance with the numbers of incomers that had arrived in the community. The services were by now bilingual for a congregation varying each week between eight and twenty-five (Ruth, Llanfechell). The congregation was also ageing, and the whole structure of religious life was disintegrating,

*“Mae beth oedd yn... strwythyr cry iawn hannar can mlynedd yn ôl...wedi datgamalu cyn belled a mae'r capeli yn y cwestiwn de, oherwydd... lle oeddau i'n hen hogyn oedd na bedwar neu pump gwenidog yn yr ardal yma...does na'm un heddiw”*

“What was a...strong structure half a century ago...has dismantled as far as the chapels are concerned, because...when I was a boy there were four or five ministers in the area...there's not a single one today...”

(Huw, Llanfechell)

## 8.5 ACCUMULATIVE EFFECT OF MODERNITY

*“Os ydi pobol yn mynd i aros yn ei tai bob gyda'r nos, watshad y bocs, ddim yn mynd allan, ddim yn mynd i addoldy ar y Sul, mynd i ddal i ddirywio mae'r pentra hwnw. Y bobol eu hunain sy'n gwneud pentra' ”*

“If people are going to stay in their houses every evening, watching the box, not going out, not going to a place of worship on a Sunday, that village will continue to deteriorate. It's the people themselves that make a village.”

(Tudur, Llanaelhaearn)

“Everyone'd rather be at the house, watching TV”

(Ciaran, Siabost)

As touched upon in Chapter 5, many of the interviewees spoke of the effect that modernity had on community life and their collective ability to establish a more resilient community. This ranged from the effect of modern technology on cultural life as well as in some cases an unwillingness to work together on common projects within the community due to demands of modern life. People tended to socialise with each other less and less which had led to a ‘great loss’,

“The fact that you drive, that we drive past people’s houses instead of walking past them, happily watch television or eat instead of going next door to talk to somebody...to me there is a great loss.”

(Robert, Tíree)

Compared to past models, people associated much less with each other and that consequently, the past communitarian traditions and means of living were being lost. Similarly in Wales, this new way of living entailed that people had different demands in their lives, that stopped them from socialising,

*“Dyw pobol ddim yn cymdeithasu’r un fath ag oeddan nhw ers stalwm, mae pobol yn byw eu bywyd eu hun. Mae ffordd o fyw pobol wedi newid, sgen pobol ddim yr amsar, mae pawb yn rhedag rhedag rhedag... mae gofynion pobol heddiw yn hollol wahanol i beth oeddan nhw ers stalwm.”*

“People don’t socialise in the same way as they used to. People live their own lives. The way of living for people has changed, people don’t have the time, people are running, running, running...the demands of people today are completely different to what they used to be like.”

(Selwyn. Llanaelhaearn)

Getting people involved in a community energy project was therefore reported as being difficult. There was also a fear that there was a haemorrhaging of young people from these rural communities, who were seeking more urbanised, exiting lives and saw little worth or interest in remaining in rural areas,



“I think as they become older they want more, they expect more, it can be frustrating to live in a small community with nothing going on, no social life, no opportunities to go and shop on a Saturday afternoon, you know the things that mainland children have...”

(Molly, Siabost)

This was also a challenge facing communities in Wales and it seemed that people could sympathise with members of the community wanting to leave the area, due to the “lack of change” and the “limitations” that this incurred (Owain, Llanaelhaearn). The challenges that modernity posed influenced how each community energy project worked, and their ability to rally support. This feeling of community cohesiveness felt eroded in each case study site, with feelings such as Owain’s common,

*“Mae o’n gythrail o job i osgogi bobol i ddod allan a gneud rhywbath, sydd ychydig bach yn wahanol... mae rhai ohonon ni wedi mynd nol i batrwm o mynd i gwaith, edrych ar ôl tŷ ni’n hunain yn llythrennol, a cadw ni’n hunain i’n hunain. Wedyn da ni yn colli dwi’n meddwl, yr ymdeimlad ma o gymdeithas, odd yn bodoli ugain, de gar ugain mlynadd yn ôl”*

“It’s a hell of a job to inspire people to come out and do something...some of us have gone back to a pattern of going to work, literally looking after our own houses, and keeping ourselves to ourselves. So we’re losing I think, that feeling of society that existed twenty, thirty years ago.”

(Owain, Llanaelhaearn)

For the Tíree Trust, it was also a difficulty to try and get people to be involved in their activities. The community would have been much more ready to partake in activities for the community in the past, but it was becoming exasperating to inspire participation in activities at present,

“...just people attending events and, stuff like that is definitely dwindling as well so...the number of people in dances, the number of people at meetings, number of people just coming out to do anything it’s getting harder and harder to get people to come to stuff...I mean we rack our brains in here to get people to come to like the community open day and have to come up with so many incentives... and new ideas and new ways to do things just to get them to come out which is just really disillusioning

and really demotivating...you put stuff on and people just don't care, they [don't] bother coming, whereas in the past they would have just come..."

(Juliet, Tíree)

There was some aversion towards modern communities and society, in that they were less cohesive, and had become more individualistic;

"There used to be a lot more community spirit in that neighbours helped each other...you know there was a good community feeling. I think as people have got wealthier - that element has changed. It used to be you know...the elderly neighbours would pop in, and people were always borrowing from each other, but again as we've got wealthier people tend not to do that, people become more self sufficient"

(Molly, Siabost)

This individualism was attributed by some interviewees to shifts towards consumerism,

*"Dwi'm yn gwybod, mae'n anodd rhoid fy mys arno fo'n union, ond yn gyffredinol dwi'n meddwl ma hwrach sgil effaith Thatcher ydi hyn. Mwy byd mae pobol wedi mynd i deimlo y, beth sy'n bwysig mewn bywyd ydi eiddo a be sy gynyn nhw, ag ym, lleia'm byd o'r deimlad o beth fedra'i neud i bobol eraill..."*

"It's difficult to put my finger on it exactly, but generally I think that this is possibly a side effect of Thatcher. The more that people have gone to think what's important in life is possessions and what they have...the less there is a feeling of, what can I do for other people..."

(Owain, Llanaelhaearn)

The modernity of ways of living, and the move away from old ways of socialising was not a conscious choice according to interviewees, but as a natural, unquestioned progression. Although small steps towards modernity made life easier and more comfortable, some of the socialisation and community aspects of having to work together were lost as an unforeseen side effect. Due to the change in modern lives, and the way that people would socialise with each other, there had been an impact on cultural aspects as is explained by Robert in the excerpt below,

"Since the second world war, tractors replaced horses, cars replaced walking, television replaced ceilidhs, English replaced Gaelic, ease of transport to Glasgow reduced the

unfamiliarity of the mainland way, and the internet in the last 10 years and other modern communications have sort of ...well they've undermined the self-entertainment we've had, they've undermined the Gaelic language considerably, and ...you could be in a Tiree house this evening and really it would be no different from...a house anywhere in suburban or rural Scotland."

(Robert, Tiree)

It seemed that there was resignation that the 'old' way of life was slowly being eradicated in all areas under study. 'Old', local cultures were being discarded in order to participate in a new international culture, which was according to Robert from Tiree, "it's not a bad thing. But it's...you lose as well as you gain in that choice." There were also concerns that the economic structure in the areas under study were not sturdy enough to allow local culture to thrive. Economic uncertainty meant that cultural aspects were also threatened,

"It is quite worrying cause we've got all this, the rich culture and heritage and all that, which is great but if we're not gonna have people here that can enjoy it...if there's nobody gonna be here then there's not much point in having it really is there? So I guess the main thing is, how do we get people to Tiree and how do we get them to stay here? Which is all based around having jobs and having houses for people to stay in."

(Jessie, Tiree)

This need to strengthen the local economy in able to strengthen local cultural aspects was a common goal across the case sites. There was also hope that the social benefits of 'old' cultural traditions could be replicated, in a new form. However, there was no desire for there to be a regression towards an 'old' way of life, as Walter and Gladys articulate below,

Walter: People don't want to live in a theme park either

Gladys: Or a museum

Walter: They want to be able to live here and now

(Walter and Gladys, Siabost)

There were hopes that the socialisation and communitarian benefits of the past and the re-establishment of community traditions could be achieved through the process and outcomes of

pursuing a community energy scheme. This was the case from the viewpoints of some people in Llanaelhaearn;

*“... dwi’n gobeithio, hefor’ prosiect Ynni Gwynt ma yn Llanaelhaearn y daw o a bywyd yn ôl...Pan dwi’n deud bywyd yn ôl, brwdfrydedd, pobol yn sbio tu allan i’w cylch bach nhw ei hunain, pobol a brwdfrydedd dros beth sydd yn digwydd yn y pentra ei hun felly, ag nid yn byw o fewn pedwar wal yn eu tai.”*

“...I hope with the wind energy project in Llanaelhaearn will bring life back...When I say bring life back - enthusiasm, people looking outside their small little circle, people with enthusiasm for what’s happening in their own village, and not living within the four walls of their houses.”

(Tudur, Llanaelhaearn)

## 8.6 THE ROLE OF COMMUNITY ENERGY

Looking back on the shared history of their communities inspired developments for the future. In the same way that the granite quarries, the tweed mills, agriculture and energy projects like the Wylfa nuclear plant had supported communities of the past in terms of employment; community led economic development could also create work, giving a seedbed for cultural life to thrive which was seen as being a necessity for the future. Community wind turbine schemes were seen within this context - as being a means of developing a local economy, local jobs and a more prosperous future both socially and for their unique cultures;

*“...yn yr un modd oedd pobol canrif cyn dwetha yn gweld y chwareli fel, wel neu gwenithfaen yn yr ardal fel modd i creu gwaith ar gyfer y cymunedau...Dyna hefyd ydi fersiwn yr oes yma... ydi defnyddio y gwynt sydd yn adnodd naturiol yn yr ardal i cynhyrchu ynni i cynhyrchu incwm i diwyallu yr anghenion... So i rhei sydd yn pryderu am yr effaith ar yr amgylchedd, dwi’n credu fod o’n rhwbath fedrith rhywun cyfiawnhau.”*

“...in the same way that people in the century before last looked at quarries, or granite in the area as a means of making work for the community...It’s a similar story

today...using wind which is a natural resource in the area to produce energy to generate income to satisfy needs...so for some who worry about the impact on the environment, I think that it's something that can be justified."

(Rhys, Llanaelhaern)

Community energy was seen as a means of community development for the future, not as a regressive means of returning to a 'sepia toned' version of the past. It was seen as a progressive means of resilience. The sector also had a means of bringing people together for a common cause, while also encouraging community cohesion,

"Community energy is...certainly a force for, definitely a force for community. I mean I think Tiree without a community wind turbine would be...would be very significantly poorer and [a] weaker group of people than it is with it."

(Robert, Tiree)

This sense of resilience and being a 'stronger' group of people as a result of the community turbine, was something that interviewees in Tiree wanted to see replicated elsewhere,

"I think any rural community would benefit from...a turbine like Tilly...it's created jobs out of it, funding for projects that wouldn't have happened, support for projects in the local community... there should be some sort of scheme to get a community turbine in every rural community in Scotland or something to really kick start people seeing the opportunities that are there for communities to sustain themselves."

(Martha, Tiree)

Despite uncertainty about the cultural future of their communities, there was a growing assuredness that cultural aspects should be protected, and that the community energy projects could contribute more widely towards this goal. Inward investment through the wind turbine on Tiree that would make the island a more attractive place to live and ensuring a more robust future, concurrently would have a beneficial effect on the culture of the island,

"I suppose if it [community energy project] helps keep people here and not [to] leave, then by default, it's supporting the culture... it's a wider benefit to the culture by making sure that we don't get any smaller and any weaker, or any more fragile."

(Jane, Tiree)

It soon became apparent during this study that community energy projects which were being developed were seen to play a pivotal role in obtaining cultural resilience. Creating a community income stream allowed groups to provide finance for certain cultural events, creating employment and developing particular projects and centres for cultural activities. This was a clear aim for the Talybolion energy project in Llanfechell, who although were not at the stage of being able to invest in local cultural aspects of the area, intended to do so with their projected sustainable income,

*“...mi’r oeddan ni eisiau cadw y gwerthoedd a’r patrwm diwylliannol oedd yn y fro, oeddwn ni’n teimlo baswn ni’n medru gwneud hynny os basa ni efo incwm ein hunain yn hytrach na dibynnu ar bobol eraill.”*

“...we wanted to keep the values and the cultural pattern that are in this vale. We felt that that we could do that if we had our own income rather than depending on other people.”

(Bedwyr, Llanfechell)

Tiree being the most developed of the four community energy projects already had examples of how their new income stream from the wind turbine was being used for cultural stimulation and resilience. Contributing towards cultural resilience was a part of Tiree Trusts remit,

“Part of the Trusts’ remit certainly is to, to continue to promote the cultural side of things, the heritage... Being able to support, financially support projects that promote the language the culture, the agriculture, crofting, fishing, all these things that are part of the way life of Tiree, you know...being able to financially support them as well as the Trust giving them other forms of support, I think it is a big thing for us”

(Thomas, Tiree)

One such commitment was donating funds towards the annual Tiree Music Festival, which had been bringing hundreds of people to the small island which was “putting Tiree on the map...helping bring people here which is then helping the tourist industry and then income stream to the whole island” (Jessie, Tiree). Another group that benefited from the Windfall

Fund<sup>48</sup> from the turbine was the Tìree and Coll Gaelic Partnership, a charity group that specifically worked on the development of the Gaelic language and historical archives and knowledge on the isles of Tìree and neighbouring Coll,

“It’s making a huge difference to...our work... I think if it hadn’t been for the Windfall Fund...[we] would have...gradually ended up tired...So, basically...it’s made a difference between viable and disintegration and when it comes to sort of heritage infrastructure and sort of producing employment for lovely bright young Tìree people...it’s a fantastic energy boost to the economy and the... I think the energy of the community.”

(Robert, Tìree)

Similarly the Fèis Thiriodh, a Tìree based group teaching and learning traditional Scottish and traditional Tìree Gaelic music (and thereby learning the language through these songs), received funding from the windfall fund to promote ‘*ar ceòl, ar cànan ‘s ar dualchas*’ - our music, our language and our culture. There were also hopes that there would be funding available for developing a similar project in Siabost - “a sort of a traditional school...a music school or something...again that keeps the traditional side to it” (Ciaran, Siabost).

Back on Tìree, the Windfall Fund part funded the post of a staff member at the Tìree Trust, a post developing cultural aspects on the island. Part funded by the Bòrd na Gàidhlig (the Gaelic Board) and with some investment by the Tìree Music Festival, the role of Music, Culture and Communications Coordinator was aimed at developing ‘Ulpán’ Gaelic language courses along with working alongside groups interested in maintaining cultural traditions of the island.

Other projects that the windfall fund from the community turbine funded on Tìree included a local drama group that had developed Gaelic language performances, and competed in the national National Mòd, a festival celebrating Gaelic music, song and dance. A tapestry project was also funded, which brought members of the community together to design and display a community collage. Another project on Tìree, supported by the windfall fund, was in relation to keeping the islands maritime traditions alive;

“We gave the Tìree Maritime Trust a grant of about twenty thousand pounds last year, to build a boat shed...for restoring and storing lug boats, which are our sort of

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<sup>48</sup> The name given to the income generated by the community wind turbine that was available for the community of Tìree to apply for

traditional Tiree sailing boat, so again it's sort of keeping the cultural aspect of the sailing of Tiree alive...they do little training courses every now and then on how to restore boats and things like that so,...apart from that fact...it's built an asset for the community, a physical asset for the community. It's also helping to promote the culture and heritage side of the sailing on Tiree."

(Thomas, Tiree)

There certainly seemed to be more confidence in Tiree due to the new income stream and how it could contribute to the protection and promotion of cultural aspects, language and heritage on the island particularly for An Iodhlan, the historical centre.

"Well it just makes it all a bit more positive doesn't it... knowing that there's this huge pot of money (it will be once the loans payed off)...that all community groups can apply to...to keep them going, instead of everyone having to worry about, oh, where's the money going to come after fund-raising...it's a much, much more positive thing and that, that makes you think, makes you plan more for positive projects that you want to do with your community group...because we know we're in a secure position, where we're not going to have to worry next year about whether we'll be open or not, how we're going to preserve all the artefacts..."

(Helen, Tiree)

However it would be naive to presume that a wind turbine can save a culture, due to the struggle between preserving small cultures against the homogenising effects of globalisation as the excerpt below explains,

"...the forces of, you know cultural homogenisation are not just felt on Tiree. They're... they are you know... these are very strong forces...technology has shrunk the world and homogenised the world...and I think you can have a million community turbines but I don't know [if they] can compete with that."

(Robert, Tiree)

There would have to be a gear change and a commitment amongst community members themselves to ensure that the culture, much of it as previously said, locked up in the language, were to be kept 'alive',



“It would have to be a sort of community effort... [Gaelic is] definitely going to get watered down as things are at the moment, it would have to be a real shift, it would have to be an agreed thing in the community that they would keep the language alive”

(Claire, Tiree)

Horshader, the Trust in Siabost that will be managing the money generated from their community turbine, were already supporting cultural projects. The *Tormod an t-Seòladair* project developed knowledge about the glass plate negatives of Dr. Norman Morrison - a native of Siabost who had used local people as his subjects for photographic negatives taken in the early 20<sup>th</sup> century. Although not funded by Horshader (who did not have their income stream established at the time of interviewing), in kind contributions (for example, volunteer time) were given. Apart from developing prints from the negatives the project also included;

“...a conference, an intergenerational project, and...a more school’s linked project - all very successful I must say... But the legacy it’s left in the community in that, the framed prints will stay in the community, some will go on display in the museum and the Historical Society”

(Molly, Siabost)

Cultural projects such as the above along with other projects were being developed in Siabost at the time of writing. One of these schemes included a boating project - reintroducing traditional boat making and practical boating skills in the area. Another project was developing a community museum in Siabost. There was a desire for the cultural aspects of the past to be imparted from the older generations to younger generations and that there was a need to ‘repatriate these things’ (Caitlin, Siabost). This was already being achieved by The *Comann Eachdraich an Taobh Siar* – a Historical Society covering the local history of the west coast communities of the Isle of Lewis, with their office in Siabost. It was named as a voluntary group that were already working towards documenting local cultural history although their work needed “to be embraced by more people” (Molly, Siabost). A museum project in the area that could hopefully be supported by the income generated by the wind turbine was seen as a way of repatriating history and culture in the area,

“The idea is to restore that museum and that really does... brings back to life if you like, the crofting ... as well as the language as well, so that’s a...that I hope will be supported by the turbine project”

(Gladys, Siabost)

The development of a community poly-tunnel (mentioned in Chapter 7) also contributed towards a reintroduction of the traditional communal aspects that was a feature of crofting practices as well as creating a sustainable food source. The plan encompassed an important social value that was viewed as being important in many ways;

“So when you get the opportunity for people to...see their wind turbine that they can see out of their window, producing cash that they can use then to purchase poly-tunnels, and then they can figure out a way of negotiating amongst themselves how they’re going to execute, manage and capitalise on that, the fact that physically growing plants and produce out of the soil...that again echoes... many of the old activities that used to go on in terms of agricultural activity and commerce on a small scale that led people to make negotiations, deals, take responsibility, interact with each other...with the nucleus of the activity being within the community - creating a gravity in towards the centre rather than a centrifugal force outwards...there’s nothing insular about this - the way that...people are able to function not only as individuals but as a unit and as a community it’s a much better base for them to be connected and to inter-relate to the world outside”

(Calum, Siabost)

This ability to socialise as a community, and work as a unit was considered an important aspect that contributed to the wellbeing and health of a community. This wellbeing of a community was considered to be of paramount importance in Siabost, achievable through more opportunities to socially connect with people,

“The reasons that these things are important is simple and universal. Health and happiness and fulfilment comes from socialisation. The number and the quality of the people that you meet and the quality of the good time that you have with them is massively associated...and related to wellbeing in every sense of the word, and every sense of notion of fulfilment in terms of simple things like feeling happy and being well

but also in terms of outcomes in terms of performing better, productivity, economic activity. It really, it's [the] closest thing to a panacea I would say."

(Calum, Siabost)

As discussed in Chapter 7, community energy was seen as a way of being able to develop community facilities and amenities, contributing towards turning the tide on depopulation patterns, and thereby allowing local cultural practices a seedbed in which to thrive. Similarly, the community wind turbine projects underway in Scotland, were seen as a way of encouraging more opportunities for people to socialise, and come back into contact with each other – another tangible benefit, and one which could also encourage the resilience of traditional cultural activities.

In the Welsh case studies, although their community energy projects were not up and running and generating an income stream, there were already ideas abounding on how money being generated by their proposed wind turbines could be used towards cultural resilience. In Llanaelhaearn, this had already been the remit their community cooperative Antur Aelhaearn. Established in 1974 the cooperative aimed to protect and develop the area as a Welsh and Welsh speaking region and instil a sense of local confidence and resilience. The wind turbine project was seen as being of vital importance in the continuation of this vision,

*"Dyna pam mae y gwaith hefo'r tyrbein ma yn un bwysig a dwi'n meddwl bod hi bod o yn rhoi cynnig i ni gael neud pethau fasa'n helpu o rhan cadw yr iaith...y drefdadaeth wsti – [mae yna] bob mathau o bethau fasa ni'n gallu neud efo fo i helpu..."*

"That's why I think the work with this turbine is important and I think that it gives a chance for us to do things that would help in relation to keeping the language...the heritage you know – [there are] all kinds of things that we could do with it to help..."

(Mark, Llanaelhaearn)

Plans to help the community included developing a floor within the chapel building (that had been bought by Antur Aelhaearn) for a new classroom for the primary school, with the bottom floor being developed into a heritage centre. The heritage centre would include information on local historical and cultural figures, including a section for interpretation of the Tre Ceiri site - the Iron Age Hill Fort above Llanaelhaearn.

Llanfechell also had plans to ensure that the cultural heritage of the area was to be protected through the community energy project, a vision that was included within their memorandum,

“I can see from this memorandum...that one of the objectives that are listed here is... ‘to utilise revenue to support assistance and development of the linguistic and cultural education and heritage of the communities of Mechell and Llanbadrig’ ....it’s...very important to have that clause in...that Welsh cultural realities would be [a] prominent part of the thinking.”

(Gerald, Llanfechell)

## 8.7 LANGUAGE RESILIENCE

“...you’re allowing Gaelic speakers to stay and use their Gaelic - it keeps it alive...”

(Gladys, Siabost)

Achieving language resilience was a driver for pursuing community energy projects. It was predicted by interviewees that through strengthening the local economy the language in turn would be strengthened, as a strong local economy would allow local people to stay rather than move away thereby preserving the language amongst community members. Tiree was already providing practical support for language initiatives. On Tiree, projects that were supporting language resilience were seen in the same light as other sustainability measures;

“[there are] various criteria that we want the projects to hit and it’s - involving young folk, involving Gaelic, involving sustainable environmental things, involving old people, and...it’s just a scoring thing that we have...”

(Henry, Tiree)

Ulpan<sup>49</sup> courses and training an Ulpan tutor has been part of the Tiree Trusts work, with money from the Windfall Fund being put towards part subsidising the courses. This entailed that the courses were more affordable for locals. Funds were also used to contribute towards the employment costs of a culture officer also now trained as an Ulpan tutor. Although the

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<sup>49</sup> A standardised Scottish Gaelic language course

connection was not noticeable at first glance, the turbine was in fact contributing towards supporting the language on Tìree,

“You don’t see the connection between the turbine there and supporting Gaelic on the island, but that’s what it’s doing. It’s doing it indirectly by being able to fund that project that make it easier for people that are resident to access courses.”

(Martha, Tìree)

Developing the Ulpan courses on the island, also had the benefit of attracting further funding,

“Our council... as soon as they got wind of us doing an Ulpan course they said that they would be keen to send; every person who works for Argyll council are entitled to attend Gaelic language classes during work hours that are payed for by the council, so, it’s an income that we can tap into which also has the, you know, that benefit of just really keeping the language as a meaningful way forward.”

(Thomas, Tìree)

There was also a potential for Tìree to develop into a language learning hub, a vision included in Tìree Trusts’ Community Growth Plan (Tìree Trust, 2011), echoing the development of the Welsh language centre in Nantgwrtheyrn close to Llanaelhaearn. A development of this sort could create a new economic benefit for the island, as well as encouraging more uptake of the language locally,

“...we’re now running a project to have Ulpan courses on Tìree so hopefully it could turn Tìree into a bit of a hub for Gaelic learning...that’s our long term plan. As of early next year we’ll be running parent classes for locals...that essentially would lead to [a] 9 week residential course that hopefully we’ll be advertising internationally, so that’s the grand plan.”

(Thomas, Tìree)

However, there remained difficulties in inspiring residents to engage with language learning itself on Tìree, and that money on its own would not be a panacea for language revival;

“I mean the problem...is getting people wanting to go to it, cause there is...sort of a large investment in learning a language...I think many people living on Tìree today

would say...it's not worth it...that's what seems to be the calculation that people are making, whether you're putting ten or a hundred thousand pounds into that project, that doesn't make a huge difference. So...it certainly, it's a positive influence, but it probably needs more than just money. Unless you can conceivably drag Tiree a 150 miles north - which would be good!"

(Robert, Tiree)

The aforementioned role of the Music, Culture and Communications Coordinator that had been created by Tiree Trust, and part funded by the Windfall trust was seen as being a role that was perfectly placed to engage with some of the problems that Gaelic was facing on Tiree;

"I think [the language] is something that's always kind of been there, and maybe now we're beginning to realize that it's always been there, but we've not really been doing much with it if that makes sense? We've just been leaving it [for] the older generation to kinda get on with it and maybe not pushing the younger ones to take it up as a language, or kind of like the importance of it and how it is kind of beginning to die out now...it's maybe a bit late to be thinking about it but I guess, something has to be done about it now which is what I, I think my post is really important to try and do something about that."

(Jessie, Tiree)

Support was also offered through Horshader in Siabost for groups that were focused on Gaelic language activities. Supporting the language and cultural heritage was a part of their criteria. As Siabost is considered a stronghold for the Gaelic language, it was also suggested that the area could benefit from further Gaelic language developments. There was certainly an appetite amongst the interviewees that there should be investment made into the Gaelic language, even in practical terms with the running of the project.

"I would hope that ... [they would] employ some sort of community worker who was a Gaelic speaker who would...be able to help in doing things. Let's take as for an example, the museum...the community centre... these places could be open and have someone like that who could be...just available to manage at different times...and I would hope, particularly with the museum, that Gaelic would feature very much in it..."

(Màiri, Siabost)

The language was already being used in Horshaders offices by the Development Officer, allowing local people to feel comfortable in communicating ideas about developing the area,

“I can speak to them in both languages, the elderly like that....so I think it’s easier, I think it’s definitely easier. I think it’s easier for them to also say to me what kind of projects they want...and to speak in both languages”

(Molly, Siabost)

Support was also in line for developments in Wales despite not having yet reached the development phases of the examples in Scotland. In Llanaelhaearn there was already a contract by Antur Aelhaearn to conduct a language study (along with an economic benefit study) to show the possible benefits that ownership of a community wind project could entail. Interviewees believed that the community turbine would contribute towards strengthening the language,

*“... mae hwn yn gyfle i gryfhau’r iaith yn lleol. Yn sicr dyw o ddim yn mynd i wanio fo, ag ym, mae na gyfle i’r strategaeth ehangach cryfhau’r iaith a’i seiliau hi, a’i chadw hi am flynyddoedd gobeithio.”*

“...this is a chance to strengthen the language locally. Certainly it won’t weaken her and...there’s a chance for the wider strategy to strengthen the language and her foundations, and keep her for many years hopefully.”

(Owain, Llanaelhaearn)

The idea of funding free Welsh lessons for local people in Llanaelhaearn was mentioned as a direct means of strengthening the language. Many interviewees saw the potential for their community energy projects to contribute towards funding such a venture and thereby support the development and sustainability of their languages. This was seen in a wider context of ensuring the community’s economic and social sustainability as a whole.

The desire to support and sustain the Gaelic and Welsh language in the communities under observation here was of vital importance. There were a number of long term visions on how to

achieve language sustainability as evidenced above. However, it was noted that other grassroots initiatives were needed, rather than an overreliance on the organising group behind the wind energy projects. Creating a new income stream for project development as evidenced on Tiree and Siabost also meant that the community had leverage power to seek match funding for certain projects, including those based around language sustainability. Furthermore, as well as putting support structures in place for language sustainability, inclusivity of the community energy schemes themselves allowed other community members to come into contact with native Gaelic speakers and learn more about the language and cultural life encapsulated within it. As Bridget, a non-Gaelic speaking resident of Siabost explains below – being a part of the community energy project allowed her to come into contact with Gaelic speakers, and learn through social situations,

“I think it just, like they say you know, people that speak Gaelic would have to speak to me in English and are not speaking Gaelic as much cause there’s more English speakers moving in, but I actually think ...by mixing and doing these kind of projects with the turbine especially helps with that...it doesn’t dilute it at all, it spreads on if you know what I mean, to more folk than it would, than would have been possible without it so.”

(Bridget, Siabost)

This practice of bringing the community together and increasing chances of using the Gaelic language amongst fluent speakers and members of the community who were willing to learn could be done through projects. However, it was argued that before addressing the issue of language resilience, community stability had to be achieved. A solid bedrock was needed for the language to develop, as alluded to in the excerpt below,

“I think that...you have to build a real community with a real life before you can address the issue of the language in a meaningful way.”

(Calum, Siabost)



## 8.8 HOW CAN COMMUNITY ENERGY RE-SOCIALISE?

As described previously whilst describing virtues and benefits from the past, interviewees often spoke about the socialisation benefits of meeting up or working communally together be it through peat cutting or the Church in Siabost, Ceilidhs on Tiree, the historical society or the rugby in Llanfechell or the local Eisteddfodau in Llanaelhaearn. Of all community attributes, this sense of gathering was the one most longed for and seen as a conduit for many cultural benefits.

Interestingly, community energy projects revealed a new possibility for communities to gather, either directly (through engagement with developing the project) or indirectly (through involvement in the projects that the community wind turbine could fund). This sense of coming together, a practice that was mourned for as a social loss, was being reinvigorated through community energy projects. Even having community meetings is a means of transferring cultural practices and norms to other members of the community;

“The community turbine keep... that side of things even more alive because when you’re having a community meeting...or a consultation or...planning a project... everybody’s getting together...and get...to talk Gaelic...mixing with everybody.”

(Bridget, Siabost)

Apart from the meetings, the projects that were lined up in Siabost, such as the playpark and the poly tunnel scheme, had the potential of bringing people together in a way that reflected the coming together of communities in the past. If not a complete solution, it was believed to be of significant help,

“I think it goes part way into bringing people back together in a communal sense, partway there, but it will be what you can do...it’s not the turbine itself, it’s what you can do because you’ve got one and those... So if you ask us in a year’s time, we’d be able to tell you what the effect of having the poly tunnels or having the playpark [are]”

(Gladys, Siabost)

There was also the possibility of ensuring that younger generations were not in the position where they had to leave. Addressing depopulation was coupled with addressing resilience and ultimately cultural resilience.

## **8.9 CONCLUSIONS**

As seen throughout this chapter, the cultural underpinnings of each community under study were of significant importance and value for interviewees. Ensuring a viable future for these cultural traditions, be it language use, traditional practices, repatriation of historical knowledge or reclaiming the relationship between people and land, was considered an imperative.

It has been argued that the effects of neoliberalism and globalisation have had particularly harmful effects on place attributes such as culture, language, tradition, history, memory and community (Murphy, 2012). The homogenising effects of these phenomena have been movingly portrayed amongst the interviewees, with descriptive analogies of how their communities are changing, local cultural attributes are abandoned, and socialisation is becoming rarer in the face of modernity. There are fewer opportunities for communities to come together and create social bonds that can bolster local cultural activities.

Community energy, however, seems to present a way of re-kindling some of these social and cultural bonds. Community energy projects appear to offer an opportunity for communities to gather once again for a shared aim, and to create objectives that include the strengthening of local cultural attributes along with posing a new reason for community members to socialise. Although inspiring engagement is a particularly modern challenge, in the face of increasing individuality (as evidenced in this chapter and Chapter 5) – community energy is perceived as offering an opportunity to turn the tide on this trend.

Community energy, as evidenced here, can also invest new income streams (generated from their renewable energy projects) into cultural activities such as local language courses, cultural and historical activities and even employment opportunities for local people. These activities combine to create a more resilient community with strengthened facilities and services that encourage people to remain, return or move to the area, which in turn contributes towards the flourishing of cultural practices and traditions.

Community owned renewable energy projects have been acknowledged as allowing communities to benefit from “natural resource wealth gains while simultaneously facilitating

holistically sustainable development.” (Krupa, 2013, p.85). This has been evidenced in this chapter. Cultural sustainability (Soini and Birkeland, 2014) was considered with as much value as ecological, economic and social sustainability amongst the interviewees. This acknowledgement at community level mirrors efforts in the European policy arena where campaigns to ensure that culture is added as the fourth pillar of sustainable development are underway (UCLG, 2010).

It would seem evident from this research, that communities themselves have always understood the interplay between economic, social, environmental and cultural sustainability. Normalising a narrative amongst indigenous communities with minoritised languages of how ownership of renewable energy projects support cultural and social aspects should be explored further. Cultural sustainability within the energy sector in particular has been rarely explored. This thesis is merely the beginning in addressing this knowledge gap, and opens the door to the continuation of research in this particular vein.

## CHAPTER 9

### FACILITATORS, PLANNERS, CAMPAIGNERS AND POLICY MAKERS' VIEW ON COMMUNITY ENERGY IN SCOTLAND AND WALES

“Place, people, passion is the life blood of cohesion. We have the most imbalanced democracy in Europe where the elite are untouchable and out of touch with the lives of ordinary folk. More community based enterprises where they can be independent of local authority or agency largesse are critical in building new rural economies based on the OECD<sup>50</sup> rural paradigm”

(Respondent 1, Scotland)

#### 9.1 INTRODUCTION

This chapter will summarise the findings from the Delphi method Questionnaire, a two rounded questionnaire conducted with the participation of facilitators, policy makers and planners working at Welsh and Scottish Government level, planners and community development officers in all four local authorities under study, along with campaigners and professionals that are employed or work in the renewable and community energy sector. The themes that run through this chapter reflect upon the themes discussed amongst interviews conducted with community energy groups on the ground. The added focus here will be on what can be done in practical terms at policy and facilitation level. Compared to more established traditions of development in the renewable energy sector, community energy is facing a more difficult and ‘precarious’ time according to previous research (Cooperative Group and Co-operatives UK, 2012). This chapter will explore and summarise what are the best means of developing the community energy sector and avoid creating a precarious future for the sector in Wales and Scotland.

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<sup>50</sup> The Organisation for Economic Co-operation and Development.

## 9.2 THE SIGNIFICANCE OF OWNERSHIP

"It [Community energy] creates a shift from energy dependency and dependency on fossil fuels to energy sovereignty and potential income generation."

(Statement 23, Respondent 14, Scotland)

An overwhelming 92.4% of Scottish participants agreed or agreed strongly with the above opinion about the significance of community energy, and its ownership model. This allusion to sovereignty was something also expressed throughout the interviews – the capacity for self-determination. Echoing many of the interviewees responses, many of the questionnaire respondents saw that community energy “represents an income stream for community regeneration that is increasingly significant as public sector service provision shrinks” (Respondent 9, Wales). In the face of past and looming public service cuts as a result of austerity measures, community energy posed itself as a community asset that could serve as a safety net to many rural communities. This is articulated further below, a statement that Welsh respondents agreed or strongly agreed with 100% in the second round of questioning,

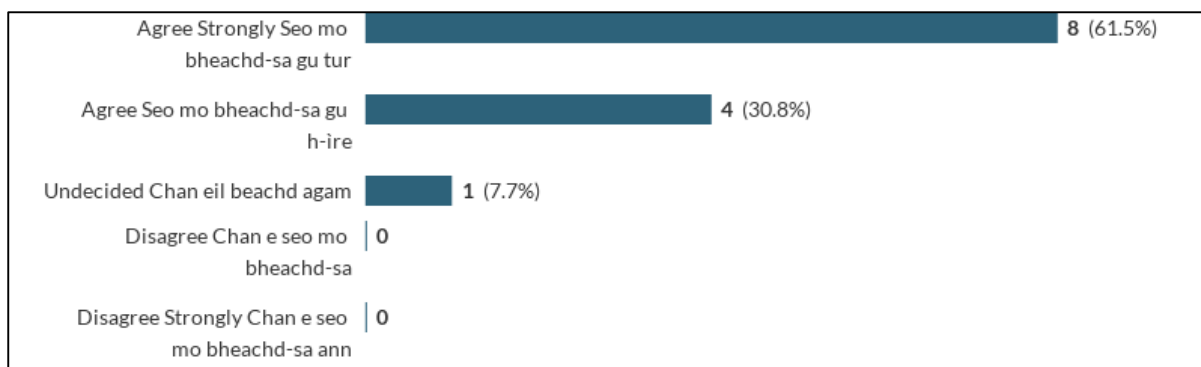
"...retaining the benefit locally ensures an increase in local wealth, an ability for communities to provide improved local services, support other local community initiatives and the development of economic multipliers that ensure for a sharing of the income throughout the local economy."

(Respondent 3, Wales)

From the Scottish perspective, communities were also deemed best suited to maximise the impact of a new income stream and would also profit from gaining added confidence,

"Community ownership of a revenue generating renewable project brings financial sustainable income to the community and results in greater community confidence and capacity that will equip communities to maximise the impact from any income generated."

(Statement 24, Respondent 11, Scotland)



**Table 9.1 Scottish Response to Statement 24, Respondent 11, Round 2, Scotland**

As can be seen in the table 9.1 above, many of the Scottish respondents agreed or agreed strongly with the above opinion, reflecting the opinions of community members interviewed and discussed in Chapter 5. However, the issue of community confidence in Wales was more problematic with some respondents believing that there were cultural issues that had led to a lack of confidence,

“Cultural issues, such as lack of confidence and belief in the abilities of local people to achieve together. Combined with a history of being told Wales isn't good enough, big enough, developed enough, entrepreneurial enough, rich enough to take care of its own needs.”

(Respondent 3, Wales)

Community ownership of local renewable energy projects also led to “reinforcing a sense of place and common purpose” (Respondent 15, Scotland), and that community energy could “also provide communities with a sense of leadership and control over their own destiny, given that they often understand their local needs far better than their authority or government.” (Respondent 3, Scotland). These observations echo what communities themselves were implying – that they are best equipped in understanding community needs and how they could be best addressed.

The role of community energy and ownership models of renewable energy technologies in the wider energy sector was recognised amongst questionnaire respondents in both Wales and Scotland as being of practical importance in furthering the development of renewable energy deployment. The benefits that are accrued from the community energy sector and their significance for the renewable energy sector was acknowledged. There were however some

disparities in how big a role community owned projects could play in the energy sector as a whole, with many respondents reverting to the importance of joint venture projects or community benefits as options to pursue rather than full ownership – an option that had not been suggested by case site interviewees at all (who preferred the concept of having *full* ownership of their community turbines). Nevertheless, decentralisation of power and its potential to benefit communities was a common thread emerging through the questionnaire responses,

“Today we see opportunity to benefit from a strategic alliance between power companies and communities and in some cases where communities can directly benefit, these options have been pursued. I believe that subsidiarity<sup>51</sup> is paramount and that when these decisions are made then as much of the benefits should remain as local as possible.”

(Respondent 1, Scotland)

There were also attestations that ownership could lead to a more tolerant acceptance of renewable energy deployment in general,

"[Community Energy] has the potential to help people make a connection between supporting a transition to renewables and their own energy consumption (easier where community groups are also suppliers)."

(Statement 28, Respondent 14, Scotland)

92.3% agreed with the statement 28 above. Although there is evidence presented in Chapter 5 and 7 that community ownership might not necessarily entail that communities are automatically supportive of community initiated renewable energy projects, the adage in the opinion above (to be energy suppliers not just generators) is a point that was communicated in the interviews at grassroots level. Many of the interviewees spoke about their desire to be able to supply their communities with (electrical) energy, rather than exporting energy for FIT payments. This however was not a viable option for the communities interviewed. It would be interesting to compare and measure the level of support for community energy projects that supply energy to their communities (be it through local grids etc) compared to the current trend of exporting energy and creating an income stream through FIT payments. One example that

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<sup>51</sup> decentralisation

has managed to supply energy rather than export to the national grid is the Isle of Eigg in Scotland. However they did not have the option of selling their energy to the national grid (as they were not connected) – and a local island grid was the easiest option (Isle of Eigg, 2014).

### 9.3 PLACE, LAND AND CULTURE

“For those who already have a relationship with place, feel their identity is part of their area and a sense of belonging, a community energy project provides an outlet for expressing that. Similarly, for those new to an area participation in a community energy group can create a sense of belonging and increase understanding for the history and culture of the place involved by encouraging interaction with others in their area”

(Respondent 3, Wales)

The theme of place, culture and identity and their relationship to the establishment and outcomes of community energy projects were discussed in depth in Chapter 8. Many of the participants in the questionnaire also had observations to offer on the subject. As the above statement shows, community energy projects could have a dual role. A project could be an ‘outlet’ to express their identity and commitment to an area whilst also being a means of allowing incomers to partake in a communal project – making them feel a sense of belonging to a community. Incomers, as evidenced in Chapter 5 and 8 through interviews with community members, appear to have dual roles that they can play - as supporters or opposers to community energy projects. Some participants of the questionnaire suggested that renewable energy and environmental issues were seen, in Wales, as being something that belonged to ‘outsiders’. This phenomenon has been proven by past research (Hughes, 2008). As one of the respondents in Wales puts it,

*"[Mae] Ynni adnewyddol/materion amgylcheddol yn dal i gael eu gweld fel rhywbeth yn perthyn i rai o du allan...Ar y llaw arall, mae mewnfudo yn dod a rhai newydd efo brwdfrydedd a gwybodaeth a sgiliau sydd yn medru bod yn sbardun i helpu datblygu cynlluniau cymunedol"*

"Renewable energy/ environmental matters are still being seen as things related to those from 'outside'...on the other hand, immigration brings people with enthusiasm and



information and skills that can be a spur to help develop community schemes"

(Quote 19, Respondent 4, Wales)



**Table 9.2 Welsh Response to Statement 19, Respondent 4, Wales**

There was a mixed response to this supposition as seen in table 9.2 above. It was also suggested that such beliefs within a community were dependent on the community itself. There were, however, some counter arguments to the idea proposed in Statement 19 above, in particular that many anti-wind sentiments were expressed by some incomers;

"In my experience immigration does sometimes bring with it enthusiasm and the skill set to develop these schemes, but also many of the anti-wind people I have encountered over the last few years are people who have moved into the area."

(Respondent 15, Wales)

This reiterates the correlation found in research by Van der Horst and Toke (2009), about middle-class incomers and opposition to wind turbines. There was also a suggestion that incomers could sometimes not be inclusive of others, if they become the driving force of a community energy development (in the Welsh context),

*"Rwyf wedi gweld os yw prosiect yn cael eu ddatblygu gan bobl sydd wedi mewnfudo mewn ir ardaloedd cymunedol gwledig yna mae'r bobl leol sydd wedi'i magu yna efallai yn cadw i ffwrdd neu ddim yn cael eu clywed."*

"I have seen that if a project is developed by people that have migrated into a rural community area then the local people who have been born and bred there maybe stay away, or don't get heard."

(Respondent 5, Wales)

This was not starkly evident in the interview case studies included in this research. In relation to community energy projects contribution towards combating out migration, strengthening cultural and language characteristics of rural areas of Wales, there was a consensus that such projects could help. There was an active desire amongst many respondents that there was a “need to make living in rural areas a sustainable option if we are going to see a future for our culture” (Respondent 6, Wales). Having a sustainable income stream through community energy projects could benefit Welsh communities and cultural life as suggested below,

“Long-term income under local control should improve community prospects, reducing the desire for out-migration, so retaining Welsh-speakers. And some of the income may be used for cultural activities and to enhance both tangible and intangible cultural heritage.”

(Statement 24, Respondent 9, Wales)

All respondents agreed or strongly agreed with the above statement (50% each); a consensus that community energy could contribute towards tangible and intangible cultural aspects including the retention of Welsh-speakers in rural areas. However, there was also recognition that if “the development process has been divisive, medium-term damage to community cohesion may occur” (Respondent 9, Wales). This was somewhat reflected in Llanaelhaearn’s case, where there appeared to be a divisive (though unintended and undesired) element in terms of the project and in cultural terms. However it was believed that there was a great benefit to the community energy sector, and cultural benefit to boot,

“There is potential to bring a huge amount of economic benefit right into the heart of communities. This can be used make our communities more resilient and create sustainable work benefiting our culture and language.”

(Statement 22, Respondent 6, Wales)

92.9% of second round respondents in Wales agreed with the statement above, showing that there was a consensus and recognition of the potential that community energy projects held in contributing towards cultural resilience. However, there was also a side-effect to achieving cultural resilience,

“Gentrification of a community though large injections of funding does not always go hand in hand with maintaining and improving the cultural makeup of the community.

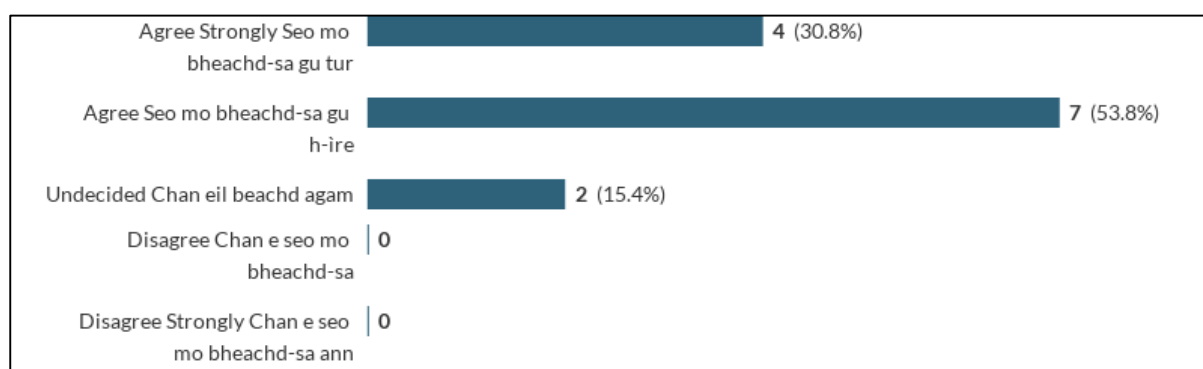
It could be detrimental if not wisely planned for. Create an affluent community and house prices increase thus closing out some people from being able to afford to live in the community.”

(Respondent 16, Wales)

In Scotland also there was a consensus that to enable communities to retain and strengthen their cultural characteristics, a sustainable funding stream was needed,

“...without funds to sustain local communities, many rural areas will continue to depopulate and that is certain to have negative effects on all cultural aspects.”

(Statement 19, Respondent 8, Scotland)



**Table 9.3 Scottish Response to Statement 19, Respondent 8, Scotland**

The majority of respondents agreed with the above statement, which was also a concern that was vocalised at grassroots level as seen in Chapter 8. It was also supposed, as seen in another response below, that a community was best placed to develop an energy project in the most sympathetic way. They could consider the actual needs and impact of developments in their community – more so than private developments,

“Revenue generating community energy projects will have a mainly positive effect on the culture and heritage of an area as the community will have control over its own development strategy, which is more likely to consider the cultural impact of a project than an externally imposed project developed by people who are less likely to speak the language or understand the local culture.”

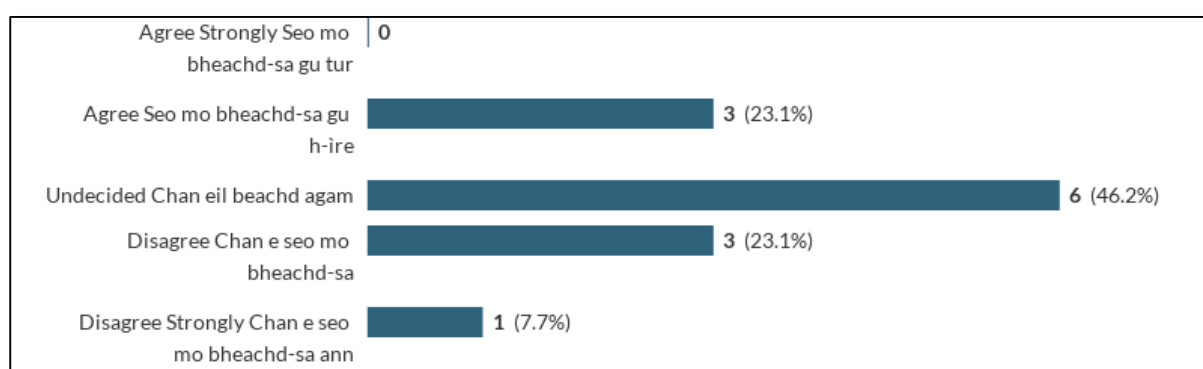
(Respondent 12, Scotland)

In regards to the Gaelic language, many respondents failed to decide on their opinion to statement 20 below. This could possibly be because respondents were not on the whole resident in areas where Gaelic is a community language, spoken on a daily basis. The immediate threat to language and desire to protect the language was not articulated in such a clear way through the questionnaire as it had been through the interviews conducted at grassroots level.

*“Tha ceangal ann eadar gnothaichean eaconamach, soisealtach agus canain, gus cothroman cosnadh ura a thoirt dha oigridh bhon sgìre aig a bheil Gaidhlig. Ach, dh' fhaodadh seo a bhith toirt buaidh air a' Ghaidhlig le luchd-obrach aig nach eil a' chanain a' tighinn a-steach dhan sgìre agus a' lagachadh cleachdadh na Gaidhlig.”*

“There is a connection between economic, social and linguistic matters, which gives new employment opportunities to the Gaelic-speaking young people in an area. But, this can have an impact on Gaelic itself, as a result of workers, who don't speak the language, coming into the area and weakening the use of Gaelic.”

(Statement 20, Respondent 7, Scotland)



**Table 9.4 Scottish Responses to Statement 20, Respondent 7, Scotland**

As seen in table 9.4 above, there was a lack of a coherent stance one way or another to statement 20. There were further responses to the statement, with the respondent below agreeing at most,

“Research has shown that economically strong areas retain minority languages better than economically weak areas. Ostensibly down to the fact that poverty and use of the language are equated and the language is dropped to try and improve job prospects.

Where the area is economically stronger the language is seen as a positive thing and therefore used more.”

(Respondent 12, Scotland)

However, others were not as convinced as to the importance of language resilience as shown below,

“If Gaelic needs protection to the extent of excluding 'outsiders', it does not deserve to survive. Welcome in and show the value of the culture and incomers will want to be part of it.”

(Respondent 8, Scotland)

The response above is quite emotive and unsympathetic to the difficulty of retaining a language and the difficulties in language learning and assimilation, as described in Chapter 8. This might reflect the more problematic national attitude towards the Gaelic language in Scotland, and how it is seen to be a peripheral issue. Some respondents (many based in the ‘central belt’<sup>52</sup> of Scotland, seemed to be detached from the issue. This is in stark contrast to the urgency felt at grassroots level to address the issue of language retention and sustainability. This supports the supposition that communities *themselves* are the best placed in recognising and giving worth to the most important aspects that need support within their communities. Scottish Gaelic language preservation was highlighted as being of great importance to those interviewed within the community. The mixed response to this issue in Scotland possibly reflects the lack of previous research into how community energy could benefit minoritised languages like Welsh and Scottish Gaelic. It seemed to have not been a consideration for those working at policy and facilitation level in the Scottish example. This would be an interesting route for further research, particularly for language development bodies and others working with indigenous rights issues.

## 9.4 AWARENESS

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<sup>52</sup> Most densely populated area of Scotland, stretching between Glasgow and Edinburgh.

“Active promotion of the benefits of such schemes to communities is required”

(Statement 14, Respondent 3, Scotland)

69.2% of the respondents in the second round of the questionnaire in Scotland agreed or agreed strongly with the above quote. This response correlates with what communities required at grassroots level – the desire for more awareness of the benefits of community ownership of renewable schemes and the advancement of similar projects amongst other communities. There seemed to be a consensus amongst respondents to the questionnaire and interviewees in earlier chapters that there was a need for more awareness and a concerted effort to raise the public profile of the community energy sector,

*"[Mae yna] ymwybyddiaeth ymysg tirfeddiannwyr/ffermwyr am gyfleoedd datblygu cynlluniau preifat, ond dim digon o ymwybyddiaeth ymysg llawer o gymunedau am y cyfleoedd a'r budd [o ddatblygu cynlluniau]."*

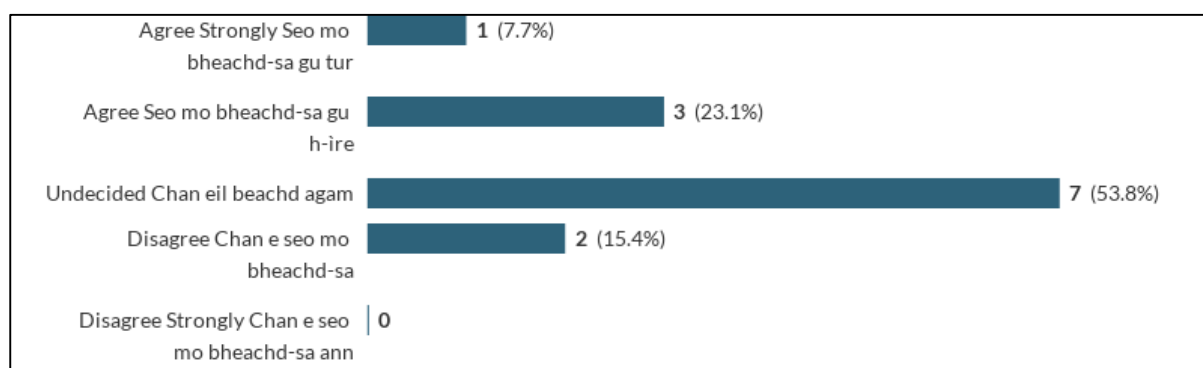
"[There is] awareness amongst landowners/farmers about the possibilities of developing private schemes, but not enough awareness amongst many communities about the chances and the benefits [of developing schemes]."

(Respondent 4, Wales)

Awareness in Scotland seemed to vary in geographic terms according to statement 16 below, with more awareness being attributed to the northern parts of the country,

"Awareness is particularly high in the Western Isles and Orkney for example, but lower in Sutherland and the Scottish Borders, where fewer projects have happened to date."

(Statement 16, Respondent 15, Scotland)



**Table 9.5 Scottish Responses to Statement 16, Respondent 15, Scotland**

Responses varied to this statement as illustrated in Table 9.5 above, with many unsure to the actual reality of the proposed statement. Some responses suggested that rural areas of the north of Scotland were in more immediate need to address economic pressures that were facing them. The needs of communities in the central belt of Scotland would be different, and possibly less urgent. This reflects somewhat on communities in Wales, who described that rural and island communities of Scotland were ‘different’ to theirs. The fact that they were so isolated in geographic terms suggested that they were much more willing to pursue the establishment of a community turbine and realise the economic benefit of establishing such a scheme with community ownership. This viewpoint from interviewees in Wales is reflected in the extract below from the Scottish questionnaire,

“Awareness is probably the same, however, the Western Isles is in greater need of investment in basic infrastructure and economic development which drives communities to deliver renewables projects.”

(Respondent 12, Scotland)

In regards to awareness of the capacity and potential outcomes of community energy projects in Scotland, 92.3% of the questionnaire respondents agreed with Statement 17 below, that there were indeed disparities between communities, but that there was gradual diffusion of projects, as more awareness was increasing,

"Awareness appears to vary between communities but I believe it is increasing with more communities looking at their renewable energy options. This is perhaps as a result of them seeing the benefits that are arising from other community projects."

(Statement 17, Respondent 9, Scotland)

This perceived growth of awareness in Scotland about the potential of community energy might be a reflection of the increasing network of community energy projects in network, facilitated by groups such as Community Energy Scotland and Local Energy Scotland. In Wales there was a call that there should be more active promotion of the benefits of ownership of renewable energy projects,

“I believe the feeling of ownership would bring the community together and be more accepting of renewable energy. The income from such a project would benefit rural communities further as it can be invested in local projects such as recreational, community halls and events. I feel these benefits need to be promoted further.”

(Respondent 15, Wales)

One respondent suggested that there should be more presence of the possibilities of community energy in annual cultural and agricultural shows such as the Royal Welsh show and the Eisteddfod in Wales, along with organising study trips to look at successful projects in Scotland. One respondent also believed that there was a role for Welsh media to play in raising more awareness to the sector. A staggering 85.7% of respondents agreed with the suggestion below that a lack of awareness of community energy posed a barrier for the niche sectors' development in Wales,

"The lack of awareness which is mainly due to lack [of] information and knowledge poses two barriers; 1. people/community oppose to certain technologies - such as wind turbines - there is a lot of 'nimbyism'<sup>53</sup> and unfortunately they influence a lot of planning decisions; 2. the lack of information and knowledge also hinder people/ community from obtaining renewable energy freely harnessed from their surroundings. It is a lost opportunity at all scales."

(Statement 16, Respondent 7, Wales)

There was also a suggestion that the least well off areas of Wales, paradoxically the areas in most need of regeneration and the benefits of a new income stream, were the least likely to know about the potential of such projects and pursue them, as posed by the statement below,

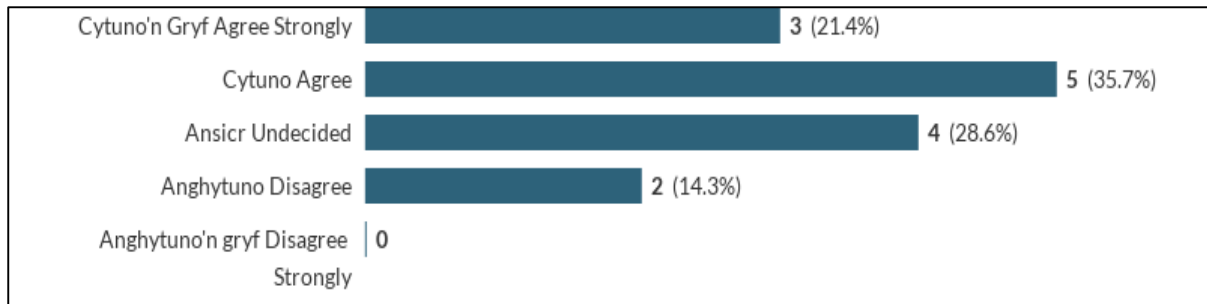
“Those in more affluent areas would be more inclined to research around the topic and look at development. Whereas less well off rural areas would have no idea that they are able to develop, and even the potential benefits. Overall I think there is a lack of awareness in rural areas, unless they are particularly driven or know of other schemes nearby.”

(Statement 17, Respondent 15, Wales)

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<sup>53</sup> Not in my Back Yard





**Table 9.6 Welsh Response to Statement 17, Respondent 15, Wales**

The response to this statement was more varied as seen in Table 9.6 above. It is a statement that reflects upon past research within the energy justice paradigm – that suggests that less wealthy areas stand to lose out in the development of community energy projects, in comparison to wealthier areas, particularly if finance for development is resourced within the community (Johnson and Hall, 2014). Respondent 16 concludes that statement 17 above is “Simplistic. You have phenomenal skills and resources in most rural areas [but] the glue to bring them together is sometimes missing”. Nevertheless, through the responses in the Welsh questionnaire, there were suggestions that a number of cultural and historical factors had led to a lack of self-confidence in a communities ability to pursue community renewable schemes as suggested in statement 9 below,

“Cultural issues, such as lack of confidence and belief in the abilities of local people to achieve together [impedes the development of the community energy sector in Wales]. Combined with a history of being told Wales isn't good enough, big enough, developed enough, entrepreneurial enough, rich enough to take care of its own needs.”

(Statement 9, Respondent 3, Wales)

Although 71.5% of respondents agreed or agreed strongly with statement 9 above, 21.4% of respondents were undecided and 7.1% disagreed. Some believed that historical context was not relevant and that “many communities across the UK have the same cards dealt to them it’s just they work better together...we have to make things happen...it’s in our hands” (Respondent 16, Wales).

## 9.5 DIFFICULTIES

*“Mae'r gofynion ar grwpiau cymunedol yn gallu bod yn gymharol drwm ac o ganlyniad gall grwpiau cymunedol ddigalonni cyn cychwyn ar unrhyw waith neu yn fuan yn y broses o ganlyniad i'r gwaith a'r gofynion sydd ynghlwm a'r broses.”*

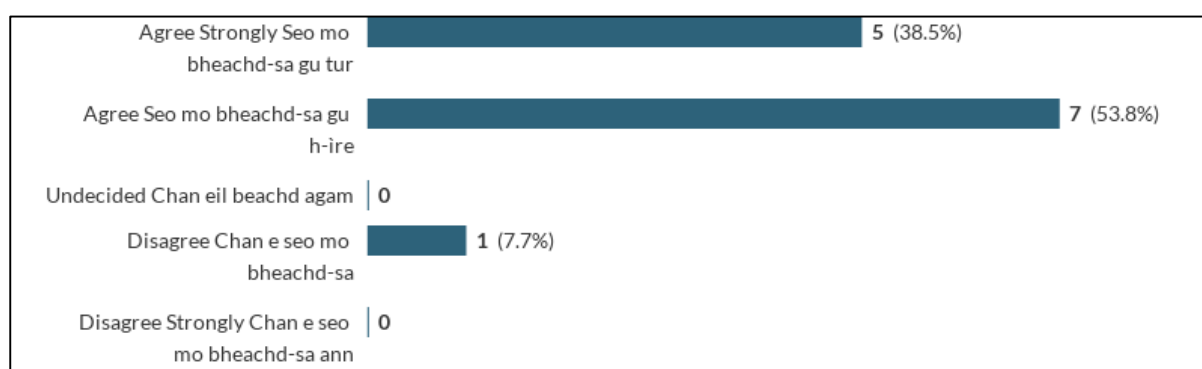
“The requests on community members can be comparatively demanding and as a result community groups can become disheartened before even starting on any work or early in the process as a result of the work and demands that are entwined with the process.”

(Respondent 10, Wales)

The level of difficulty and obstacles faced by communities in the process of establishing community energy projects was recognised as being cumbersome, as reflected in the above excerpt from the first round of the Welsh questionnaire. This was not however a Welsh specific conundrum, as shown in Statement 4 from the Scottish questionnaire below – a statement agreed with by the majority of respondents as seen in the following Table 9.7,

"It is difficult for most communities to find the time and capacity to spend working through all the necessary steps, gaining local support, finding a suitable project and obtaining the necessary agreements with landowners before even starting construction."

(Statement 4, Respondent 8, Scotland)



**Table 9.7 Scottish Response to Statement 4, Respondent 8, Scotland**

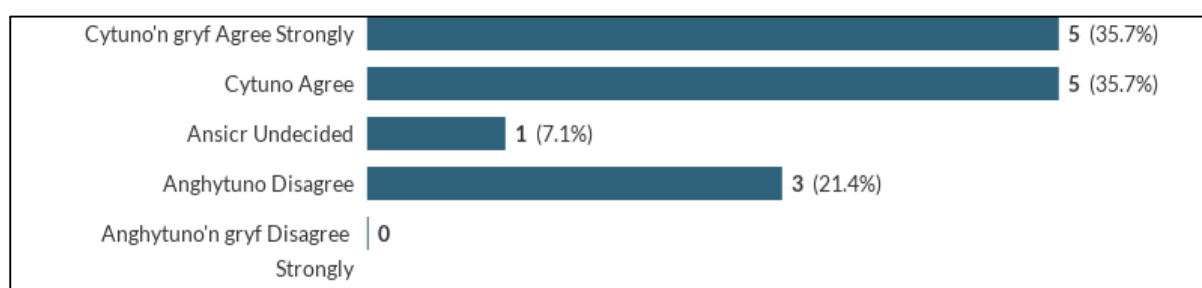
The difficulties facing the community energy sector acknowledged by the respondents participating in the questionnaire reflected many of the issues that were raised amongst community members themselves articulated in the interviews. Such communities were seen by some of the experts panel as “very much pioneers...[who] will make things easier for others in future by influencing policy.” (Respondent 6, Wales). This pioneering effect of communities was reflected in the cases of Tiree and Siabost – who were considered as leaders and were able

offer practical help for other communities by sharing experiences and information – making things essentially easier for other communities to establish their wind turbines. Some other difficulties highlighted by the expert panel included a common concern that FIT reductions would adversely impact community groups,

*"[Mae] Toriadau i lefelau FITs yn gwneud cynlluniau yn llai economaidd, ac felly yn anoddach codi'r cyllid cyfalaf."*

"Cuts in FITs levels make projects less economical and therefore harder to raise the capital costs"

(Statement 7, Respondent 4, Wales)



**Table 9.8 Welsh Response to Statement 7, Respondent 4, Wales**

Cuts in FITs were highlighted as a particular difficulty for community energy development, as expressed in Statement 7 and agreed with to varying degrees amongst the Welsh panel of experts as seen in table 9.8 above. However, this questionnaire was conducted before the present Conservative Government announced intentions to cut FITs drastically. Such cuts were not foreseen at the time of questioning. Nevertheless, reductions in FITs were already happening at time of questioning, which in itself appeared to have caused some insecurity for the sector. This lead to more generalizable opinions as to the difficulties posed by inadequate governance in the field,

"[There is] a lack of consistent support, both in terms of expertise and money. [There are] inconsistent messages from government - supportive in words but often not so much in actions (e.g. not taking on problems with the DNOs, difficult planning system, etc)."

(Statement 10, Respondent 6, Wales)

78.6% of respondents agreed with Statement 10 above, although it was not clear which government Respondent 6 had in mind (both national and sub-national it is assumed since planning and regulation of DNOs are mentioned). As was suggested by another member of the panel in response to the above statement, “this may be true of UK government, Welsh Government is supporting the sector through Ynni’r Fro programme” (Respondent 15, Wales). However it was suggested by another respondent that the Ynni’r Fro programme did not address more technical barriers,

“Technical and professional expertise is also a barrier for establishing community-owned RE<sup>54</sup>. If it is not within the local community, it is costly to buy-in. There is not enough support to help community groups overcome this issue.”

(Respondent 3, Wales)

Concoctions of difficulties were expressed in all of the respondent’s answers in the questionnaire in Wales. These complexities were also expressed in the Scottish questionnaire, some difficulties that reflect on interviewees experience at grassroots level (grid connection, planning) and others that had not been (relationship with Ministry of Defence) – although might very well be a difficulty in various areas of Scotland, as Statement 6 describes below,

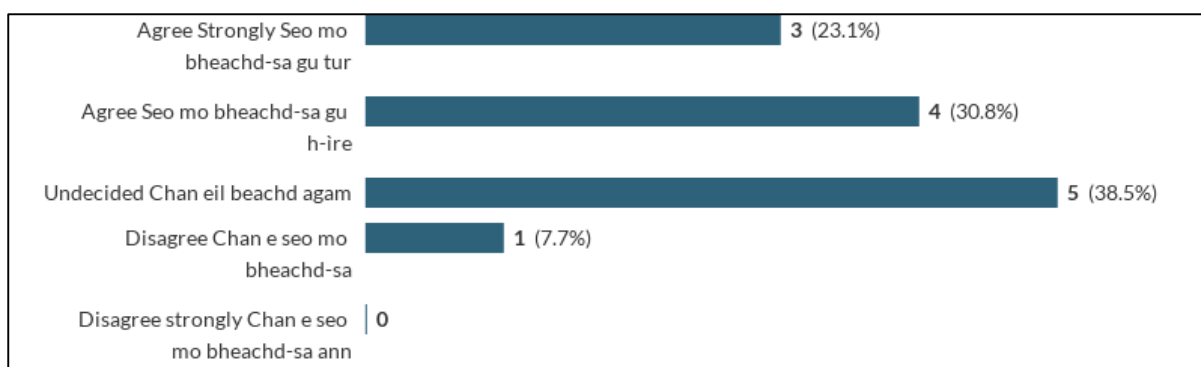
"The complexity of balancing the planning, securing a grid connection and dealing with statutory consultees, particularly MoD<sup>55</sup> [is a difficulty]. Additionally, the attempts by external lobby groups to impose environmental designations on rural land that prevent development of any sort. Rural economies need more than tourism to survive."

(Statement 6, Respondent 12, Scotland)

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<sup>54</sup> Renewable Energy

<sup>55</sup> Ministry of Defence



**Table 9.9 Scottish Response to Statement 6, Respondent 12, Scotland**

There was a mixed response to the above statement, particularly in regard to the role of designated areas and the need for their protection, although it was conceded that rural areas were also in need of development and that they cannot rely on tourism alone – an opinion shared by many interviewees.

## **9.6 SUPPORT AT SUB-STATE LEVEL**

### **9.6.1 Scotland**

“Within budget constraints there is good support in terms of the CARES scheme.”

(Respondent 4, Scotland)

Overall, the respondents in the Scottish questionnaire acknowledged that there was an admirable level of support for community energy groups in Scotland. Between the Scottish Government’s Community and Renewable Energy Scheme (CARES), to the expertise from Local Energy Scotland (delivering the CARES scheme) and Community Energy Scotland, there appeared to be a consensus that the level of support for community energy was adequate. The Scottish Governments target was also commended,

“The SG (Scottish Government) provides a wide range of advice and support, free at the point of use, through our Community and Renewable Energy Scheme (CARES) to support community wishes to be involved in renewable projects, as owners, in JV (Joint Ventures) or get the best deal from commercial developments happening on their

doorstep. SG has a target of 500MW by 2020 to be community and locally owned which is unique in the UK”

(Respondent 2, Scotland)

The commendation of the CARES scheme (along with the Scottish Government in general) was echoed at grassroots level through interviews conducted, although there was no mention of the desire for joint ventures or ways to ‘get the best deal from commercial developments happening on their doorsteps’ as Respondent 2 above mentions. It would appear that from the perspective of communities, these options were not as desirable as full ownership of a community energy scheme, as discussed in Chapter 7. Community Energy Scotland, the charity that had ran CARES from 2011-2013 were also similarly highly commended in their work with communities amongst the Scottish panel of experts, and were attributed with the success of many of the established groups,

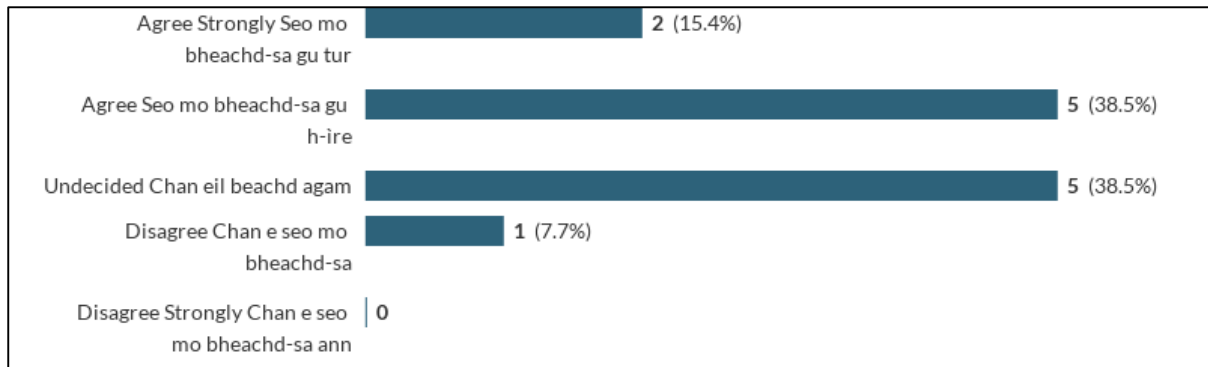
“Community Energy Scotland has led the way in support of communities and many of the communities now generating power would attest that they would never have achieved their ambitions without the focused support of CES.”

(Respondent 10, Scotland)

Apart from Community Energy Scotland, there was also a nod towards progressive reforms being made at Scottish government level that were allowing communities to become owners of land. The Land Reform Act in Scotland was something, in the opinion of the panellist below, was playing an important role in making land and resources available for communities to develop their own renewable energy schemes, with a slim majority of second round respondents in agreement as seen in Table below,

"The Land Reform Act that increased and expanded the number of communities able to own their own land/estates...This has significantly increased the opportunities for communities to purchase the land and water resources essential to delivering such projects."

(Statement 8, Respondent 12, Scotland)



**Table 9.10 Scottish Response to Statement 8, Respondent 12, Scotland**

Expanding on the point, panellist 12 goes on to say “without community ownership of the land many of the community owned projects could not have progressed. In the cases where the land is not community owned the projects have taken longer, or not happened at all.” (Respondent 12, Scotland).

However, despite praising a number of initiatives taken by the Scottish Government, there was also recognition that a more radical gear shift was needed in how the energy sector operates in general. Reflecting some issues raised amongst the community energy group interviews in this thesis and past research literature (Strachan et al, 2015; Johnson and Hall, 2014; Eames and Hunt, 2013), energy justice was also a theme that was raised in the Scottish questionnaire – and the need to ‘rebalance’ the system,

“CARES and its various streams arguably provide an exemplary level of support, at least in a UK context. However this support is largely required to re-balance a system that is far from joined up and was never designed with community energy in mind, let alone prioritised.”

(Respondent 15, Scotland)

This is reiterated in the suggestion below – that the Scottish Government has a role to play in applying pressure, particularly on DNOs, to assist community energy groups,

“Scottish Government has a role to play in assisting those groups who cannot proceed due to grid constraints, by bringing pressure on network operators.”

(Respondent 10, Scotland)

This was most certainly the desire at grassroots level, where it was obvious that community renewables schemes’ relationships with the DNOs was particularly exasperating. Indeed, despite a recognition of the progress of community energy projects in Scotland, and the support given by CARES and CES, as illustrated in Statement 10 below, establishing such projects was still a mammoth task,

"While Scottish Government support through CARES (Community and Renewable Energy Scheme) and membership organisations such as Community Energy Scotland should make the process easier, it remains the case that establishing a community energy project is rarely an easy process."

(Statement 10, Respondent 15, Scotland)

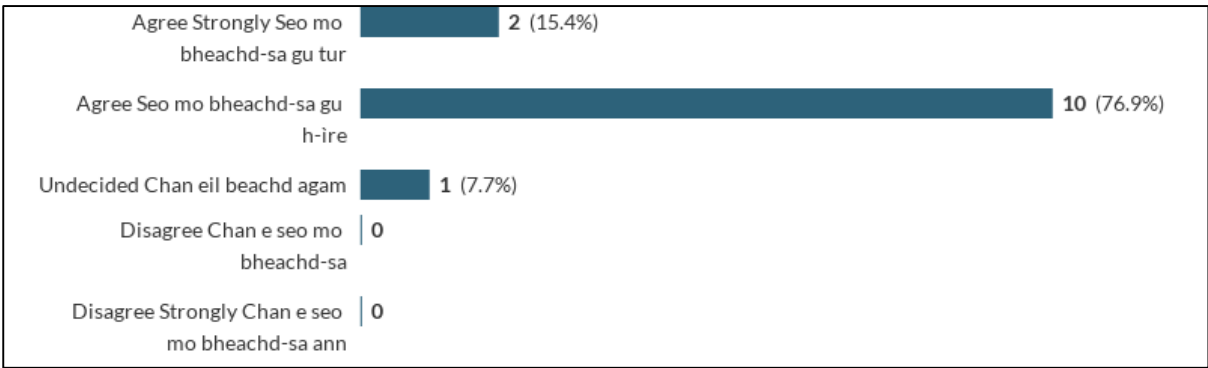


Table 9.11 Scottish Response to Statement 10, Respondent 15, Scotland

9.6.2 Wales

“[Support is] insufficient as evidenced by the number and size of community energy projects in Wales.”

(Respondent 1, Wales)

In comparison, questionnaire results in Wales showed a consistent pattern to the opposite, with respondents at most criticising the lack of commitment in Wales towards the development of the community energy sector. Policy in Scotland (and in England according to one participant)



was seen to be stronger and more coherent, whereas the message in Wales remained quite vague,

“The lack of policies at a Welsh Government level does not help. There appears to be will to support but without the creation of policy support, planning guidelines, set targets for community-ownership, and legal agreements on community benefit from large scale developments it will continue to be difficult for communities to take ownership of RE developments in Wales.”

(Respondent 3, Wales)

Suggestions amongst respondents in the questionnaire included the need for a toolkit, similar to the one produced by Community Energy Scotland, that mapped the way for community energy projects in developing their schemes. Developing a network of local and national community energy groups in Wales was also suggested as a means forward for the sector. A lack of a networking group pushing community energy forwards was deemed a particular problem,

“There are programmes supporting individual projects (e.g. Ynni'r Fro) and general advice from national or government sources (e.g. Plan local). What is lacking is the middle layer which brings projects in an area together to push each other forward and support each other.”

(Respondent 6, Wales)

There were calls for a more streamlined policy framework, as although a small number of respondents felt there was sufficient support, “this support is too short term, grant steered and a bit disjointed. [There’s] no real 'hub' for community energy in Wales. It’s all in siloes” (Respondent 15, Wales). There was also a call for an umbrella body in Wales to represent and work for communities at a national level. Respondent 3 lists some of the most important factors to be considered in able to support the community energy sector in Wales,

“Greater policy support from Cardiff to at least match Westminster but ideally match Scotland...Support for a single over-arching umbrella body in Wales such as

Community Energy Wales to represent area based umbrella organisations that collate community needs and represent communities at a national level. Greater grassroots development work to encourage ground-up working as well as top-down.”

(Respondent 3, Wales)

Respondent 3 goes on to say,

“The WG<sup>56</sup> support for Ynni Fro should be commended but the scheme has been constrained by a range of barriers that the WG should have addressed with more vigour sooner in the development of the scheme. Lessons need to be learnt to ensure another 7 years of EU funding doesn't disappear without the achievement of significant and meaningful outcomes.”

(Respondent 3, Wales)

There was consensus that there were gaps in support, reflecting the problems highlighted by the communities themselves in the interviews. There was also a supposition that Scotland was being more supportive of the sector, and that Wales should emulate some of their policies,

"...it would be good to have a programme such as Scotland's CARES (Community and Renewable Energy Scheme) which provides loans with a [write] off facility if projects do not go ahead. It also brings community and 'local' energy together, promoting links between communities and private landowner schemes. There is a lot more tangible ministerial support in Scotland."

(Respondent 6, Wales)

However, in response to the above opinion, others were of the belief that what works for Scotland might not necessarily work in Wales. There were however, clear plans that there would be developments in future to support the sector more adequately,

“The next phase of Welsh Government support after Ynni'r Fro will retain the best aspects of the existing scheme, but we will look at what Scotland are doing as well, for example CARES, to see if some aspects of that programme will work. We are also talking to Northern Ireland about their plans going forward. What worked for Scotland

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<sup>56</sup> Welsh Government

might not be what we need and I understand that the take up for the Scottish programme has not been great.”

(Respondent 15, Wales)

Bringing Local Authorities into line with national policy was also a desirable goal as there was a “lack of understanding of the economic/social benefits amongst some public sector bodies” (Respondent 4, Wales). In fact a cross-Wales policy was suggested, as a way of streamlining all developments,

“There is need for policy support, planning guidelines, set targets for community-ownership, and legal agreements on community benefit from large scale developments at a Welsh level. Welsh government intervention to enable timely, fairly costed grid connection would be welcomed as would the development of a Community Energy Strategy to compliment that of the UK government. All the above could be tied to a central body such as Community Energy Wales to ensure a focussed response to the needs of community groups interested in making RE developments.”

(Respondent 3, Wales)

### **9.6.3 More legislative powers?**

"There are areas already within the Scottish Parliament's control, such as planning, where the current government has failed to take a clear lead in favour of community energy. In the context of the referendum, calls for additional legislative powers are inevitably politicised; however unless firm commitments are made to the necessary changes there is no guarantee that additional powers will in themselves bring about an improvement."

(Respondent 15, Scotland)

During the course of the Delphi questionnaire process, the Scottish independence referendum had come and gone, which had naturally thrown up questions to do with further legislative powers amongst all participants of this study. Although there were many who believed that

independence would be a framework allowing the Scottish Government to create better conditions for the community energy sector others believed that,

"...the focus should not be on who has the legislative power but whether that power is or would be used to make changes that support community energy and the renewables transition at large."

(Statement 29, Respondent 14, Scotland).

69.3% of the respondents agreed with Statement 29 above. Despite this, it seemed that the majority of respondents did believe that there was need for further legislative powers if a different policy strategy were to be pursued in Scotland, with 77% of respondents agreeing with Statement 30 below,

"Energy policy is not a devolved power, along with the regulation of energy markets, incentives and infrastructure. Nor is policy on State Aid, or taxation. Therefore if the Scottish Parliament wanted to pursue a radically different policy on community energy to the current UK government, it seems that additional legislative powers would be necessary."

(Statement 30, Respondent 15, Scotland)

In Wales there seemed to be a mixed response to whether or not more legislative powers were necessary, and that "more powers would muddy the water. Let's get better with what we have before asking for more." (Respondent 16, Wales). There were adequate powers in place in Wales, particularly in the case of community energy,

"Energy is devolved in Wales and I think we have heard enough of Welsh government mourn that they could do a better job if they had all the powers but I don't think that is the case especially for community renewables. Aspects that help determine a RE (Renewable Energy) project are devolved such as planning and environment. It would be a good start if WG (Welsh Government) sort this before requesting for more powers. This in itself will address many issues; besides community renewable will fall within

the threshold that WG has powers (below 50MW). It has been more than a year since the Low Carbon Transition kicked off, have not seen a great deal of progress."

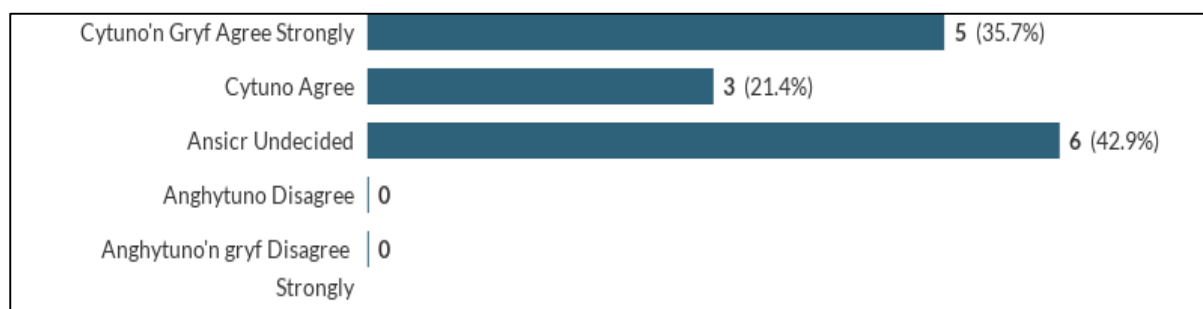
(Statement 34, Respondent 7, Wales)

There was a mixed response to Statement 34, with one panellist commenting that "WG determines very few projects, most are dealt with by local authorities which have a terrible track record of approving projects, whether commercial or community based." (Respondent 1, Wales). This response reflects what communities interviewed in Wales portrayed also – that local authorities were not aligned with Welsh Government's apparent support of community renewables, with Llanaelhaearn in particular having been refused planning in the autumn of 2014. Other panellists participating in the questionnaire reflecting on Statement 34 above believed that the most important aspect of legislative powers for energy matters in Wales was dependent on who administers policies; "What this statement highlights for me is that the powers are only useful if the elected government of the time choose to use them. Labour have shown they do not know how to use them..." (Respondent 3, Wales). Although there was no direct mention of Welsh Labour amongst interviewees in both case sites in Wales – there was a similarity in their criticisms of the Labour Welsh Government's vision for the community energy sector.

The issue of legislative powers, and due in possible part to the timing of the questionnaire (during the run up to the Scottish independence referendum in 2014), the issue of independence in Wales was also raised as shown in Statement 32 below,

"We need to have planning control over energy developments at all levels. I think [Welsh] independence would only be a benefit in this regard"

(Statement 32, Respondent 6, Wales)

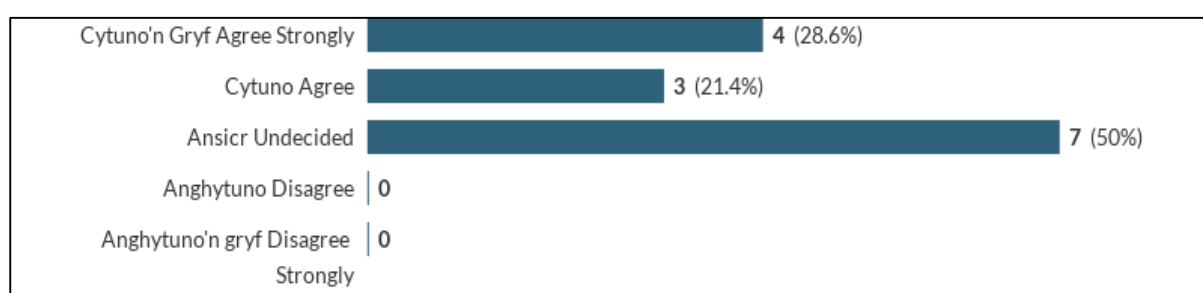


**Table 9.12 Welsh Response to Statement 32, Respondent 6, Wales**

Interestingly, nobody disagreed with Statement 32 as seen in Table 9.12 above, suggesting that independence as a route for further legislative power in Wales was not considered to be objectionable. Some of the panellists explained their response further; “I believe Wales should have control over its resources and the Welsh Government is best placed to align Wales’ energy aspirations with the needs of our communities and our natural environment. The recent Silk Report recognised the need for further devolution of consenting powers, but unfortunately it recommended to limit Wales to projects up to 350MW...It is the Welsh Government’s intention to continue to pursue, and make a case for, the full devolution of energy consenting power for Wales, with nuclear being the sole exclusion” (Respondent 12). This is further reflected in Statement 41 below,

"There is need for policy support, planning guidelines, set targets for community-ownership, and legal agreements on community benefit from large scale developments at a Welsh level. Welsh government intervention to enable timely, fairly costed grid connection would be welcomed as would the development of a Community Energy Strategy to compliment that of the UK government. All the above could be tied to a central body such as Community Energy Wales to ensure a focussed response to the needs of community groups interested in making RE (Renewable Energy) developments."

(Statement 41, Respondent 3, Wales)



**Table 9.13 Welsh Response to Statement 41, Respondent 3, Wales**

As can be seen in Table 9.13 above, there was no consensus showing agreement on the whole of Statement 41, with one respondent saying “Not sure that CEW is necessarily the right body” (Respondent 1, Wales). Nevertheless, when looking at responses and comments made on overall suggestions for sub-state policy development in Wales, it would seem that there is

concordance between panellists of the questionnaire and interviewees that there is a need for a more strategic framework in Wales to enable the community renewables sector to flourish

## **9.7 UK GOVERNMENT SUPPORT**

“National Government (UK) has supposedly set the framework for stability of funding, but then spent the last few years undermining confidence in the system by changing the rules and playing off energy companies, rising energy costs and the green agenda to remove public support for such measures.”

(Respondent 8, Scotland)

There were a number of criticisms of Westminster’s approach to supporting the community energy sector as illustrated in the excerpt above. In fact, Westminster were seen in Scotland as being more of a hindrance, and openly supportive of fossil fuel and nuclear sectors rather than committing adequate support for the community renewables sector,

“Westminster provides more of a hindrance with its anti-wind rhetoric (e.g. wanting to bring in a moratorium for onshore wind) and clear support for fossil fuels (e.g. unconventional gas) and nuclear industries (nuclear subsidies through contracts for difference) whilst providing uncertainties to the renewables industries.”

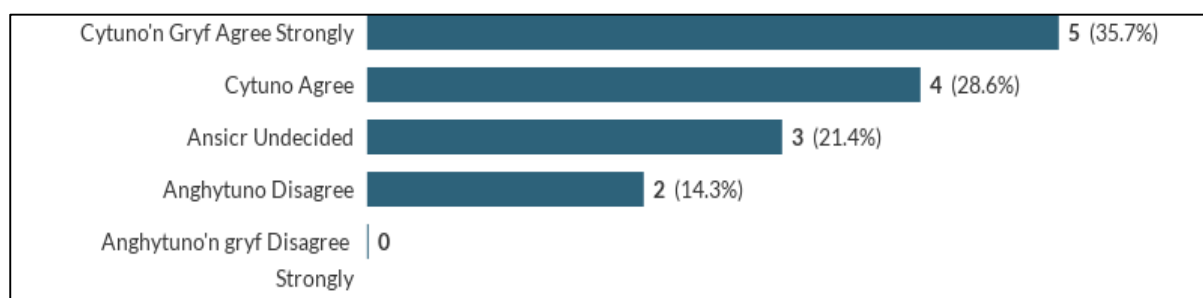
(Respondent 14, Scotland)

Feelings were similar amongst the Welsh panellists of the questionnaire. As Statement 36 below illustrates, it was believed that if Westminster were to ‘put their heart into it’, more could be done for the community energy sector. Statement 36 questions the intentions of the coalition government (that were in power in Westminster at time of questioning) but also is applicable to the current government who seem to be progressing with a number of retrogressive cuts to the community energy sector (Hopkins, 2015; Vaughan and MacAlistair, 2015). This reiterates the fears of interviewees at grassroots level, fears exacerbated further with more recent intentions to cut FIT levels,

"...it is obvious that if the government puts its heart into it, it can move a lot faster and efficient...there are some technologies such as unconventional gas, has progressed a lot

faster in this country, because the government helped pushed that by forming a new office within DECC (Department of Energy and Climate Change) to act as a coordinating unit between industry and public, incentives through tax subsidies and enhanced processes through planning etc. I don't think RE (Renewable Energy) has received the same kind of support on such short span, let alone community renewable."

(Statement 36, Respondent 7, Wales)



**Table 9.14 Welsh Response to Statement 36, Respondent 7, Wales**

From the response to Statement 36 seen in Table 9.14 above, it can be summarised that the majority of Welsh respondents were in concordance about the lack of support shown by Westminster towards the community energy sector. This was mostly down to who the administering government were, according to some – “You can have all the power but you must choose to use them” (Respondent 3).

## 9.8 OPERATING WITHIN A CORPORATE WORLD?

“It requires a huge amount of determination and resilience to develop community-owned assets in a system designed to facilitate corporate, capitalist developments”

(Statement 4, Respondent 3, Wales)

78.5% of respondents in the second round of questioning in Wales agreed with Statement 4 above, showing that there is a consensus amongst experts working in the community renewable field, that community energy projects are operating within an energy system that does not aim to accommodate them. This reflects recent research (referred to in this subtitle), ‘Promoting Community Renewable Energy in a Corporate Energy World’ by Strachan et al (2015) which



reiterates that the energy sector in the UK (and across Europe) has been, and will remain unless challenged, a platform for the development of incumbent, corporate and large-scale energy developments. This is an impression also evidenced at the grassroots community level – where interviewees felt that they were being side-lined in the renewable energy sector, particularly by DNOs, by a lack of sufficient policy and practical support from Westminster, and partly from sub-state governments and local authorities. They were indeed operating in a seemingly ‘corporate energy world’.

Another interpretation presented through the questionnaire, was that there had been a historical trend of resources and their economic value being essentially ‘stolen’ from rural areas for wealth generation outside these areas. This reflects the literature covering the idea of resource peripheries (Mason and Milbourne, 2014; Murphy and Smith, 2013), and how resources are taken from such areas with no immediate benefit to local communities. This is also an emerging topic in literature concerning indigenous rights issues and natural resources and renewable energy rights in rural Canada (Henderson, 2013). This ‘resource flight’ and the power struggle between peripheral and core regions was portrayed as a perpetuating historical trend, a trend that community energy could however challenge,

“One of the issues which has plagued Wales for centuries has been capital and resource flight, from rural community to urban, and from Wales to England and further afield. We need capital to remain within communities, as local money is more likely to be spent locally.”

(Statement 5, Respondent 1, Wales)

An overwhelming 92.9% of respondents agreed or agreed strongly with Statement 5 above. The practice of resource depletion and ‘flight’ in the case of rural Wales and Wales as a nation described in Statement 5 above was a similar symbolic description used amongst the community members interviewed in Wales. The tale of the granite mines of Llanaelhaearn and the nuclear plant and wind farms in Llanfechell were also retold as narratives of resource flight. Granite and energy (nuclear and renewable) were resources that were taken from these peripheries for the benefit of ‘outside’ developers. Whereas these communities had benefited to a degree (in terms of employment in the case of the granite quarry and nuclear plant), community energy posed a chance for this power relationship to change and for communities to benefit to a much higher degree,

*"Mae llawer iawn o adnoddau naturiol i'w gael yng Nghymru, y broblem ar hyn o'r bryd yw bod cwmnïau preifat yn dod mewn gan ddatblygu systemau ynni adnewyddol. Wrth wneud nid yw'r buddion arianol yn aros yn lleol, gyda cyfraniad bach os o gwbl yn aros yn lleol. Os buasai y cymunedau lleol berchen y systemau ynni adnewyddol yn lleol, byddai'r buddion economaidd yn cael effaith gadarnhaol anferth, yn enwedig mewn cymunedau gwledig Cymru"*

"There are many natural resources available in Wales, the current problem is that private companies come in and develop renewable energy systems. By doing so, the financial benefits are not retained locally, with little if any donation staying local. If local communities owned the renewable energy systems locally, the economic benefits would have a huge positive effect, especially in rural areas of Wales"

(Respondent 5, Wales)

Respondents in the questionnaire agreed that there were however, many obstacles in diffusing community renewable projects across Wales, partly due to the compounding historical reality that the energy sector has been, and continues to be monopolised by a small, but powerful minority,

"Grid connection is an enormous constraint that is exacerbated by the dominance of the Big Six energy companies and their business models that include generation, transmission, distribution and sales of energy. It is not in their interests to facilitate community scale renewables as it will affect their business interests in another part of their business."

(Statement 6, Respondent 3, Wales)

71.4% of respondents in Wales agreed with Statement 6 above that the Big Six monopolise all aspects of the energy market. It would not be in their interests to facilitate community energy, as it would threaten their business interests. Following up from this statement, it was suggested that,

"The DNO[s] sees small renewable energy as a problem but also as an opportunity to improve the grid on the cheap."

(Respondent 16, Wales)

This reflects what was raised in Chapter 6, where communities felt that their local district network operators (in the Scottish case sites) were using community energy projects to pay for grid developments. Tiree and Siabost were both obliged to buy STATCOMS to regulate energy flows through their connection to the grid, meaning that “a local community charity has paid a multi-million pound company that’s listed on the stock exchange, who couldn’t be bothered to pay three hundred thousand pounds for a piece of kit so that people who lived here could have a reliable electrical supply” (Walter, Siabost).

In Scotland, it was suggested and agreed to varying degrees as seen in the response in Table 9.15 below that,

"While there will always be a case for projects with high social or environmental benefits that are not captured by traditional economic valuation to be supported by grant funding, it also perpetuates a sense that community energy is a 'nice to have' rather than an integrated, fundamental part of our energy system."

(Statement 12, Respondent 15, Scotland)

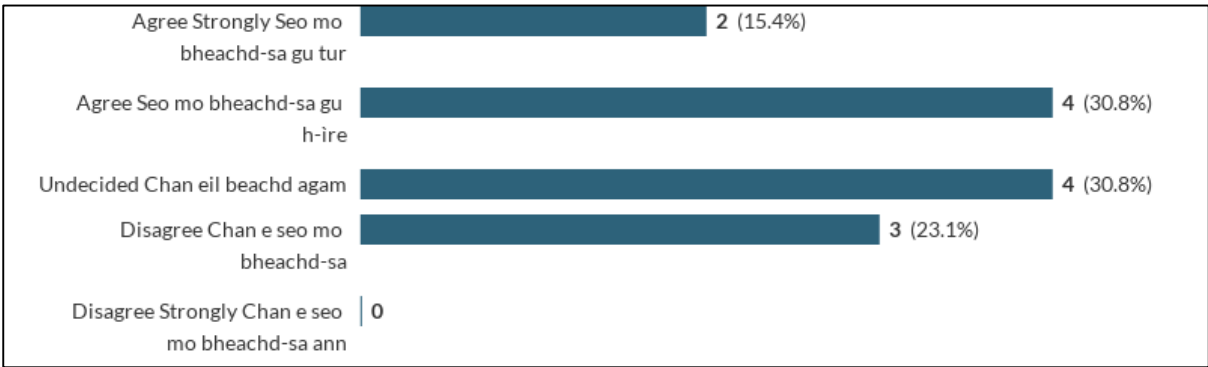


Table 9.15 Scottish Response to Statement 12, Respondent 15, Scotland

Following on from the above opinion, were further sentiments that DNOs were treating communities worse than private developed energy projects, again reflecting some of the communities feelings and concerns in Chapter 6,

“This is compounded by SHEPD's<sup>57</sup> treatment of community generators, which often seems to be worse [than] that [of] private developers. This is compounded by the more

<sup>57</sup> Scottish Hydro Electric Power Distribution plc (“SHEPD”) is the licensed electricity distribution business which operates networks in the northern Scotland part of the British Isles. SHEPD is a member of the Scottish and Southern Energy plc group of companies.

rural communities where the turbines are connected to the 'distribution' network, not the 'transmission' network.”

(Respondent 12, Scotland)

In regards to grant funding perpetuating the role of community energy as a ‘nice to have’ component of the energy sector rather than an equal player, the opinion below seems to infer that community energy projects were nevertheless becoming more ‘business like’. Although many groups in Scotland relied on CARES for pre-planning, capital costs for actual construction and operation of projects were being supplied through bank loans as was the case on Tiree and in Siabost,

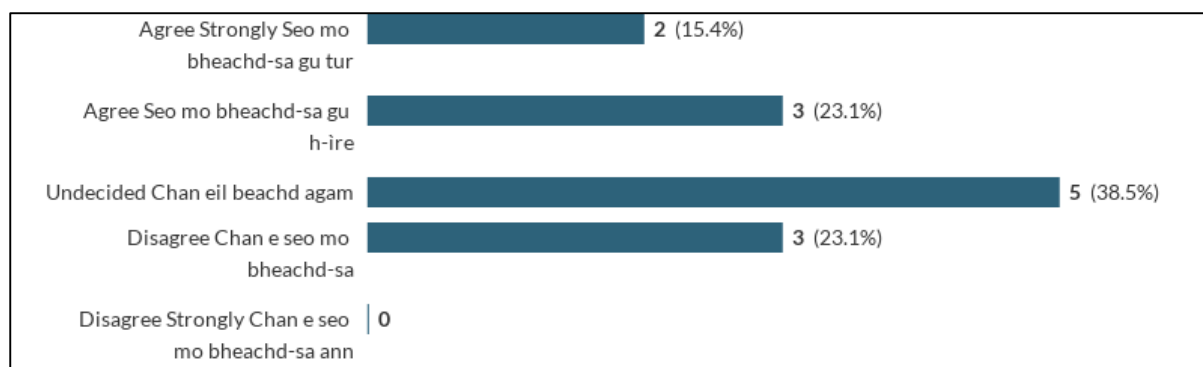
“Whilst CARES funding is available to communities, they are unable to access FIT payments if this has been used for the capital development of the project so, whilst the community will often take CARES funding for the pre-planning stage, the construction and operation of community energy schemes will usually require to be sustainable with equity from loans or community share offers.”

(Respondent 9, Scotland)

Whether or not this is the ideal circumstance for community energy to flourish is to be questioned. Keeping in mind the number of linked multiple benefits to the sector (which has not been evidenced to be achieved through private energy developments), then there are legitimate reasons as to why governments should support such schemes. Others believed that it would be better for communities to work more with private developments so that “then both can benefit. Even if a community leads the project, they will have to get the funds from somewhere, and that will usually be from the private sector” (Respondent 5, Scotland). This was not the view taken by interviewees at grassroots level, and it seemed that, in the case of the Welsh case studies in particular, alternative financing models (community share offers) meant that there could be a possibility that there is no necessity for communities to depend on private sector financing. It was furthermore suggested that there would be a number of ‘fundamental’ changes needed to ensure an ‘even playing field’,

“Unless the regulatory, planning, and financial systems are fundamentally changed to ensure a more even playing field, then I am personally doubtful that any level of targeted financial support will be able to release the full potential of the community sector.”

(Statement 33, Respondent 15, Scotland)

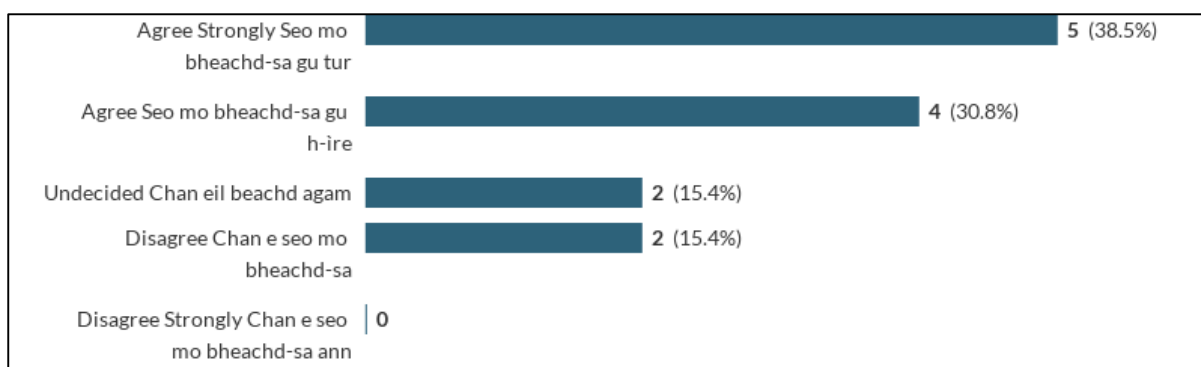


**Table 9.16 Scottish Response to Statement 33, Respondent 15, Scotland**

Although responses to Statement 33 are inconclusive as seen in Table 9.15, similar opinions were expressed amongst many who worked in the field, who thought that “community projects should be given priority by policy makers as they deliver both economic and social benefit to remote rural communities that are often the most disadvantaged.” (Respondent 12, Scotland). It is also suggested in Statement 22 below, with the panel at most in agreement as seen in the Table 9.16, that,

"More needs to be done in addressing the monopolistic attitudes of the major power companies and their access to infrastructure. It was built (originally) by the nation, maintained and upgraded (until recently) by the nation and so should be accessible to communities of any size and aspiration."

(Statement 22, Respondent 1, Scotland)



**Table 9.17 Scottish Response to Statement 22, Respondent 1, Scotland**

Having smaller, local grids was suggested by experts as contributing towards a fundamental change in the way the energy generating sector operated. However, whether or not those incumbents at the helm would invest in such infrastructural and fundamental changes to the way energy is made and distributed is a further subject that needs addressing.

## 9.9 CONCLUSIONS

“It is hard to think of a community that wouldn't have an interest in [community energy] ... and making the most of this opportunity, therefore it is very important that communities are aware of what renewable energy can offer them.”

(Respondent 15, Scotland)

Conducting Delphi method questionnaires in Scotland and Wales has allowed for a number of interesting comparisons to be drawn in relation to how policy makers, planning officers, facilitators, campaigners and experts working in the field see the development and furtherance of the community energy sector in both countries. The significance of ownership was recognised in order to keep benefits local. This was deemed particularly important in the face of public sector cuts. The desire for local grids was also articulated through the questionnaire – a desire that was echoed amongst the interviews. Communities want to be able to supply their energy locally, rather than sell to the national grid.

Past research has posed that policy needs to engage a broader cross-section of the population – rather than over-relying on a minority of active citizens – in order for the community energy sector to grow (Rae and Bradley, 2012). Participants in this research support this claim. One way in delivering the aim of engaging more people is through raising awareness of the potential

of community renewable projects in Wales and Scotland. This could entail an educative or awareness raising programme that could raise the profile of community energy opportunities in both countries. It is unclear whether or not rural areas are more or less aware of the possibilities that the community energy sector holds. They are however areas that are in more immediate need for sustainable projects of the sort that can contribute towards their local economies. Nevertheless, it would seem that all communities should be engaged with, to realise the potential economic and social benefits that the community renewables sector could pose.

Articulating the concerns and exasperating experiences of communities at grassroots level, participants in the questionnaires also recognised that the community energy sector is currently operating within a corporate energy sector. This was having a particularly crushing effect on community confidence – particularly in Wales, which was attributed to a history of being told “Wales isn't good enough, big enough, developed enough, entrepreneurial enough, rich enough to take care of its own needs” (Respondent 3, Wales). A more open and candid debate addressing the nature of the energy sector and who currently benefits from the current system, is a discussion that seemingly needs more attention. Such an open debate, discussing energy justice and sovereignty issues would be particularly helpful and democratic in opening up negotiations as to how communities can gain from the low carbon energy transition.

There was a consensus across both nations to the need of a more robust policy framework and support network for communities to be able to develop as a force within the energy sector. This was particularly the case in Wales, where there has been a lack of enabling policy in the field. A desire for a Community Energy Strategy for Wales for example was suggested. Despite being held as an exemplary case for the community energy sector, in Scotland there was also a call for more commitment from the Scottish parliament too. This reflects previous finding that sub-state nations, although showing signs of supporting the community renewables sector more positively compared to the Westminster government, “broadly support” conventional energy generators (Strachan et al, 2015, p.107). Results from this research agree with previous research recommendations that a more coherent policy framework is needed for the community energy sector to play a key role in the energy transition (Co-operative group and Co-operatives UK, 2012; Harnmeijer et al, 2013). Challenging the status quo would be central during the development of such a framework. In particular, there is a pressing need for governments to help tackle problems between communities and DNOs. Also, the impact of the Land Reform Act in Scotland should be followed closely, in order to see what impacts it could have on the

furtherance of community energy in Scotland, and the possibility of implementing such an act in Wales.

The Delphi method questionnaire was also a useful process in showing the dissimilarities in the opinions of those working at policy, planning and facilitation level and communities working at grassroots level. In particular, there had been no mention, or apparent appetite for joint-venture schemes or benefit packages made by private developers at grassroots level. This shows that communities that are pursuing their respective community turbine projects, are more interested in being the sole owners of renewable energy projects, rather than business partners or the recipients of benefit packages. However – it must be remembered that the communities under observation in this research, have become empowered with the knowledge of how they stand to benefit through complete ownership of a renewables project. Other communities might not be as enlightened. Hence, the need (and call as shown in this research) for an awareness raising strategy.

The holistic approach in ensuring cultural sustainability within communities seemed to be better appreciated at community level – showing that they are best placed to understand how best to reinvest a new income stream into their respective communities. The Delphi process has shown that, although being a panel of energy experts, that this does not necessarily mean that they are equipped with the understanding of what works best for a community. Putting the responsibility into community hands is therefore important.

Further legislative powers for Scotland and Wales were topics raised through the Delphi method questionnaire. It was apparent from the Welsh perspective that there was indeed more appetite for further devolved powers needed in general for energy policy development. Nevertheless, there was also deliberation on the need for an effective administration to deliver on the policy development needed for the community energy sector to flourish.

Being able to compare the responses of the Delphi respondents between both devolved nations with the responses gathered through interviews with community energy projects in north west Wales and Scotland, has been a way of seeing where consensus and emerging suggestions for the sector lie. The final chapter will therefore disseminate all conclusions as a summary, with suggestions for future development for the sector, and the need for future research.



## CHAPTER 10

### DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

“I really... personally I, I love Tilly! I love driving past it, I like looking at and seeing a little red flickering light in the turbine. It makes me feel very happy...probably a little bit – wind making energy is probably uneconomic and it’s easier to burn Chinese coal but I like the feeling of it, I like the fact that my mates organised it...I like the fact that it’s given Tiree quite a decent economic independence and I think it’s, you know, it’s the best thing that’s happened to Tiree.”

(Robert, Tiree)

#### 10.1 INTRODUCTION

Community ownership of renewable energy schemes is a sector that has obtained more consideration from governments as an auxiliary means of contributing towards renewable energy targets (Walker and Devine-Wright, 2008). The Community Energy Strategy (DECC, 2014) is an example of the UK Government attempting to address a gap in the availability of tangible support for the community energy sector. Although there are criticisms of this strategy, for example its lack of radicalism and binding targets (Coxcoo, 2014), it nevertheless answers the call from grassroots level for more governmental support for the sector. The strategies of the recently elected Conservative Government, however, are jeopardising the development of community energy across the UK. In addition to their moratorium on onshore wind energy and their apparent enthusiasm for shale gas and nuclear power, the UK government is also considering cutting the Feed in Tariff in 2016 (Gani, 2015; Vaughan, 2015). Cutting this tariff could have serious impacts on the community energy sector. There would be less incentive for communities to pursue renewable energy projects, as the return on their investment would decrease. There is already a lack of confidence amongst communities to develop renewable energy projects, particularly in Wales, as this thesis shows (see for example chapter 5 and 7). The sector needs *more* incentive and support, rather than less (Hopkins, 2015) and, furthermore, needs to be recognised as a “force for good” (Jones, 2015).

This research has taken an in-depth look at the differences, similarities and current challenges within the community energy sector and its development in Scotland and Wales. The research has also looked at the potential benefits that the sector can deliver for rural communities and in so doing, identified the ‘conditions’ that make community energy possible in different cases. The research has contributed towards a better understanding as to how community energy has, to date, developed under both devolved nations, through combining the perspectives of experts working in the field and the grassroots experiences of four case groups in north-west Wales and Scotland. This is evidence based work that can be used to bolster or disprove assumptions. Conclusions can be drawn from the comparison made between both sub-state nations which contribute to the overall understanding of how community energy can be developed (if this should be the genuine will of the devolved nations and the UK as a whole).

## **10.2 LIMITATIONS AND REFLECTION**

In trying to discover the most appropriate ‘conditions’ for community energy generation, limitations to the project were, of course, inevitable. Due to time, financial and resource constraints, the project was limited in comparing Wales and Scotland. It is true that interviews with more of these community energy projects could have been conducted, although this would have been more time consuming and costly. However, such an approach would not have allowed for as deep an understanding of the threats facing rural areas of north-west Scotland and north-west Wales specifically, threats that had spurred the pursuit of community energy project development in both areas.

There are also limitations in regards to the methods used for the study, despite being chosen to answer the specific questions posed from the beginning of this research. Interviews with community members were very useful in uncovering new insights of how community renewable energy projects currently operate in rural areas of north-west Scotland and north-west Wales. Interviews with those working at policy, planning and facilitation level would also have been an interesting method to have adopted; although the Delphi methods questionnaire benefited from being more practical in terms of gathering data from individuals who were scattered across Wales and Scotland.

This piece of research is timely and of specific value in understanding the current state of community energy in Wales and Scotland. The research contributes knowledge that could lead to more sympathetic policy development in the field, particularly for the Welsh and Scottish

Governments. This could be framed within a Community Energy Strategy for both respective countries, to reflect the Westminster strategy released at the beginning of 2014. The research could also provide useful information for developers in the community energy sector at a more localised level. Knowing what the main stumbling blocks are in the development of community energy projects is vital in order to understand how best to address them. Local Authority bodies in particular would stand to gain from this research – understanding how best they can facilitate, rather than block projects that seek to strengthen rural economies and communities, particularly in the face of looming austerity measures and public service cuts. Ynni'r Fro, Community Energy Scotland, Local Energy Scotland and Community Energy Wales (along with bodies that look at community development and language and cultural sustainability) could also serve to benefit from the knowledge gained from this research. The research would also benefit manufacturers and suppliers of renewable energy equipment. There could be a new emerging market for their technology, if community energy schemes are to become more prevalent.

Academically, the research has also contributed to current discourses in the field of community energy – with a particular focus on peripheral communities with cultural and linguistic heritage concerns to consider as a part of their community resilience. The research, once disseminated amongst the participants of the study, can also provide a useful insight for community energy projects themselves who are currently operating or starting their own projects to generate renewable sustainable energy.

### **10.3 SUB-STATE SUPPORT FOR COMMUNITY ENERGY**

The aim of the research was to compare the community energy sector in Scotland and Wales, through the perspectives of four community wind projects and the perspectives of policy and planning developers, facilitators and campaigners working within the field. Through a review of current literature, interviews and a Delphi method questionnaire, conclusions can be made in regard to the policy and facilitation support that is available at devolved nations' level.

Both devolved governments have shown varying levels of support for the development of community energy. Both Ministers holding the energy portfolio in the Scottish and Welsh sub-state governments (Fergus Ewing MSP and Carl Sargeant AM) are currently collaborating in their response to the threats that current and proposed changes by Westminster could pose to the community energy sector (Scottish Government, 2015). There is clearly a desire to support

community energy projects within the devolved nations. However, the level and effectiveness of support varies, as evidenced through this research.

The Welsh Government has indicated increased support for the sector, through funding of the Ynni'r Fro project (and plans to fund the next round of the scheme in the near future), funding for the set-up of Community Energy Wales, and the publication of a paper in praise of community energy (Welsh Government, 2015). However, there is no *concrete* goal in Wales. This has had an adverse effect on the confidence of community energy groups on the ground as evidenced in Chapters 5, 6, 7 and 9. This lack of a coherent goal, a strategy or any real focus on the way forward for community energy caused a particular frustration at grassroots level in Wales. Despite communities in Scotland and Wales having more trust in the devolved government (in comparison to Westminster) in relation to renewable and community energy support, this trust was being abused in Wales – since there was a clear sense of a lack of support and confidence amongst interviewees at grassroots level. These findings were confirmed by responses to the Delphi method questionnaire – with a clear call for the need for a more structured framework for the furtherance of the community sector in both nations. This research also showed that there is an exasperating relationship between community energy projects and local governments within both devolved nations – in particular the planning departments of Local Authorities. This was clearly apparent in Wales (particularly in Llanaelhaearn), but was also a frustration in Scotland.

However, in Scotland, having a goal of producing 500MW from community renewables by 2020 has, it seems, given the sector confidence and the will to develop. This became evident through the interviews in particular, with a real sense of confidence and trust in Scottish governance being illustrated by the interviewees. The Delphi questionnaire partly agreed that the Scottish government was showing coherent support for the sector. However, other contributors suggested that there was room for further improvement. The supportive role of Community Energy Scotland and Local Energy Scotland who have delivered the CARES scheme since 2011, has also been crucial in creating an active sector that, by September 2015, saw 508MW of community or locally owned energy capacity operational (Energy Saving Trust, 2015). Scotland has *surpassed* its 2020 goal for the community sector, with five years to spare. How much of the 508MW capacity is community owned (rather than locally owned – i.e. privately owned small schemes) could be investigated further.

The research was carried out at a pivotal period of devolved political development on the British Isles. In the autumn of 2014, Scotland held an independence referendum, and the Scottish National Party won a historic 56 Westminster seats in the UK general election in 2015. At the same time, Wales has been through a process of collecting evidence for the Commission on Devolution in Wales (the ‘Silk’ commission) regarding whether or not the same devolution settlement arranged with the north of Ireland and Scotland is needed for the future legislative organisation of Wales. These processes have thrown up many questions in regard to sub-state legislative and territorial ‘rights’. These include further legislation for developing the energy sector and territorial rights for natural resources. However, the proposed legislative changes published as the Wales Bill draft in autumn 2015, do not bring Wales in line with the other devolved nations in regard to legislative and planning rights (Clubb, 2015). Responses through the Delphi questionnaire showed that there was a call for more powers in the energy field in Wales, albeit that an effective administration of such legislative rights was also necessary for the development of the community energy sector.

Regardless of constitutional matters, Scottish and Welsh governments have shown a clear desire to support the community energy sector compared to Westminster. However, despite the support that sub-state governments have given the community energy sector, some would argue that they have “broadly supported the maintenance of conventional, large-scale electricity development pathways and indeed enhanced them, in the spheres of market support, planning reforms and by adding additional layers of political legitimacy.” (Strachan et al, 2015, p.107). Moving away from the addictive pathway of generating energy using traditional large-scale methods remains a real and almost insurmountable challenge. Despite sub-state (and Westminster) ‘strategies’ and claimed goodwill towards the community sector, mainstreaming the practice of community ownership of renewable energy projects remains stifled due to an ingrained notion that energy generation and ownership is the domain of large energy producers. (Co-operative group and Co-operatives UK, 2012). As has been argued before and evidenced throughout this research, community renewables are different, and “failing to recognise that the community energy sector is distinctly different from the commercial sector represents a spectacular failure of the imagination” (Hopkins, 2015).

This has been a common thread throughout the research. As one participant in the Delphi method questionnaire states, the energy system “was never designed with community energy in mind, let alone prioritised”. The national grid is still designed to accommodate large scale

energy generation. The grid remains deficient in its ability to receive and cater for the needs of small distributed energy producers. Communities are reliant on a grid that appears to be indifferent to providing a service for them, as evidenced in Chapter 6. There is also the issue of energy monopolies. It could be supposed that energy providers, ‘the big six’ in the UK, would look disapprovingly at a movement that seeks to encourage energy independence, in a system which currently relies on dependency. Do large energy companies want to see the empowerment of communities, and a move towards energy autonomy? How would such a movement benefit them? Supporting community energy from their perspective would entail that their own companies would eventually become obsolete, as communities become energy independent. The very fact that communities have had to battle for a number of years for their projects to reach completion and the particularly difficult relationship the Scottish examples in this research had experienced with their local DNOs indicates that there exists an opposing force that impedes them. Does the vision of a distributed community owned renewable energy sector therefore appeal to the businesses and incumbent actors that currently monopolise the energy sector?

#### **10.4 OWNERSHIP AND SUSTAINABILITY**

Perhaps a more pertinent question would be: Does the vision appeal to people? Do we want ownership models of the renewable energy sector to mirror the models of ownership of the past, or should the energy transition offer something different and more equitable? Do citizens and communities want a distributed energy system in which they are active participants that can benefit from local renewable resources? Evidence in this research shows that there is clearly an appetite amongst communities observed and a number of participants in the Delphi method questionnaire for such a regime. There is also evidence in this research that indeed shows that community energy projects are a “force for good” (Jones, 2015), through the myriad of projects that each case site had in mind for ensuring the long term sustainability of their communities. This was particularly relevant in the face of austerity measure cuts to public services and facilities. Community energy can create a steady income that moves communities away from grant dependency and towards resilience and autonomy. However, there is a danger that the low carbon transition could “distribute its costs and benefits just as unequally as past transitions without governance mindful of distributional justice” (Eames and Hunt, 2013, p.58). Therefore, there must be a concerted effort to facilitate the progression of community energy.

For the community energy sector to progress, the above issues of ownership, energy justice, and the (re)balance of power and wealth distribution from the energy sector needs to be candidly addressed.

As was shown in Chapter 7, ownership has a powerful significance for communities that are pursuing energy projects. Rather than being *passive* players in the energy field, having ownership over a project entails that communities can become *active* participants within the energy sector. Bringing people closer to energy matters and becoming owners of energy projects is in itself a challenging undertaking. Competing with an ingrained psychological distance from energy and within a historical context that has seen people as users rather than producers of energy is a challenge. Changing from dependence on large energy providers to becoming autonomous generators of energy is an imposing and symbolic conversion, particularly when the energy sector is currently so poorly-suited for community participation.

A movement that discusses energy justice and ownership issues across communities is needed. Raising awareness and understanding of what can be gained from the sector is imperative. This has already been done to an extent through networks as demonstrated by Community Energy Scotland (and currently Local Energy Scotland). There are signs that this could also be a role for Community Energy Wales (and Community Energy England). However, to be central players in the energy sector rather than a ‘nice to have’ constituent; a more coherent and inclusive effort is needed. Existing civil society groups could be specifically targeted to engage with the potential of the community energy sector. It has been evidenced throughout this thesis, particularly in Chapters 5 and 7, how difficult it has been to engage with other community members, and generate enthusiasm for community energy projects beyond the small nucleus of active ‘movers and shakers’. No community development is a walk in the park – and it is evident that community members need to show grit and determination at both ends of the spectrum – dealing with community members themselves, as well as energy, finance and planning actors. Nevertheless, as Müller et al (2011) have previously contested; communities need to be central to energy development, not just simply a body that is ‘dealt with’ during the implementation of energy infrastructure. As the authors put it,

“We need concepts that go beyond acceptance of technologies and innovations...and enable local actors to actively participate in the transformation of the energy system and pursue their interests and contribute to the good of their society”

(Müller et al, 2011, p.5801)

In order to achieve this vision, civil society needs to be engaged. Confidence needs to be raised, more people need to understand the possible benefits accrued – which will enthuse and enable communities to feel poised to pursue their own community renewable projects. Drawing from results in this research, confidence appeared to be more prevalent in Scotland than in Wales, although determination and feelings of ‘justice’ and ‘rights’ in the pursuit of establishing each community turbine were comparatively the same.

## **10.5 CULTURAL SUSTAINABILITY**

The relationship between community energy ownership and cultural sustainability is a theme within this research from which important conclusions can be drawn. Evidence in this thesis shows that there is a genuine capacity for community energy projects that generate a new income stream through the provision of FITs to contribute to the cultural sustainability of communities. By providing new or strengthening existing community services and amenities, community energy projects can contribute towards the sustainability of a community. A sustainable and strengthened community was seen as a seedbed for the recovery or enhancement of cultural attributes within these peripheral communities. There are many community renewables projects in Welsh speaking and Scottish Gaelic speaking areas of the British Isles that have initiatives to contribute towards the cultural resilience of their communities, including the four observed in this study. Already the projects in Scotland are investing in initiatives that lead to cultural and language resilience both directly and indirectly. Language and cultural resilience are central to the Welsh case sites, and one of the factors that has driven the projects to develop. Language threat was also a reason for pursuing community energy projects. These issues are less understood at policy level and amongst those questioned through the questionnaire, showing that communities themselves are the best equipped to understand the needs of their communities. This research has shown that rather than culture being a force for opposing energy developments (Murphy, 2012; McIntosh, 2004), it can also be a force that drives communities to develop their own, indigenous projects. As Chapter 8 evidenced – culture can also be bolstered by community energy projects. This supports emerging research into the cultural benefits of indigenous peoples territorial rights to natural resources and renewable energy projects (Murphy and Smith, 2013; Henderson, 2013). This research has contributed conceptually to the emerging arguments that culture should be the fourth pillar of the sustainable development model. Further research in this vein would have a



significant value to the sector, and be of particular interest to communities whose cultural entity and language are under threat.

## **10.6 FUTURE SUPPORT**

Support for community energy development is critically important for the sector to flourish. This may seem self-evident, however, when looked at in more detail, as evidenced in this research, support is needed at many levels.

Firstly, there is need for more support and encouragement of community energy on the ground. In comparison with Scotland, knowledge and understanding of community energy and the contribution such schemes can have on the resilience of a community were not realised to such a degree in Wales amongst the community groups examined. Although this was also a difficulty in Scotland, it seemed that the lack of support or understanding of the potential of community energy in Wales was more pronounced, as seen in Chapters 5, 6 and reiterated in Chapter 9. This lack of information contributed towards generating doubt amongst the nucleus of people developing each project and causing some opposition within the wider community. There has been a multiplying effect in Scotland, where more and more groups develop energy projects following the success of other groups. They have also demonstrated that a genuine and efficient network of community energy groups has been formed. In Wales, there are only a handful of community energy projects that have reached completion, accounting for the lack of replication of projects. Without native projects, it is difficult to demonstrate the possibilities of the sector to others. To convince Welsh communities that community energy projects are viable, Welsh examples need to be shown. As was highlighted in this research, using examples from ‘different’ places, like Scotland, was not effective. Therefore, a more concerted awareness raising effort is needed in both nations, to elevate the sector in terms of numbers, but also in the name of divulging further the many benefits of the sector as evidenced further in this research. These benefits include the strengthening of a local economy, services and amenities; emboldening the capacity of communities to project manage and deliver viable energy projects; raising ambition, bringing people together for the purpose of improving their long-term sustainability and moving away from energy dependency to energy autonomy. Furthermore, raising awareness for the consequential benefits of community energy projects could aid communities to harness more support *locally*, reducing the potential for resentment and opposition towards schemes.

Secondly, more support is needed at local government level. This research has shown that there is a disconnect between development of community energy and the understanding of the sector by local government and planning officials. Addressing this gap in knowledge within local councils would certainly benefit the community energy sector. Each one of the local authorities in all four case sites were criticised to varying degrees by the communities interviewed for a lack of understanding of their projects' aims. Planning departments in particular posed an obstacle to communities. Since planning regulation is a devolved matter, a more coherent policy would be needed, to ensure that community energy projects are not blocked on the basis of antiquated planning directives. This would entail that there is equal consideration of the benefits made possible for communities, in economic, social and cultural terms.

Thirdly, more support is needed through policy development at sub-state government level. A Labour ran Scottish Government instigated the CARES scheme in 2011, a scheme that continues under the current SNP Government. The Labour ran Welsh Assembly have managed the Ynni'r Fro programme, which has not been as successful in reaching targets, not from inefficiency as such, but from the effect of external factors such as planning disputes, access to grid and finance. Planning at local government level should be aligned entirely with the strategy of the Welsh Assembly Government. This would entail that there is a coherent and binding policy from the Welsh Government to ensure that this takes place.

Finance is also key for communities to develop their projects. Currently there are not enough opportunities for communities to seek finance. Banks are not attuned to the needs or the capacity of communities to project manage energy projects, with only two banks mentioned in this research that were deemed approachable as financiers to such schemes. Banks appear to be "as centralised as the energy system, and mismatched to the needs of civic actors" (Johnson and Hall, 2014). There is a need (and desire) for an alternative financing capacity that would allow the community energy sector to develop in a more simplified way. There does appear to be, however, the capacity for the community renewables sector to adapt in the face of adversity, and pursue alternative finance. The need for such adaptability to occur again might very well be necessary if Westminster will decide to cut the Feed in Tariff, with no contingency plan, in 2016. Community share offers are increasingly being used by communities to self-finance projects, despite attractive tax-breaks on such offers also being halted by Westminster at the end of November, 2015 (Gani, 2015). Whether or not a move towards such alternative

financing would entail that more affluent communities are able to develop projects more easily compared to others would be something worthy of further investigation.

Lastly, the community energy sector needs to be recognised as being a “force for good” and not only viewed in terms of kWh generated (Jones, 2015). A UK wide survey of community energy groups has revealed that groups themselves have admitted that there is a limit to what they can achieve alone – they require external support (Seyfang et al, 2013). This has also been evidenced through the interviews in this study. It has been argued that barriers have been stronger than incentives, despite potential resources across the whole of the UK that could be tapped into by small community ownership projects (Walker, 2008). It is argued that communities that pursue energy projects should receive recognition and a guaranteed support throughout all stages of their projects (Cooperative Group and Co-operatives UK, 2012), rather than being faced with continual uncertainties regarding finance, FIT cuts, planning restraints and lack of access to the grid - uncertainties that have been highlighted in this research. Stronger and more consistent policy is called for if the government genuinely wish to see the development of community-based renewable energy schemes (Rogers et al, 2008; Yadoo et al, 2011). Conclusions from a recent UK wide survey suggested that there should also be more cross departmental thinking, due to the diversity of aims and benefits that arise from the sector,

“The multiplicity of the sector's objectives highlights the need for joined-up thinking among government departments; the community energy sector addresses policy goals covering a number of different government departments, not solely energy and climate change.”

(Seyfang et al, 2013, p.988)

## **10.7 FINAL CONCLUSION**

There are numerous difficulties facing the community energy sector, presented in this research, which collectively function to block the sector’s development. These difficulties have been highlighted through evidence collected through interviews and the Delphi questionnaire. Barriers exist at a UK level (and are exacerbated by a rapidly changing policy landscape), but also in both devolved nations. However, it would seem that Scotland is better adapted to address many of the difficulties that arise and threaten the community energy sector. This is partly due to the fact that they are further ahead in their developments. The Scottish government

is also more advanced in positioning the arguments for more territorial autonomy (Royles and McEwen, 2015), resource rights and energy infrastructure – as a result in part of developing arguments for independence in 2014. There appears to be more trust of Scottish ministerial and governmental aspirations for the community energy sector in general, whereas in Wales, despite having more trust in their devolved representatives, communities are perplexed as to what the Welsh Government aim to do in order to help the sector. This is reflected in the lack of a coherent policy in Wales for the community renewables sector and the lack of any identifiable target. This is not to say that the conditions in Scotland are perfect, but in comparison to Wales, they are more favourable. A domino effect has occurred in Scotland that has seen over one hundred and thirty six projects completed or in development (Local Energy Scotland, 2015b). This is in comparison to the fifty groups that are being supported by Ynni'r Fro (Ynni'r Fro 2015). Although a more recent document shows that there are eighty-seven community energy projects in development in Wales currently, only twelve are operational and generating; most of which are small solar projects (Community Energy Wales, 2015).

The most pressing matter for community energy however, is the relationship between small energy generators and an energy sector that is not motivated to facilitate them. This is further aggravated by impending threats to FITs, along with an evidently anti-wind position of the UK Government, illustrated through the recent moratorium on wind energy projects. Who stands up for and lobbies for the interests of the community energy sector? According to some researchers,

“One factor perpetuating the marginal position of community renewables in the UK is the failure to cultivate actors that are willing and able to challenge the power of major incumbent energy businesses and policies”

(Strachan et al, 2015, p.105).

Despite the emergence of Community Energy Scotland, Local Energy Scotland, Community Energy Wales, Community Energy England, and the Community Energy Coalition – is there still a lack of challengers to the current status quo? In this respect, this thesis challenges the present circumstances in which the community energy sector operates, by presenting findings that are evidence based and by listening to the people who understand the sector best. This knowledge base is now available for the participants of the study, but also to communities that

are perhaps thinking of venturing into the field of community owned renewables. What is truly important is, not only the warnings about impediments to developments but the successful results of such projects, which will hopefully serve to inspire and enthuse new participants in this field. It is hoped then that this research will contribute towards a more candid and open debate, ensuring that people and communities realise that they too can be a central and positive force influencing the energy transition that is occurring around them.

## **10.8 RECOMMENDATIONS FOR FURTHER RESEARCH**

Through the process of delivering this research project and thesis, recommendations for areas of further research have arisen. These include:

- If not FITs, then what? An investigation into the possibilities of localised grids and community renewable energy would be particularly useful. Many interviewees showed enthusiasm and a desire to generate and distribute energy locally (rather than exporting). Communities had the desire to be energy independent. Is this a practicable possibility, and one in which the Feed in Tariff subsidy would not be necessary?
- Further research into the field of cultural sustainability and community renewable energy projects is necessary. Drawing comparisons with indigenous projects in the UK and their counterparts in Canada and Australia including a study into links with indigenous, cultural and territorial rights.
- The further devolution of powers. Is what the Wales Bill proposes enough for developing community energy in Wales? Should powers for renewable energy subsidies (like the Feed in Tariff) be a devolved issue? Should all devolved nations receive the same parity (the complete legislative and planning rights as had by Northern Ireland)?

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## APPENDICES

### APPENDIX 1

#### SEMI-STRUCTURED INTERVIEW SCRIPT

##### INTERVIEWS

These series of interviews, conducted with community energy group members, and members of the community they serve, aim to gather data on **feelings, thoughts, opinions, experiences and community practices** in the sector of community owned renewable energy projects in rural Wales and Scotland. The objectives that drive the interview questions are:

**OBJECTIVE 1:** To compare the differences in support structures and visions for this niche market amongst policy and local government levels (Also addressed through the Delphi method – through an online questionnaire)

**OBJECTIVE 2:** To examine the differences between visions, hopes and difficulties facing community energy groups in Wales and Scotland

**OBJECTIVE 3:** To investigate the relationship between community energy and future sustainability of cultural, heritage and linguistic issues

**INTRODUCTION:** My name is Sioned Haf. I am a research student at Bangor University, Wales. As I have said in my previous correspondence, I am interested in exploring features of community energy groups in rural areas of Wales and Scotland. The research includes gathering community feedback of how community energy groups are functioning, their purposes, hopes, success and any barriers they have encountered. I also aim to investigate if (and how) community energy groups contribute towards the economic, social, cultural, linguistic and heritage sustainability of their areas. I'm basically interested in **feelings, thoughts, opinions, experiences and community practices** of rural communities where there exists a community owned renewable project.

This interview will last up to an hour and a half – depending on how we go. It is split into 5 main sections, which in turn cover a number of related themes relevant to community energy groups and rural sustainability, place identity and devolution. It is more of a conversation that

we'll be having, where you can explain to me as an outsider, through examples, or stories, your experiences within this community, and your views on the community energy group and sustainability/future of this community and area.

As I have explained in my previous correspondence, this interview will be treated in confidence. I will analyse the interview thematically, so your identity will not be revealed. I will be recording the interview, after which I will write a transcript. If at any time you are interested in the data collected in the research, you are welcome to. If I feel that further clarification is needed on a particular subject, would you agree to me contacting you through email/phone (whichever convenient) at a later date to discuss? YES ☐ NO ☐. If you feel uncomfortable about answering any of the questions, you are not under any obligation to do so, and we can move on to other questions or terminate the interview.

So before we start, I'd also like to make clear that the reason why we'll be having this discussion, is because I am interested in understanding these themes from your perspective. There are no right or wrong answers, just your unique answers. Your answers can help me understand your unique world view. Feel free to give me stories and examples as we go along, that help you to illustrate any points, and to help me understand.

**INITIAL QUESTIONS: Introductions (so I've introduced myself a little bit, now over to you...name, age, employment, volunteering)**

1. Can you first tell me the story of how you came to live in this area?

**PLACE AND IDENTITY – your area and what does it mean to be here? (How does place inspire a community energy group?)**

2. How would you describe this place to people unfamiliar with it? (geographically, demographically, historically – it's place in the world!)
3. How would you describe the people?
4. Are there culturally distinct features that are of importance within this community? (i.e. what makes this place different from other places?)
5. How do you feel about living in this area?
6. What do you think are the benefits and the disadvantages of living here?
7. Are you concerned about the future of this community? (What are the biggest challenges facing the area?)

**COMMUNITY ENERGY GROUP (so now, we'll talk a bit about the community energy group itself)**

8. How did the group come about in the first place? (Why a community energy group?)
9. What are the objectives of the group?
10. Would you regard (insert groups name) as a community group? What does that mean to you?
11. How has being a part of a rural/peripheral community affected your project? (made it easier, harder, essential to survival, just happened to happen...)
12. Were there any barriers in setting up your community energy group? Can you give examples?
13. What was enjoyable about setting up the group?
14. What were unenjoyable about setting up the group?
15. What would your advice be to other communities setting up projects like yours?

**CULTURAL AND LINGUISTIC (...in this section, I'd like to discuss with you more about the cultural nature of this area...)**

16. How would you describe the cultural nature of this area (language, traditions, crofting, farming, history)
17. Do you think that cultural aspects are safe here?
18. How can the cultural be secured?
19. What role can the community energy group play in this?
20. Are there examples of the group doing this?

**POLITICAL SUPPORT – CENTRALISATION OR DEVOLUTION (We'll just talk now about the political background to these issues...and your perception about them...)**

21. Do you think being part of a devolved nation has affected your project in any way?  
Can you give examples?
22. From which bodies did you receive support in your initial set-up of the group? (local council, carbon trust, Ynni'r fro, CES)
23. Do you think independence/further devolution would benefit communities like yours?
24. If yes, how so. If not, why not?

## **RESILIENCE**

- 25. Do you think that the group can ensure a prosperous future for the community?
- 26. Where do you see your group in 5 years' time?
- 27. Are you hopeful about the future of this community?
- 28. Has the community energy group influenced the way you see the future?

## **END**

- 29. Any other comments/observations...? Do you think the interview has allowed you to get your point of view across? Is there anything else that you'd like to talk about that relates to these issues?

\*Context protocol should be written straight after the interview... Depending on the research question it should include information about the interviewee (his or her family situation, profession, age etc.) and about the interview (when, how long, who was the interviewer etc.). Most important are the interviewer's impressions of the situation and the context of the interview and of the interviewee in particular.

### **PROMPTING QUESTIONS (as backup)**

- # Can you elaborate more on....
- # Do you have further examples of this...

### **INTERPRETING QUESTIONS**

- # You then mean that.../Is it correct that you feel...?

## APPENDIX 2

### FIRST ROUND OF THE DELPHI QUESTIONNAIRE: WALES

# Ynni Cymunedol yng Nghymru | Community Energy in Wales

Cyfres o gwestiynau agored ynglŷn â chefnogaeth, manteision a'r weledigaeth dros y sector ynni cymunedol ymysg ymarferwyr, gweithwyr polisi, llywodraeth leol a llywodraeth ddatganoledig

**An open ended series of questions discussing the support, advantages and visions for the community energy sector amongst practitioners, policy workers, local government and devolved government**

## Cyfarwyddiadau | Instructions

Atebwch y cwestiynnau sy'n dilyn mor onest ac y medrwch (yn Gymraeg neu'n Saesneg). Ymhelaethwch fel y gwelwch yn briodol ar bob cwestiwn - nid oes terfyn geiriau. Mi fydd yr atebion yn cael eu casglu, a'r ymatebion mwyaf nodedig yn cael eu dewis a'u hail-anfon o gwmpas y cyfranwyr am drafodaeth bellach. Mi fyddwch yn aros yn ddienw trwy gydol y broses hon (mae eich manylion isod go gyfer nodiadau'r ymchwilydd yn unig)

**Please answer the following questions as honestly as you can (in Welsh or English). There is no word limit, so feel free to elaborate on each question as you see fit. The answers will be collated, and the most salient comments will be selected and re-sent around the participating group for further discussion. Your personal details below are for the researcher's notes only, and your identity will remain anonymous throughout the process**

## Manylion | Details

1 Enw/ **Name:**



2 Galwedigaeth/ **Occupation:**

3 Oed/ **Age:**

☐ 21-30

☐ 31-40

☐ 41-50

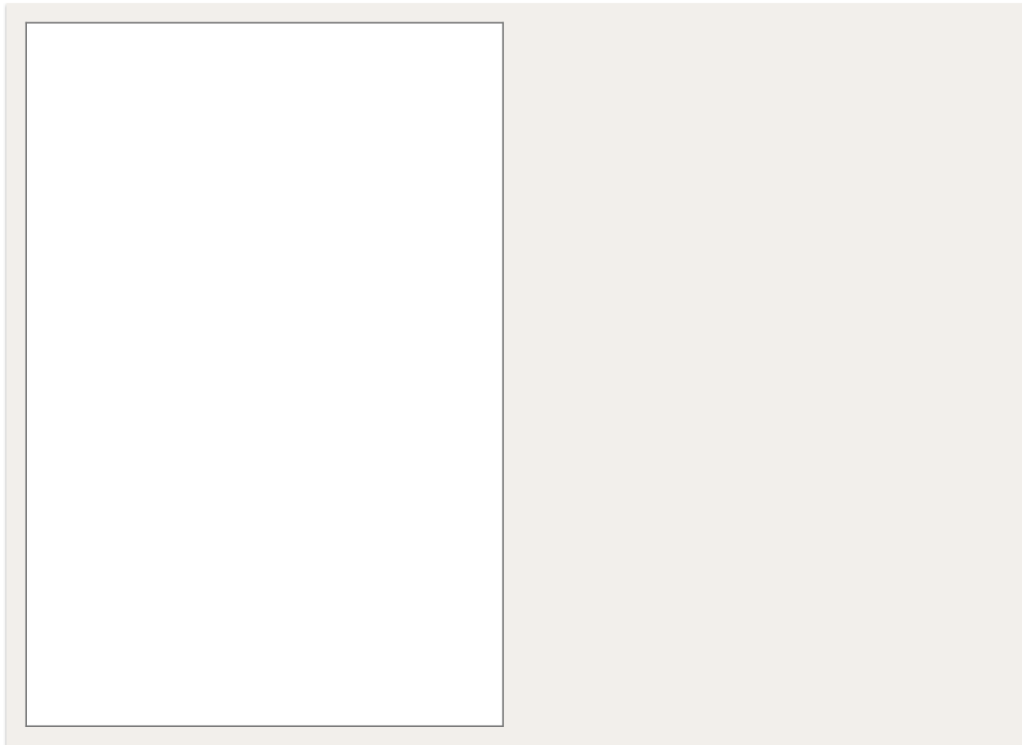
☐ 51-60

☐ 61-70

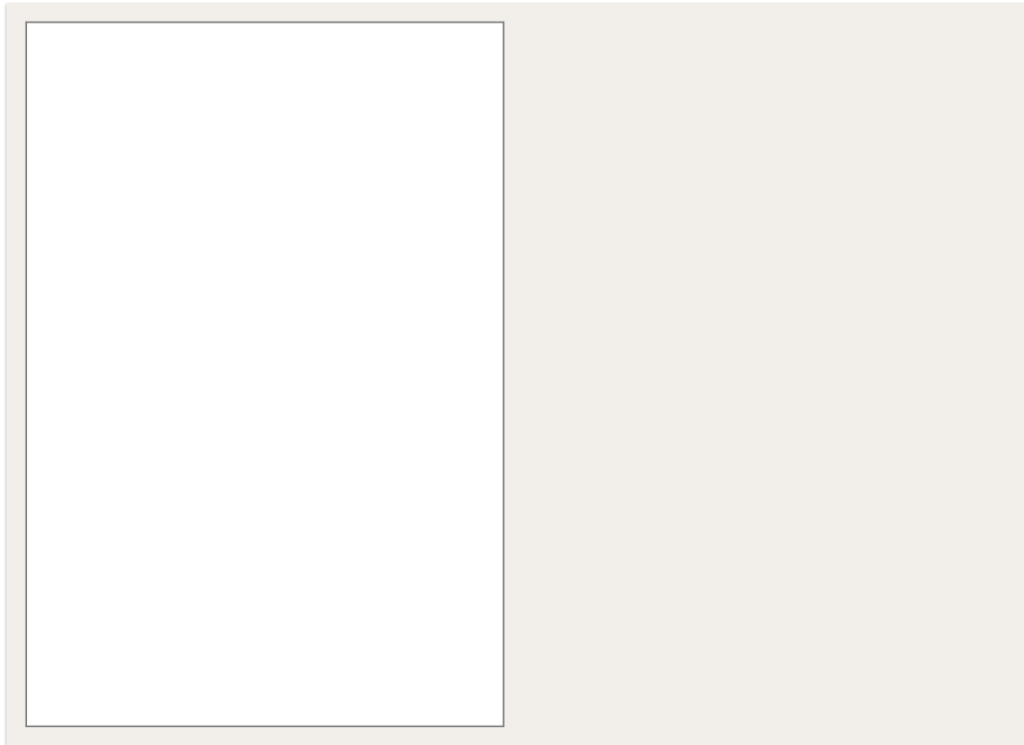
☐ 71+

### **Ynni Adnewyddadwy dan Berchnogaeth Gymunedol | Renewable Energy Under Community Ownership**

4 Yn eich barn chi, pa mor bwysig yw hi i gymunedau yng Nghymru fod yn rhan o'r sector ynni adnewyddol? Esboniwch eich ateb os gwelwch yn dda. **In your opinion, how important is it for communities in Wales to be involved with the renewable energy sector? Please explain your answer.**



5 Yng Nghymru, pa mor anodd neu hawdd yw hi i gymunedau sefydlu prosiectau ynni adnewyddol cymunedol? Esboniwch os gwelwch yn dda. **In Wales, how difficult or easy is it for communities to establish community-owned renewable energy projects? Please explain.**

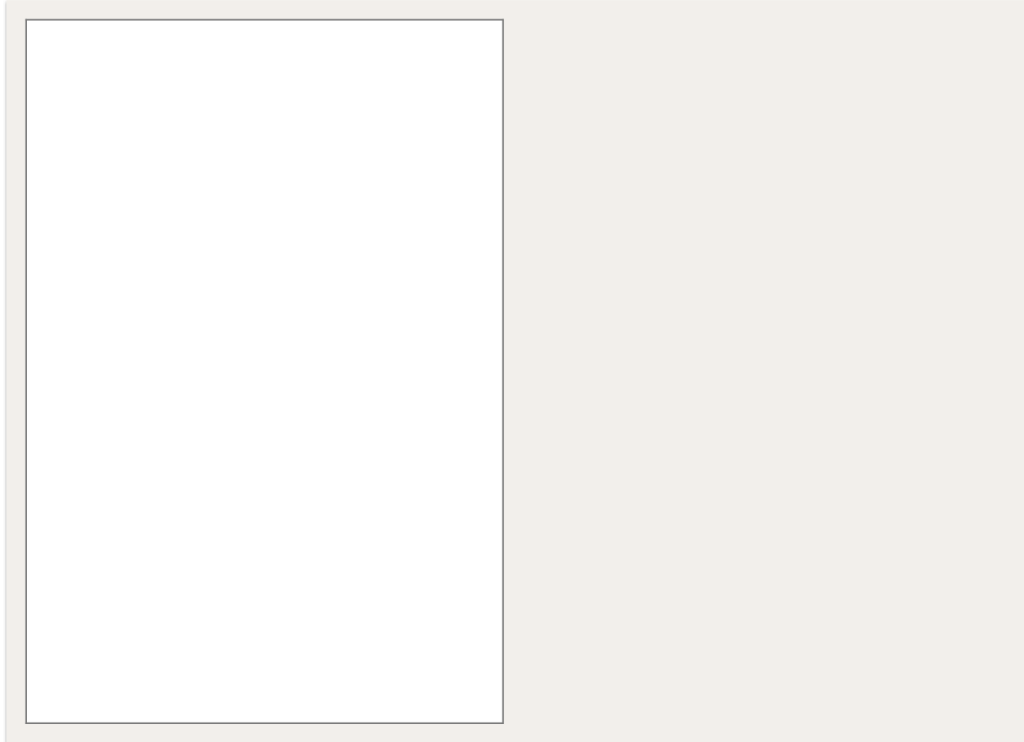


## Cefnogaeth i Gynlluniau Ynni Adnewyddadwy Berchnogaeth Gymunedol | Support Structures for Community Owned Renewable Energy Schemes

6 Yn eich barn chi, a oes yna ddigon o gefnogaeth i gynlluniau ynni cymunedol yng Nghymru? (e.e. ar lawr gwlad, llywodraeth leol, llywodraeth genedlaethol). Rhowch resymau am eich ateb. **In your opinion, is there sufficient support for community owned renewable energy schemes in Wales? (e.g. at grassroot, local government and national government levels). Please give reasons for your answer.**

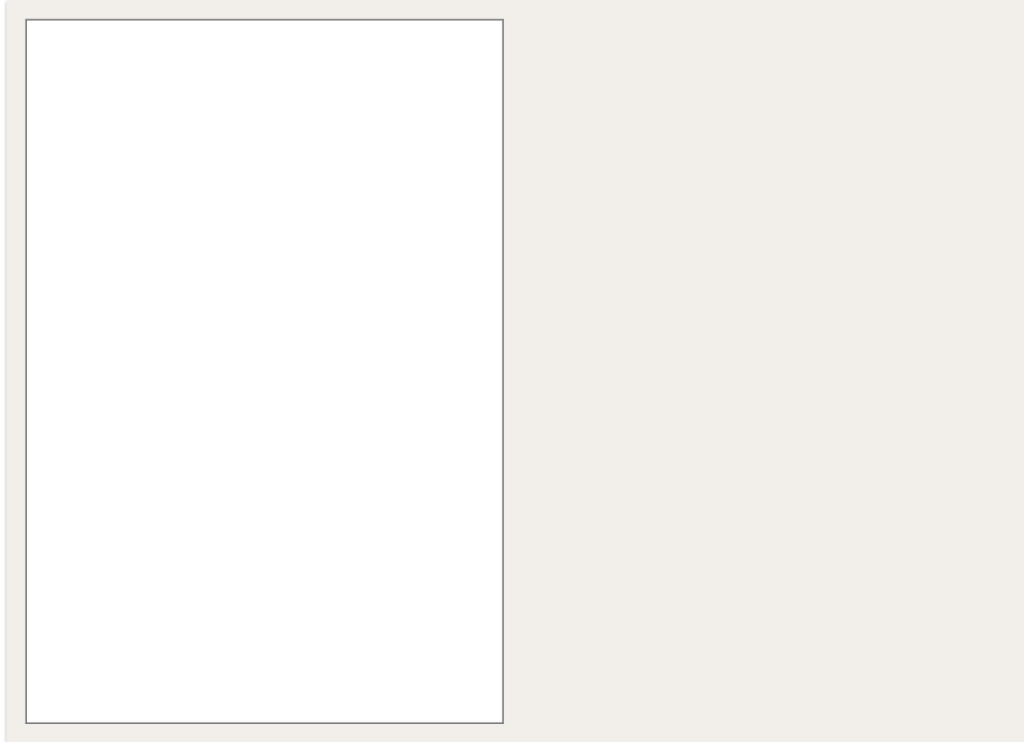
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7 A oes angen pwerau deddfwriaethol pellach ar Gynulliad Cenedlaethol Cymru i ddatblygu'r sector ynni adnewyddol cymunedol? Esboniwch eich ateb os gwelwch yn dda. **Is there need for further legislative powers for the National Assembly for Wales to develop the community energy sector? Please explain your answer.**

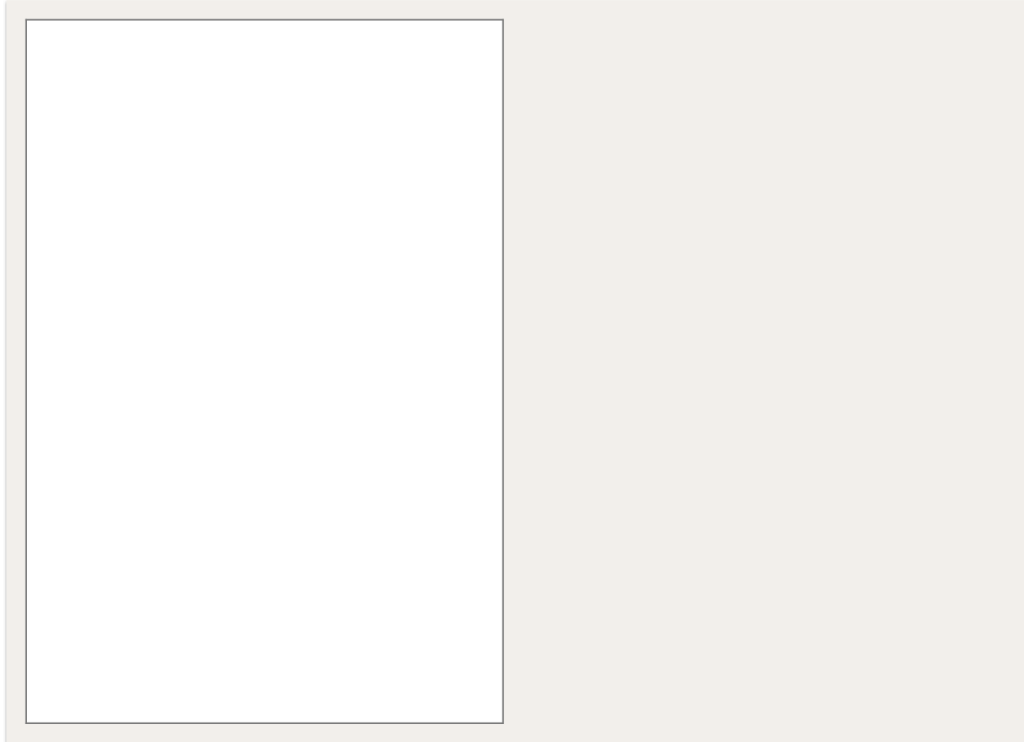


### **Buddion Cymunedol o Gynlluniau Ynni Adnewyddadwy Berchnogaeth Leol | Community Benefits of locally-owned Renewable Energy Schemes**

8 A gall perchnogaeth leol o brosiectau ynni adnewyddadwy buddio cymunedau gwledig Cymru? Rhowch resymau am eich ateb. **Can local ownership of renewable energy projects benefit rural communities in Wales? Please give reasons for your answer.**

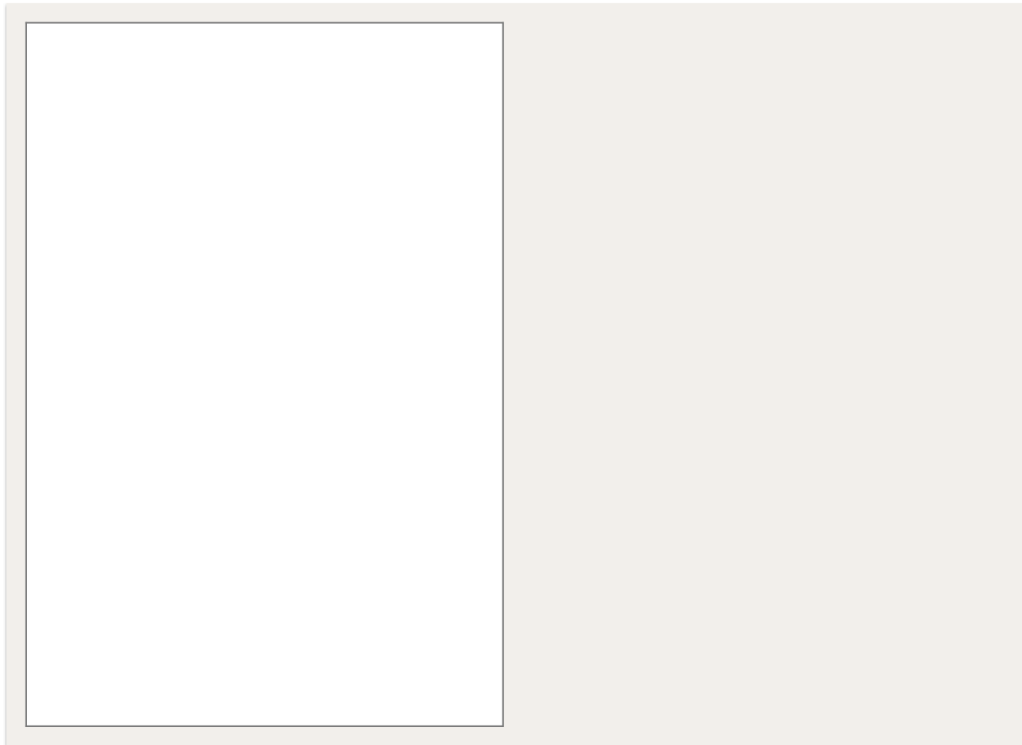


9 Yn eich barn chi, a oes yna ymwybyddiaeth ymysg cymunedau cefn gwlad Cymru o'r cyfleoedd i ddatblygu cynlluniau ynni adnewyddol cymunedol eu hunain? Esboniwch eich ateb os gwelwch yn dda. **In your opinion, is there awareness amongst rural communities in Wales of the possibilities of developing community-owned renewable energy schemes themselves? Please explain your answer.**



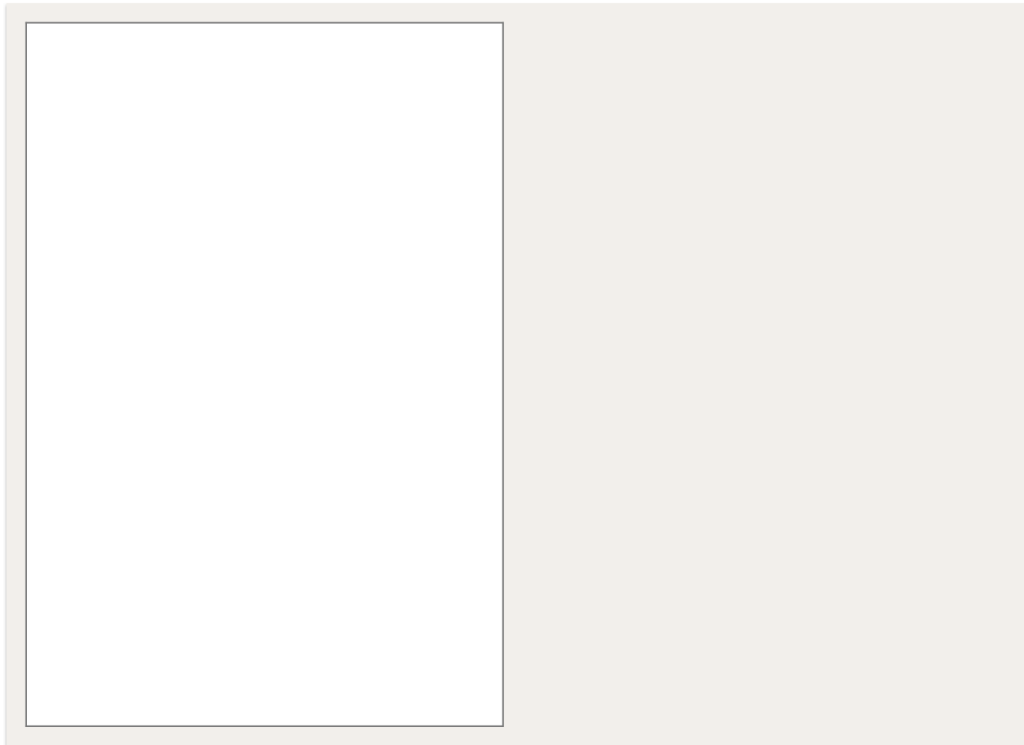
## Datblygiad Diwylliannol trwy Ynni Cymunedol | Cultural Development through Community Energy

**10** A gall prosiectau ynni cymunedol gael effaith bositif neu negyddol ar agweddau diwylliannol o gymunedau gwledig yng Nghymru? (e.e. y Gymraeg, treftadaeth, arferion). Os felly, ym mha ffordd? **Can community energy projects have a positive or negative effect on cultural aspects of rural communities in Wales? (i.e. the Welsh language, heritage, customs). If so, in what way?**



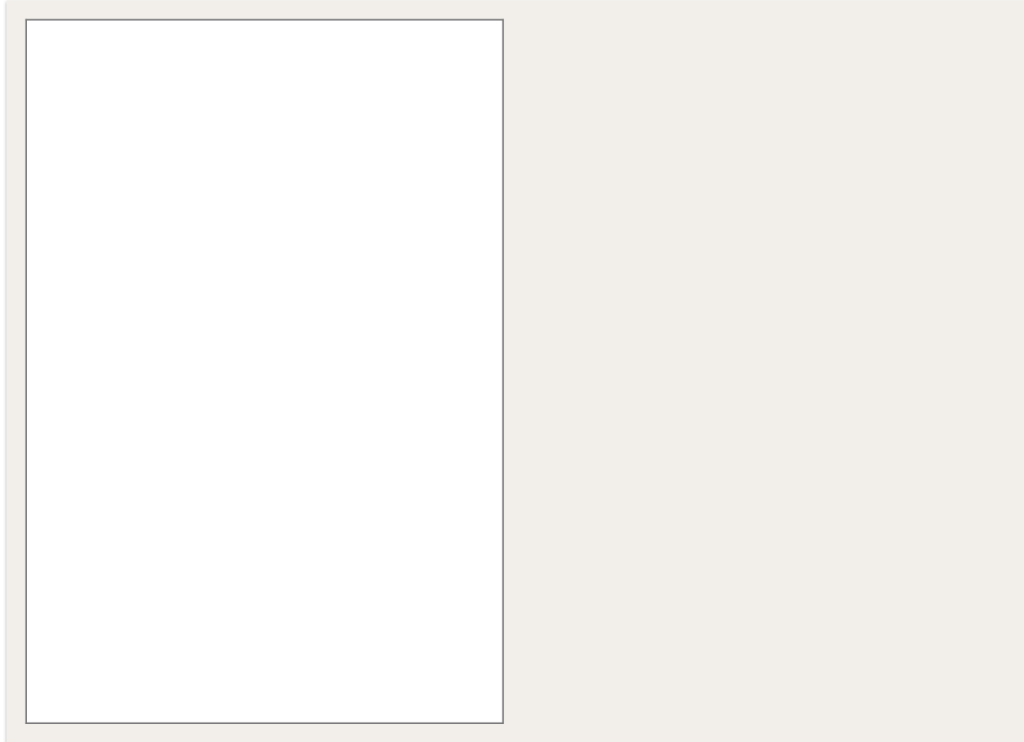
**11** Yn eich barn chi, a yw hunaniaeth a pherthynas at le yn bwysig neu beidio er mwyn dechrau grŵp ynni cymunedol yng Nghymru wledig? Esboniwch eich ateb os gwelwch yn dda. **In your opinion, is relationship to place and local identity important or not in starting a community energy group in rural Wales? Please explain your answer.**



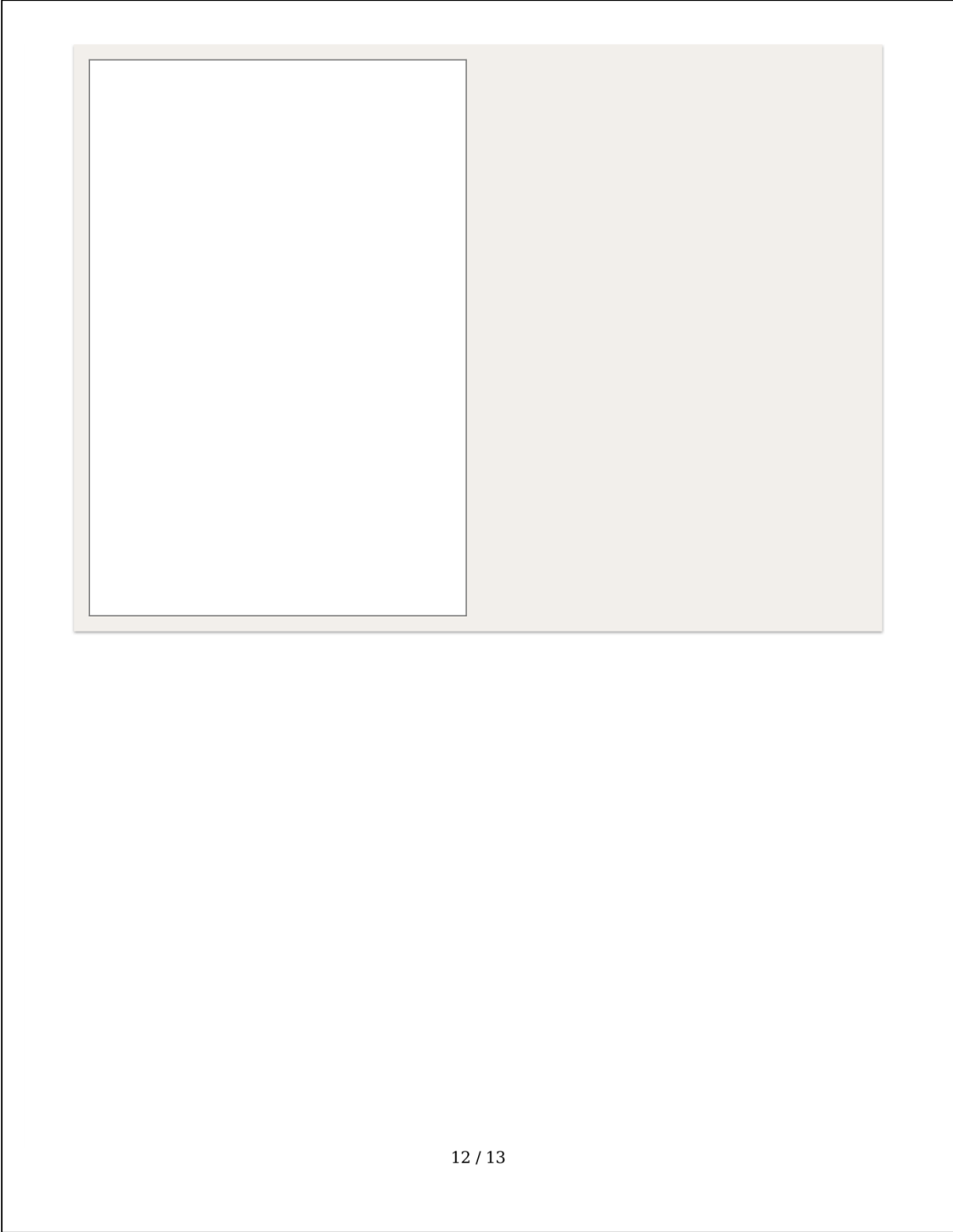


### **Datblygiad y Farchnad Arbennig Hon | Development of this 'Niche' Market**

**12** Beth, yn eich barn chi, sydd yn atal datblygiad y sector ynni cymunedol yng Nghymru? **What, in your opinion, impedes the development of the community energy sector in Wales?**



**13** Beth yn eich barn chi, sydd ei angen i alluogi cynlluniau ynni cymunedol yng Nghymru i ddatblygu yn y dyfodol? (e.e. polisi, ariannu, strwythur cefnogaeth ayyb) **What, in your opinion, is needed to allow community energy schemes in Wales to develop in the future? (e.g. policy, funding, support structures etc)**



**Diolch yn Fawr! Thank you very much!**

Diolch yn Fawr am eich cyfraniad! Mae eich ymateb wedi cael ei gofnodi

**Thank you very much for your participation! Your response has been recorded.**

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## APPENDIX 3

### FIRST ROUND OF THE DELPHI QUESTIONNAIRE: SCOTLAND

# Cumhachd na Coimhearsnachd ann an Alba | Community Energy in Scotland

Seo sreath de cheistean fosgailte a-mach air taic, buannachdan agus mòr-mhiannan do roinn chumhachd na coimhearsnachd am measg ghnàthaichearan, oibrichean poileasaidh agus an riaghaltas ionadail is nàiseanta.

**An open ended series of questions discussing the support, advantages and visions for the community energy sector amongst practitioners, policy workers, local government and devolved government**

## Stiùireadh | Instructions

Bhiomaid nur comain nam freagradh sibh na ceistean a leanas cho onarach 's a ghabhas. Chan eil crìoch air uiread nam facal ann, agus le sin faodaidh sibh na thogras sibh innse. Thèid na freagairtean a chur ri chèile, agus gheibh a' bhuidheann obrach ath-sgaoileadh de na beachdan as soilleire airson tuilleadh deasbaireachd. 'S ann a-mhàin airson clàraidhean an rannsaiche a bhios am fiosrachadh pearsanta a thug sibh seachad gu h-àrd, agus bidh sibh buileach neo-ainmichte air feadh a' phròiseis seo.

**Please answer the following questions as honestly as you can. There is no word limit, so feel free to elaborate on each question as you see fit. The answers will be collated, and the most salient comments will be selected and re-sent around the participating group for further discussion. Your details above are for the researcher's notes only, and your identity will remain anonymous throughout the process**

## Details

1 Ainm/ **Name**

1 / 13

2 Dreuchd/ **Occupation**

3 Aois/ **Age**

☐ 21-30

☐ 31-40

☐ 41-50

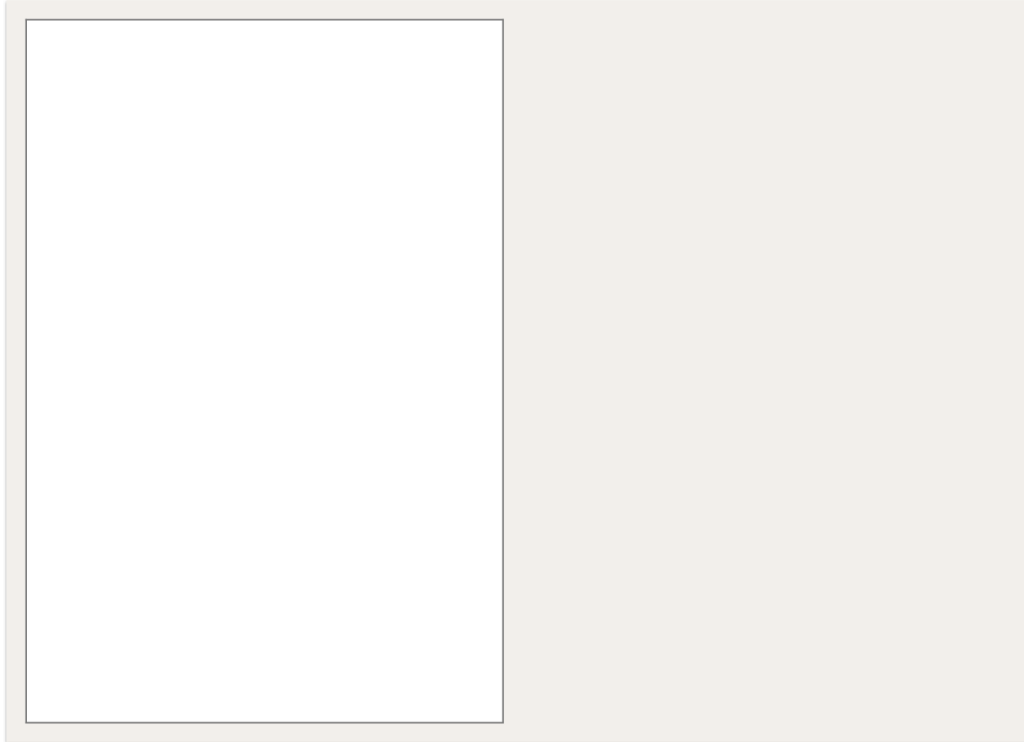
☐ 51-60

☐ 61-70

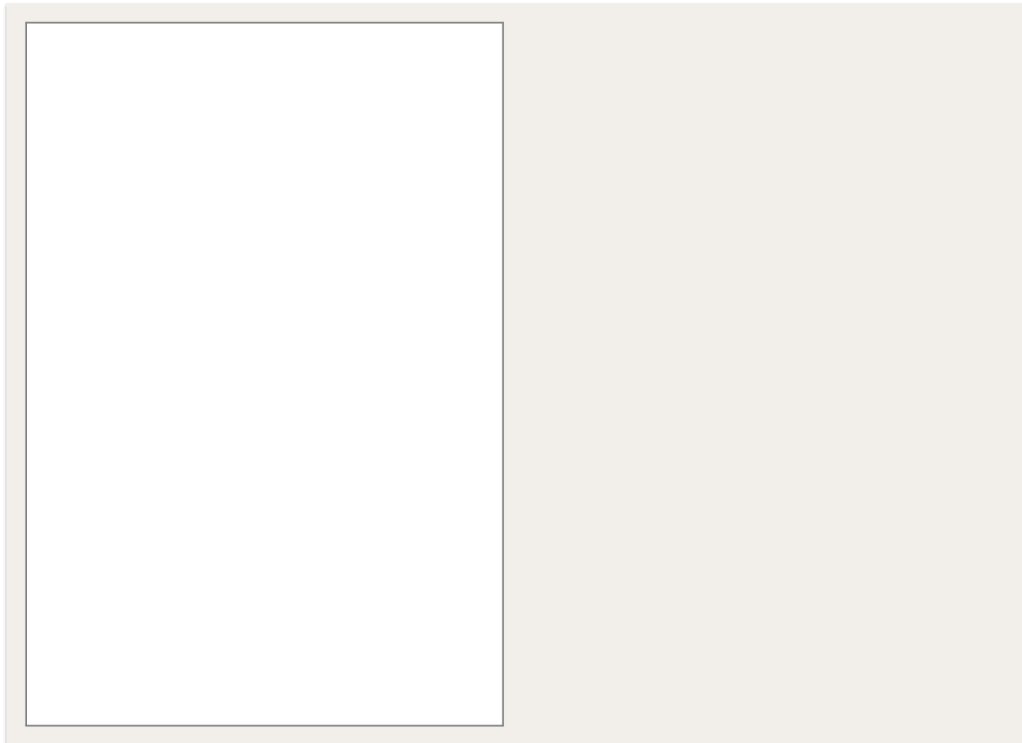
☐ 70+

**Cumhachd Ath-nuadhachail fo Shealbh na Coimhearsnachd**  
**| Renewable Energy Under Community Ownership**

4 Nur beachd-ne, dè cho cudromach 's a tha com-pàirteachas choimhearsnachdan ann an Alba ann an roinn na cumhachd ath-nuadhachail? Nach mìnich sibh ur freagairt. **In your opinion, how important is it for communities in Scotland to be involved with the renewable energy sector? Please explain your answer.**



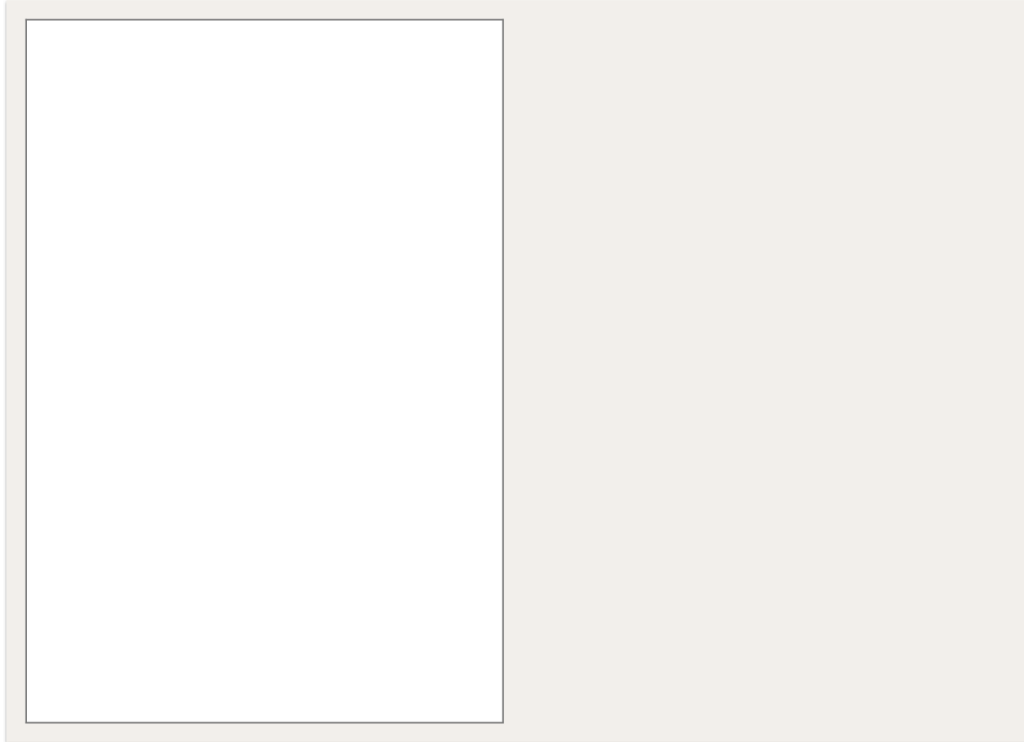
5 Dè cho furasta 's a tha e do choimhearsnachdan ann an Alba ri pròiseactan cumhachd ath-nuadhachail fo shealbh na coimhearsnachd a chur air dòigh? Nach minich sibh. **In Scotland, how difficult or easy is it for communities to establish community-owned renewable energy projects? Please explain.**



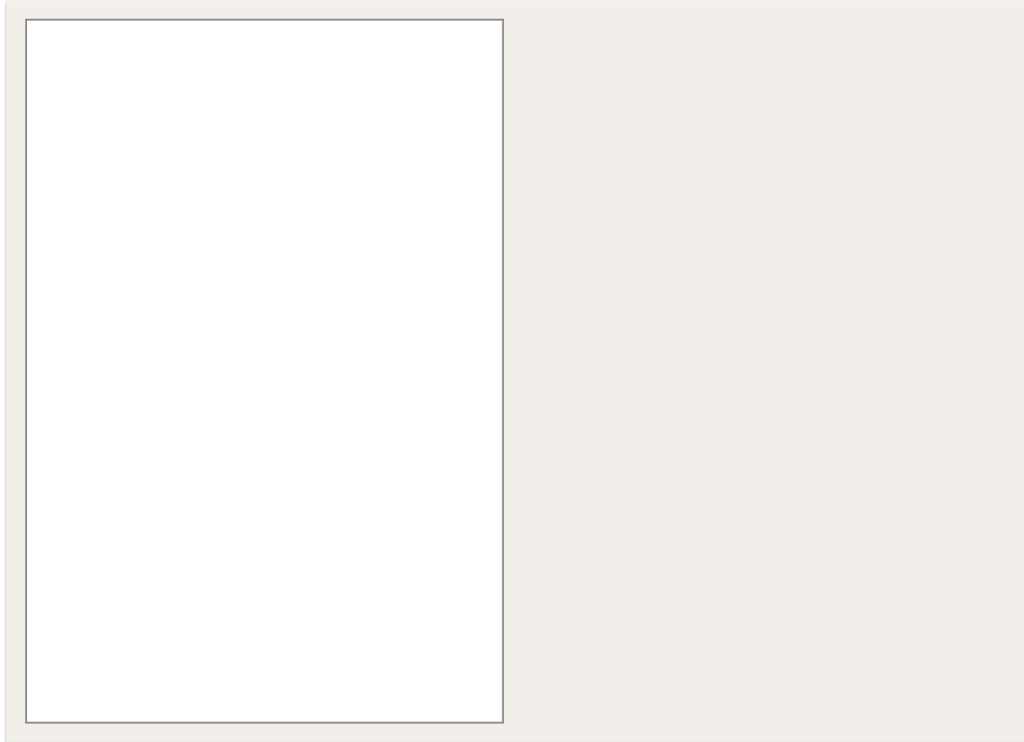
## Structaran taice do Sgeamaichean Cumhachd Ath-nuadhachail fo Shealbh na Coimhearsnachd | Support Structures for Community Owned Renewable Energy Schemes

6 Nur beachd-ne, a bheil taic gu leòr ri fhaighinn do sgeamaichean cumhachd ath-nuadhachail fo shealbh na coimhearsnachd ann an Alba? (m.e. aig ìre an t-sluaigh, agus aig ìre an riaghaltais ionadail no nàiseanta). Dè na h-adhbharan a th' agaibh do ur freagairt? **In your opinion, is there sufficient support for community owned renewable energy schemes in Scotland? (e.g. at grassroot, local government and national government levels). Please give reasons for your answer.**



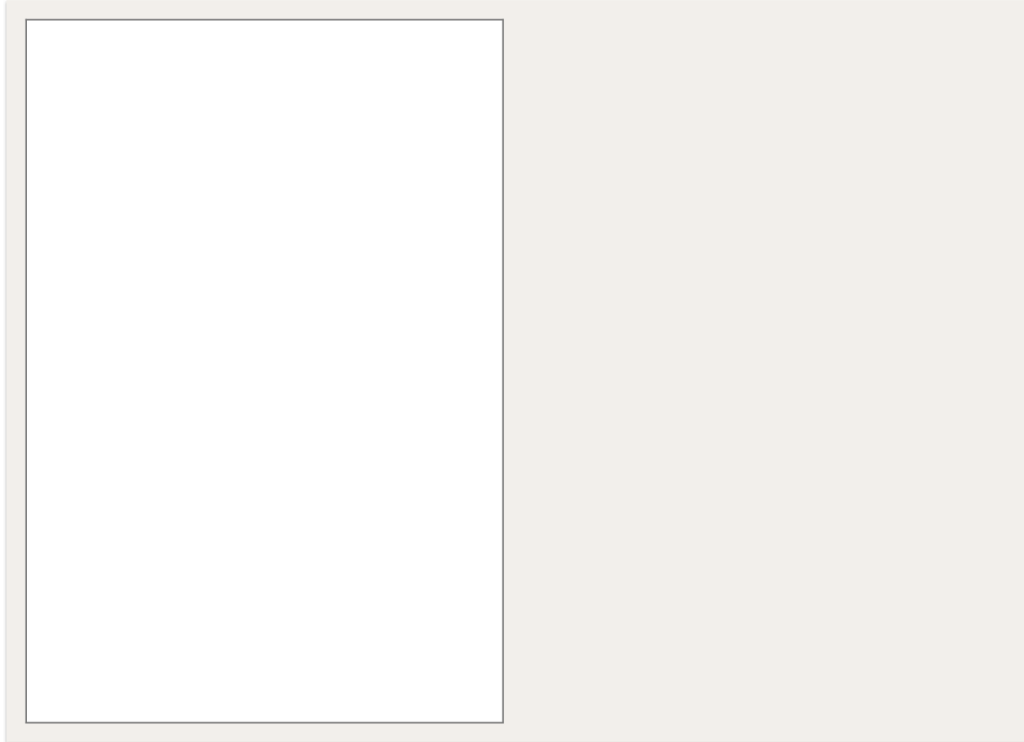


7 A bheil feum aig Pàrlamaid na h-Alba air cumhachdan reachdail a bharrachd gus roinn cumhachd na coimhearsnachd a leasachadh? Nach mìnich sibh ur freagairt. **Is there need for further legislative powers for the Scottish Parliament to develop the community energy sector? Please explain your answer.**

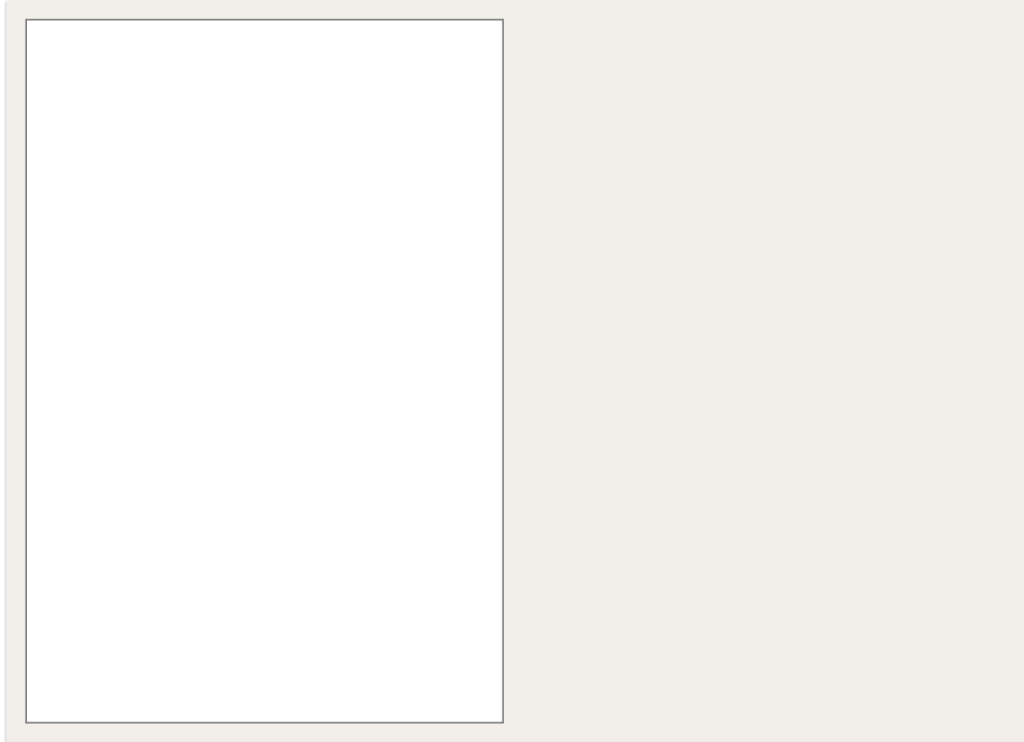


**Buannachdan don Choimhearsnachd à Sgeamaichean  
Cumhachd Ath-Nuadhachail fo Shealbh Ionadail |  
Community Benefits of locally-owned Renewable Energy  
Schemes**

8 Am faigh sgìrean dùthchail ann an Alba buannachdan à pròiseactan cumhachd ath-nuadhachail fo shealbh na coimhearsnachd? Dè na h-adhbharan a th' agaibh do ur freagairt? **Can local ownership of renewable energy projects benefit rural communities in Scotland? Please give reasons for your answer.**

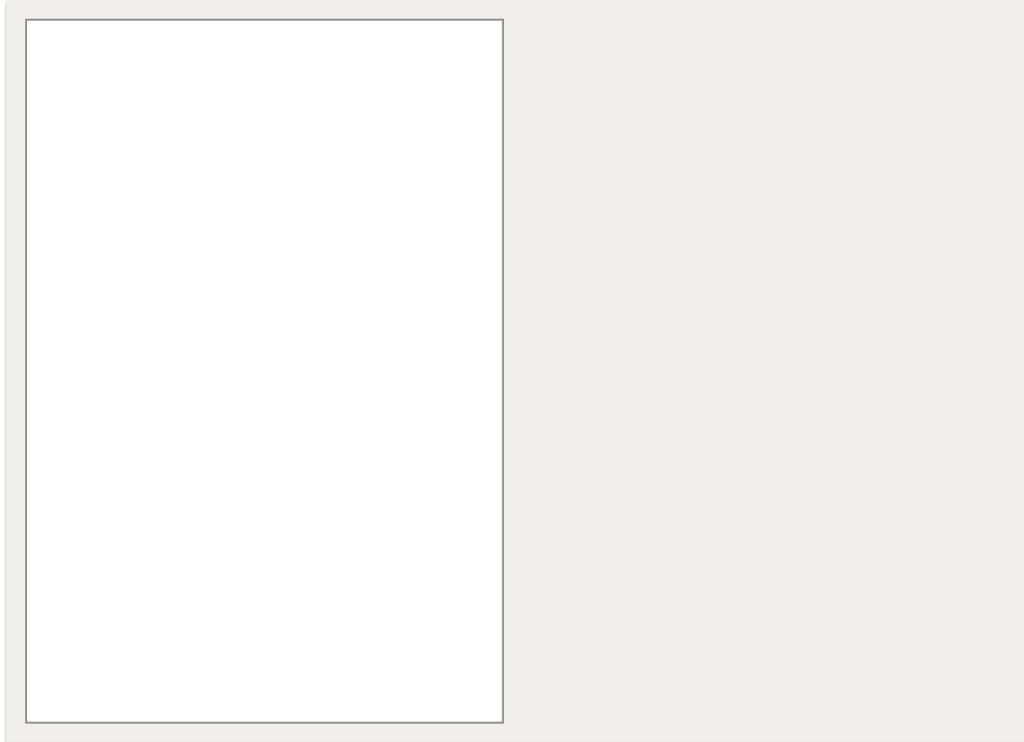


9 Nur beachd-ne, a bheil fios aig sgìrean dùthchail ann an Alba air na cothroman a th' ann airson sgeamaichean cumhachd ath-nuadhachail fo shealbh na coimhearsnachd a leasachadh dhaibh fhèin? Nach minich sibh ur freagairt. **In your opinion, is there awareness amongst rural communities in Scotland of the possibilities of developing community-owned renewable energy schemes themselves? Please explain your answer.**

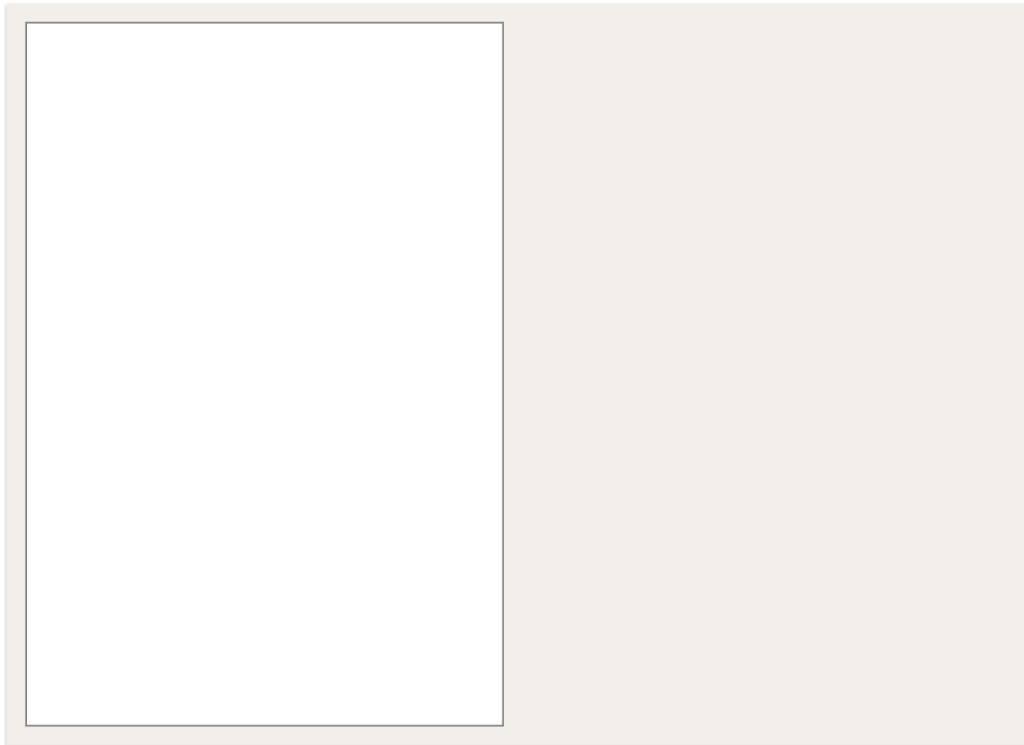


### **Leasachadh Cultarach air sàilleabh Cumhachd na Coimhearsnachd | Cultural Development through Community Energy**

**10** An tìgeadh buaidhean deimhinneach no àicheil air cultar sgìrean dùthchail na h-Alba à pròiseactan cumhachd fo shealbh na coimhearsnachd? (s.e. air cànan, dualchas, nòsan). Nan tìgeadh, ciamar? **Can community energy projects have a positive or negative effect on cultural aspects of rural communities in Scotland? (i.e. language, heritage, customs). If so, in what way?**

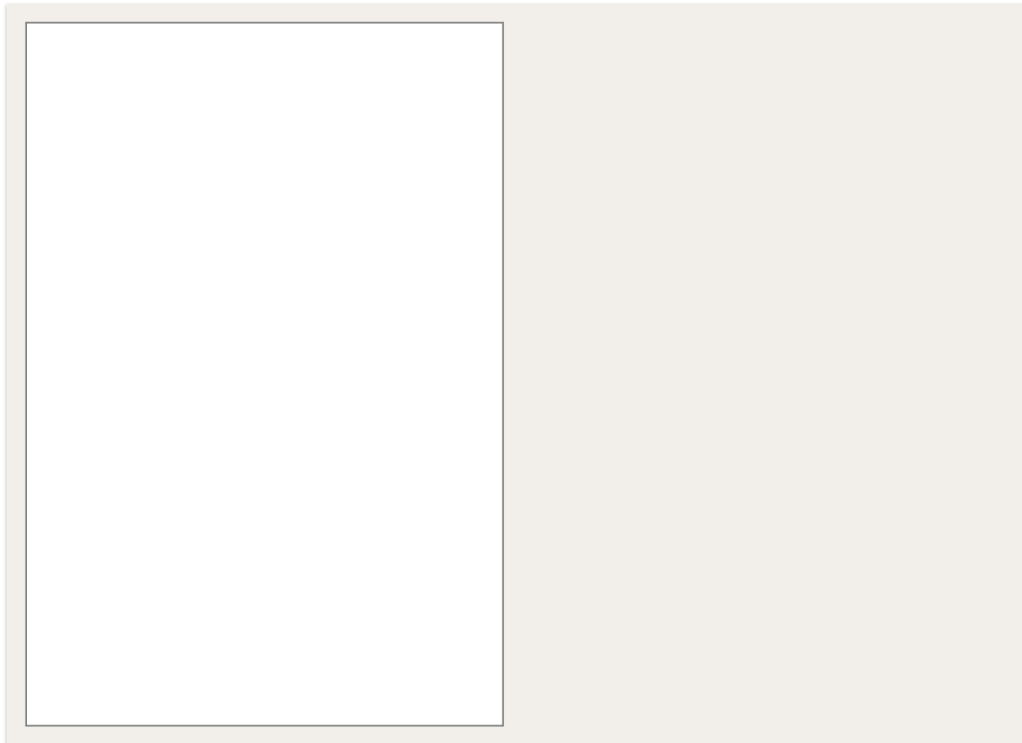


**11** Nur beachd-ne, a bheil dàimh do sgìre agus do dh'fhèin-aithne ionadail cudromach idir fhad 's a thathar a' cur buidheann cumhachd na coimhearsnachd air dòigh? Nach minich sibh ur freagairt. **In your opinion, is relationship to place and local identity important or not in starting a community energy group in rural Scotland? Please explain your answer.**

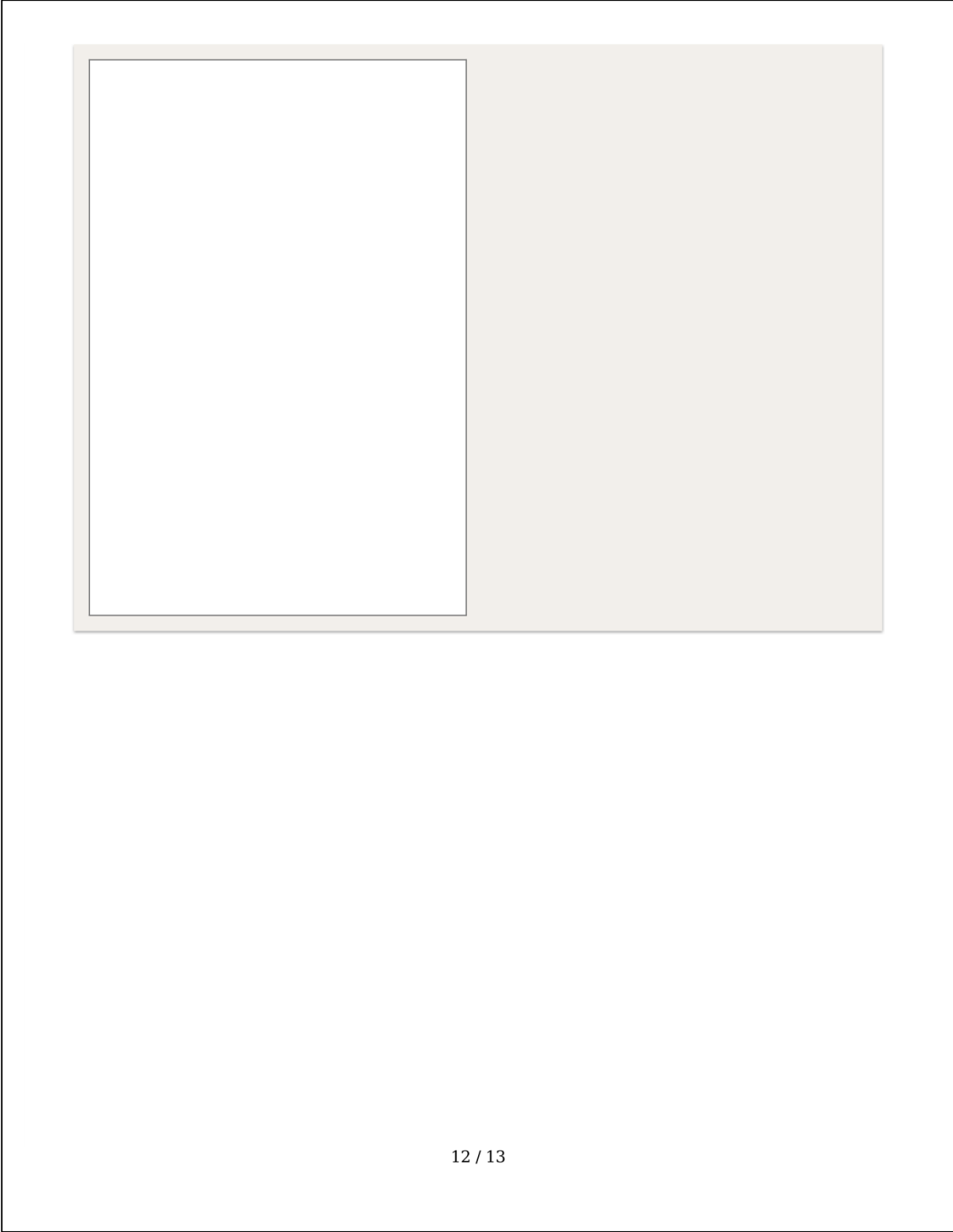


### **Leasachadh a' Mhargaidh 'Cùiltich' seo | Development of this 'Niche' Market**

**12** Dè tha a' cur bacadh air leasachadh roinn cumhachd na coimhearsnachd ann an Alba, nur beachd-ne? **What, in your opinion, impedes the development of the community energy sector in Scotland?**



**13** Dè leigeadh le sgeamaichean cumhachd na coimhearsnachd soirbheachadh san àm ri teachd, nur beachd-ne? (m.e. poileasaidh, maoineachadh, structaran taice, etc.) **What, in your opinion, is needed to allow community energy schemes in Scotland to develop in the future? (e.g. policy, funding, support structures etc)**





Mòran taing airson! Thank you very much!

Mòran taing airson ur cuideachaidh! Chaidh ur freagairt a chlàradh

**Thank you very much for your participation! Your response has been recorded**

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## APPENDIX 4

### SECOND ROUND OF THE DELPHI QUESTIONNAIRE: WALES

# Ynni Cymunedol yng Nghymru (Rhan 2) | Community Energy in Wales (Round 2)

## Page 1: Cynlluniau Ynni adnewyddol perchnogaeth gymunedol: Cefnogaeth, Gweledigaeth a Datblygiadau i'r dyfodol | Community Owned Renewable Energy Schemes: Support, Vision and Future Development

Diolch yn fawr am gytuno i gymryd rhan yn fy ymchwil ar ran Prifysgol Bangor, yn cymharu ynni cymunedol yng Nghymru a'r Alban. Rwy'n gobeithio y byddwch yn mwynhau rhan olaf o'r broses a'i fod yn syml a diddorol i'w gyflawni.

Dyma ail rownd i holiadur sydd yn cymharu'r gwahaniaethau yn fframwaith cefnogaeth, buddion a gweledigaeth i'r sector ynni cymunedol ymysg ymarferwyr, gweithwyr polisi, llywodraeth leol a llywodraeth ddatganoledig yng Nghymru a'r Alban.

Os bod yna unrhyw sylwadau pellach hoffwch ei gyfleu, croeso i chi gysylltu â mi ar unrhyw adeg: [sioned.haf@bangor.ac.uk](mailto:sioned.haf@bangor.ac.uk) / 07967771361

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*Thank you very much for taking part in my research at Bangor University comparing community energy in Wales and Scotland. I hope that you will find this final step of the process enjoyable and straightforward.*

*This is the second round to a questionnaire comparing the differences in support structures, advantages and visions for the community energy sector amongst practitioners, policy workers, local government and devolved government in Scotland and Wales.*

*If there are any other comments that you want to convey, feel free to contact me at any time: [sioned.haf@bangor.ac.uk](mailto:sioned.haf@bangor.ac.uk) / 07967771361*

## Page 2: Cyfarwyddiadau | Instructions

Mae'r cwestiynau i'w ddilyn yn cynnwys cyfres o ddyfyniadau o'r rownd flaenorol o'r holiadur.

Gofynnir i chi i gytuno neu anghytuno gyda'r dyfyniadau ar raddfa lithr. Mae yna hefyd fwlch ar gael er mwyn i chi esbonio'ch ymateb yn bellach neu gynnig sylwadau pellach. Mae'r ymarferiad hwn yn fodd o gyrraedd consensws barn ymysg y grŵp, neu i amlygu ardaloedd ble nad yw consensws yn bosib.

Mae'r cwestiynau wedi eu rhestru dan isdeitlau thematig - themâu ddaeth yn amlwg yn ystod dadansoddi rownd gyntaf o'r holiadur: **'Brwydr gyffredin?'**, **'Cefnogaeth'**, **'Gweledigaeth'**, **'Ymwybyddiaeth ar lawr gwlad'**, **'Lle, Tirwedd a Diwylliant'**, **'Democrateiddio'**, **'Cynaliadwyedd'**, **'Trefn Lywodraethol a Diwygiad Cyfansoddiadol'** a **'Datblygu i'r Dyfodol'**.

Unwaith i chi wasgu'r botwm 'continue' ar waelod bob dudalen bydd eich atebion yn cael eu cofnodi. Unwaith i chi wneud hyn, ni fydd bosib i chi golygu eich atebion pellach.

*I ail-ategu, mae eich manylion personol (i'w lenwi isod) go gyfer nodiadau'r ymchwilydd yn unig, ac mi fyddwch yn aros yn ddienw trwy gydol y broses hon*

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The following questionnaire is made up of a series of statements taken from respondents in the previous round.

You are asked to agree or disagree with these comments on a sliding scale. You are also given space to elaborate on your choice if you would like to explain your views further. This is a means of arriving at a consensus view amongst the group, or to highlight cases where consensus is unachievable.

The statements are listed under thematic titles - themes that became apparent in the analysis of the first round of questioning: **'A common struggle?'**; **'Support'**; **'Vision'**; **'Awareness at grassroots'**; **'Place, Landscape and Culture'**; **'Democratisation'**; **'Sustainability'**; **'Governance and Constitutional Reform'** and **'Future Development'**.

Once you press the 'continue' icon at the bottom of the page, your answers will be logged. Once this is done, you will not be able to go back and edit your answers.

*Note that your name and occupation (to be filled in below) are for the researcher's notes only, and your identity will remain anonymous throughout the process.*

## Manylion Details

1 Enw/Name:

2 Galwedigaeth/ Occupation:

3 Oed/ Age:

- ☐ 21-30
- ☐ 31-40
- ☐ 41-50
- ☐ 51-60
- ☐ 61-70
- ☐ 71+

## Page 3: Brwydr gyffredin? | A common struggle?

4 "It requires a huge amount of determination and resilience to develop community-owned assets in a system designed to facilitate corporate, capitalist developments."

- ☐ Cytuno'n Gryf Agree Strongly
- ☐ Cytuno Agree
- ☐ Ansicr Undecided
- ☐ Anghytuno Disagree
- ☐ Anghytuno'n gryf Disagree Strongly

4.a Sylwadau Pellach / Further Comments:

5 "One of the issues which has plagued Wales for centuries has been capital and resource flight, from rural community to urban, and from Wales to England and further afield. We need capital to remain within communities, as local money is more likely to be spent locally."

- ☐ Cytuno'n Gryf Agree Strongly
- ☐ Cytuno Agree
- ☐ Ansicr Undecided
- ☐ Anghytuno Disagree
- ☐ Anghytuno'n gryf Disagree Strongly

5.a Sylwadau Pellach / Further Comments:

4 / 32

6 "Grid connection is an enormous constraint that is exacerbated by the dominance of the Big Six energy companies and their business models that include generation, transmission, distribution and sales of energy. It is not in their interests to facilitate community scale renewables as it will affect their business interests in another part of their business."

- ☐ Cytuno'n Gryf Agree Strongly
- ☐ Cytuno Agree
- ☐ Ansicr Undecided
- ☐ Anghytuno Disagree
- ☐ Anghytuno'n gryf Disagree Strongly

6.a Sylwadau Pellach / Further Comments:

7 "(Mae) Toriadau i lefelau FITs ('Feed in Tarrifs') yn gwneud cynlluniau yn llai economaidd, ac felly yn anoddach codi'r cyllid cyfalafCuts in FITs (Feed in Tarrifs) levels make projects less economical, and therefore harder to raise the capital costs"

- ☐ Cytuno'n gryf Agree Strongly
- ☐ Cytuno Agree
- ☐ Ansicr Undecided

- ☐ Anghytuno Disagree
- ☐ Anghytuno'n gryf Disagree Strongly

7.a Sylwadau Pellach / Further Comments:

8 "Dydy'r cynlluniau ddim yn creu llawer o swyddi yn uniongyrchol, ac felly angen mwy o waith i ddangos y budd economaidd "The projects don't create many jobs instantly and therefore more work needs to be done to show economic benefits"

- ☐ Cytuno'n Gryf Agree Strongly
- ☐ Cytuno Agree
- ☐ Ansicr Undecided
- ☐ Anghytuno Disagree
- ☐ Anghytuno'n gryf Disagree Strongly

8.a Sylwadau Pellach / Further Comments:

9 "Cultural issues such as lack of confidence and belief in the abilities of local people to achieve together(*impedes the development of the community energy sector in Wales*). Combined with a history of being told Wales isn't good enough, big enough, developed enough, entrepreneurial enough, rich enough to take care of its own needs."

- ☐ Cytuno'n Gryf Agree Strongly
- ☐ Cytuno Agree
- ☐ Ansicr Undecided
- ☐ Anghytuno Disagree
- ☐ Anghytuno'n gryf Disagree Strongly

9.a Sylwadau Pellach / Further Comments:



## Page 4: Cefnogaeth |Support

**10** "(*There is...*) a lack of consistent support, both in terms of expertise and money. (*There are...*) Inconsistent messages from government - supportive in words but often not so much in actions (e.g. not taking on problems with the DNOs (*District Newtwork Operators*), difficult planning system, etc)."

- ☐ Cytuno'n Gryf Agree Strongly
- ☐ Cytuno Agree
- ☐ Ansicr Undecided
- ☐ Anghytuno Disagree
- ☐ Anghytuno'n gryf Disagree Strongly

**10.a** Sylwadau Pellach / Further Comments:

**11** "(*Mae...*) Polisi cenedlaethol yn gryfach yn Lloegr ac yr Alban "National policy is stronger in England and Scotland."

- ☐ Cytuno'n Gryf Agree Strongly
- ☐ Cytuno Agree
- ☐ Ansicr Undecided
- ☐ Anghytuno Disagree
- ☐ Anghytuno'n gryf Disagree Strongly

**11.a** Sylwadau Pellach / Further Comments:

**12** "Byddai bodolaeth unigolyn neu adnodd ar ffurf person i gynnig cefnogaeth ac arweiniad i grwpiau cymunedol yn amhrisiadwy yn fy marn i."The existence of an individual or resource in the form of a person who can offer support and leadership for community groups is invaluable in my opinion."

- ☐ Cytuno'n Gryf Agree Strongly
- ☐ Cytuno Agree
- ☐ Ansicr Undecided
- ☐ Anghytuno Disagree
- ☐ Anghytuno'n gryf Disagree Strongly

**12.a** Sylwadau Pellach / Further Comments:

## Page 5: Gweledigaeth | Vision

**13** "Rwy'n credu dylai Cymru ddilyn esiamplau o'r Alban ble mae cymunedau/fffermwyr wedi gwrthod cymerid rhent gan gwmnïau mawr o'r tu allan i wneud prosiectau ar eu tir, gan fynd ymlaen gyda'r prosiectau eu hunain. Golygai bod buddion economaidd yn aros yn lleol a chreu swyddi mewn ardaloedd gwledig.""I think Wales should follow examples in Scotland where communities/farmers have refused to take rent from large companies from outside to make projects on their land, by going ahead with the projects themselves. This means that economic benefits remain local and create jobs in rural areas"

- ☐ Cytuno'n Gryf Agree Strongly
- ☐ Cytuno Agree
- ☐ Ansicr Undecided
- ☐ Anghytuno Disagree
- ☐ Anghytuno'n gryf Disagree Strongly

**13.a** Sylwadau Pellach / Further Comments:

**14** "The income from... a (*community*) project would benefit rural communities further as it can be invested in local projects such as recreational, community halls and events. I feel these benefits need to be promoted further."

- ☐ Cytuno'n Gryf Agree Strongly
- ☐ Cytuno Agree
- ☐ Ansicr Undecided
- ☐ Anghytuno Disagree

☐ Anghytuno'n gryf Disagree Strongly

14.a Sylwadau Pellach / Further Comments:

## Page 6: Ymwybyddiaeth ar lawr gwlad |Awareness at grassroots

**15** " (Mae yna...) ymwybyddiaeth ymysg tîrffeddiannwyr/ffermwyr am gyfleoedd datblygu cynlluniau preifat, ond dim digon o ymwybyddiaeth ymysg llawer o gymunedau am y cyfleoedd a'r budd (o ddatblygu cynlluniau)." " (There is...) awareness amongst landowners/farmers about the possibilities of developing private schemes, but not enough awareness amongst many communities about the chances and the benefits (of developing schemes)."

- ☐ Cytuno'n Gryf Agree Strongly
- ☐ Cytuno Agree
- ☐ Ansicr Undecided
- ☐ Anghytuno Disagree
- ☐ Anghytuno'n gryf Disagree Strongly

**15.a** Sylwadau Pellach / Further Comments:

**16** "The lack of awareness which is mainly due to lack (of) information and knowledge poses two barriers; 1. people/community oppose to certain technologies - such as wind turbines - there is a lot of 'nimbyism' (*not in my back yard*) and unfortunately they influence a lot of planning decisions; 2. the lack of information and knowledge also hinder people/ community from obtaining renewable energy freely harnessed from their surroundings. It is a lost opportunity at all scales."

- ☐ Cytuno'n Gryf Agree Strongly

- ☐ Cytuno Agree
- ☐ Ansicr Undecided
- ☐ Anghytuno Disagree
- ☐ Anghytuno'n gryf Disagree Strongly

**16.a** Sylwadau Pellach / Further Comments:

**17** "Those in more affluent areas would be more inclined to research around the topic (*community energy*), and look at development. Whereas less well off rural areas would have no idea that they are able to develop, and even the potential benefits. Overall I think there is a lack of awareness in rural areas, unless they are particularly driven or know of other schemes nearby"

- ☐ Cytuno'n Gryf Agree Strongly
- ☐ Cytuno Agree
- ☐ Ansicr Undecided
- ☐ Anghytuno Disagree
- ☐ Anghytuno'n gryf Disagree Strongly

**17.a** Sylwadau Pellach / Further Comments:

## Page 7: Lle, Tirwedd a Diwylliant |Place, Landscape and Culture

**18** "For those who already have a relationship with place, feel their identity is part of their area and a sense of belonging, a community energy project provides an outlet for expressing that."

- ☐ Cytuno'n Gryf Agree Strongly
- ☐ Cytuno Agree
- ☐ Ansicr Undecided
- ☐ Anghytuno Disagree
- ☐ Anghytuno'n gryf Disagree Strongly

**18.a** Sylwadau Pellach / Further Comments:

**19** "(Mae...) Ynni adnewyddol/materion amgylcheddol yn dal i gael eu gweld fel rhywbeth yn perthyn i rai o du allan...Ar y llaw arall, mae mewnfudo yn dod a rhai newydd efo brwdfrydedd a gwybodaeth a sgiliau sydd yn medru bod yn sbardun i helpu datblygu cynlluniau cymunedol" "Renewable energy/ environmental matters are still being seen as things related to those from 'outside'...on the other hand, immigration brings people with enthusiasm and information and skills that can be a spur to help develop community schemes"

- ☐ Cytuno'n Gryf Agree Strongly
- ☐ Cytuno Agree
- ☐ Ansicr Undecided
- ☐ Anghytuno Disagree

☐ Anghytuno'n gryf Disagree Strongly

19.a Sylwadau Pellach / Further Comments:

20 "Fel bod y buddion economaidd yn cael eu defnyddio yn gywir...os nad oes gan bobl ddealltwriath o hunaniaeth a pherthynas at le, yna mae mwy o debygolrwydd fydd y buddion yn cael eu cam-ddefnyddio" "In order for the economic benefits to be used properly...if people don't have an understanding of identity and relationship to place, then there is more of a probability that the benefits would be misused."

- ☐ Cytuno'n Gryf Agree Strongly
- ☐ Cytuno Agree
- ☐ Ansicr Undecided
- ☐ Anghytuno Disagree
- ☐ Anghytuno'n gryf Disagree Strongly

20.a Sylwadau Pellach / Further Comments:

21 "For those new to an area participation in a community energy group can create a sense of belonging and increase understanding for the history and culture of the place involved by encouraging interaction with others in their area."



- ☐ Cytuno'n Gryf Agree Strongly
- ☐ Cytuno Agree
- ☐ Ansicr Undecided
- ☐ Anghytuno Disagree
- ☐ Anghytuno'n gryf Disagree Strongly

21.a Sylwadau Pellach / Further Comments:

22 "There is potential to bring a huge amount of economic benefit right into the heart of communities. This can be used make our communities more resilient and create sustainable work benefiting our culture and language."

- ☐ Cytuno'n Gryf Agree Strongly
- ☐ Cytuno Agree
- ☐ Ansicr Undecided
- ☐ Anghytuno Disagree
- ☐ Anghytuno'n gryf Disagree Strongly

22.a Sylwadau Pellach / Further Comments:

23 "On an economic level the development of increased local wealth could

support cultural initiatives. A small amount of local, skilled jobs could be supported by developments, helping to keep our young local."

- ☐ Cytuno'n Gryf Agree Strongly
- ☐ Cytuno Agree
- ☐ Ansicr Undecided
- ☐ Anghytuno Disagree
- ☐ Anghytuno'n gryf Disagree Strongly

**23.a** Sylwadau Pellach / Further Comments:

**24** "Long-term income under local control should improve community prospects, reducing the desire for out-migration, so retaining Welsh-speakers. And some of the income may be used for cultural activities and to enhance both tangible and intangible cultural heritage."

- ☐ Cytuno'n Gryf Agree Strongly
- ☐ Cytuno Agree
- ☐ Ansicr Undecided
- ☐ Anghytuno Disagree
- ☐ Anghytuno'n gryf Disagree Strongly

**24.a** Sylwadau Pellach / Further Comments:

25 "Gentrification of a community though large injections of funding does not always go hand in hand with maintaining and improving the cultural makeup of the community. It could be detrimental if not wisely planned for. Create an affluent community and house prices increase thus closing out some people from being able to afford to live in the community."

- ☐ Cytuno'n Gryf Agree Strongly
- ☐ Cytuno Agree
- ☐ Ansicr Undecided
- ☐ Anghytuno Disagree
- ☐ Anghytuno'n gryf Disagree Strongly

25.a Sylwadau Pellach / Further Comments:

## Page 8: Democrateiddio | Democratisation

**26** "Mae llawer iawn o adnoddau naturiol i'w gael yng Nghymru, y broblem ar hyn o bryd yw bod cwmnïau preifat yn dod mewn gan ddatblygu systemau ynni adnewyddol. Wrth wneud nid yw'r buddion arianol yn aros yn lleol, gyda cyfraniad bach os o gwbl yn aros yn lleol. Os buasai y cymunedau lleol berchen y systemau ynni adnewyddol yn lleol, byddai'r buddion economaidd yn cael effaith gadarnhaol anferth, yn enwedig mewn cymunedau gwledig Cymru" "There are many natural resources available in Wales, the current problem is that private companies come in and develop renewable energy systems. By doing so, the financial benefits are not retained locally, with little if any amount staying local. If local communities owned the renewable energy systems locally, the economic benefits would have a huge positive effect, especially in rural areas of Wales"

- ☐ Cytuno'n Gryf Agree Strongly
- ☐ Cytuno Agree
- ☐ Ansicr Undecided
- ☐ Anghytuno Disagree
- ☐ Anghytuno'n gryf Disagree Strongly

**26.a** Sylwadau Pellach / Further Comments:

**27** "...retaining the benefit locally ensures an increase in local wealth, an ability for communities to provide improved local services, support other local community initiatives and the development of economic multipliers that ensure for a sharing of the income throughout the local economy."

- ☐ Cytuno'n Gryf Agree Strongly

- ☐ Cytuno Agree
- ☐ Ansicr Undecided
- ☐ Anghytuno Disagree
- ☐ Anghytuno'n gryf Disagree Strongly

27.a Sylwadau Pellach / Further Comments:

## Page 9: Cynaliadwyedd | Sustainability

**28** "Credaf bod angen i unrhyw brosiect ynni adnewyddol fod yn bartneriaeth cyfartal rhwng datblygwyr a'r gymuned er mwyn sicrhau bod y budd a ddaw yn sgil unrhyw ddatblygiad yn cyfoethogi'r gymdogaeth leol er mwyn sicrhau cynaliadwyedd hir dymor." "I believe that any renewable energy project should be an equal partnership between developers and the community to ensure that the benefits that come from any development would enrich the local community thereby ensuring long term sustainability."

- ☐ Cytuno'n Gryf Agree Strongly
- ☐ Cytuno Agree
- ☐ Ansicr Undecided
- ☐ Anghytuno Disagree
- ☐ Anghytuno'n gryf Disagree Strongly

**28.a** Sylwadau Pellach / Further Comments:

**29** "Not only (*does*) small scale renewable energy provide economic benefits to a community, it has a social element as well which bring awareness on issues such as climate change etc. It teaches community about conserving energy and maximising their resources in a sustainable way."

- ☐ Cytuno'n Gryf Agree Strongly
- ☐ Cytuno Agree
- ☐ Ansicr Undecided
- ☐ Anghytuno Disagree

☐ Anghytuno'n gryf Disagree Strongly

29.a Sylwadau Pellach / Further Comments:

30 "...involving communities increases awareness of other benefits such as social and economic, not just environmental. I feel a bottom up approach is needed for the implementation of renewable energy, and so involving the communities will enable this."

- ☐ Cytuno'n Gryf Agree Strongly
- ☐ Cytuno Agree
- ☐ Ansicr Undecided
- ☐ Anghytuno Disagree
- ☐ Anghytuno'n gryf Disagree Strongly

30.a Sylwadau Pellach / Further Comments:

31 "Community-owned RE (*Renewable Energy*) developments make a direct impact on the de-carbonisation of our energy system, raise awareness within communities of climate change and other related environmental issues and provide an opportunity for communities to show stewardship over their local environment."

- ☐ Cytuno'n Gryf Agree Strongly
- ☐ Cytuno Agree
- ☐ Ansicr Undecided
- ☐ Anghytuno Disagree
- ☐ Anghytuno'n gryf Disagree Strongly

**31.a** Sylwadau Pellach / Further Comments:



## Page 10: Trefn Lywodraethol & Diwygiad Cyfansoddiadol | Governance & Constitutional Reform

**32** "We need to have planning control over energy developments at all levels. I think (*Welsh*) independence would only be a benefit in this regard"

- ☐ Cytuno'n Gryf Agree Strongly
- ☐ Cytuno Agree
- ☐ Ansicr Undecided
- ☐ Anghytuno Disagree
- ☐ Anghytuno'n gryf Disagree Strongly

**32.a** Sylwadau Pellach / Further Comments:

**33** "More powers would muddy the water. Let's get better with what we have before asking for more."

- ☐ Cytuno'n Gryf Agree Strongly
- ☐ Cytuno Agree
- ☐ Ansicr Undecided
- ☐ Anghytuno Disagree
- ☐ Anghytuno'n gryf Disagree Strongly

**33.a** Sylwadau Pellach / Further Comments:

34 "Energy is devolved in Wales and I think we have heard enough of Welsh government mourn that they could do a better job if they had all the powers but I don't think that is the case especially for community renewables. Aspects that help determine a RE (*Renewable Energy*) project are devolved such as planning and environment. It would be a good start if WG (*Welsh Government*) sort this before requesting for more powers. This in itself will address many issues; besides community renewable will fall within the threshold that WG has powers (below 50MW). It has been more than a year since the Low Carbon Transition kicked off, have not seen a great deal of progress."

- ☐ Cytuno'n Gryf Agree Strongly
- ☐ Cytuno Agree
- ☐ Ansicr Undecided
- ☐ Anghytuno Disagree
- ☐ Anghytuno'n gryf Disagree Strongly

34.a Sylwadau Pellach / Further Comments:

35 "...it would be good to have a programme such as Scotland's CARES (*Community and Renewable Energy Scheme*) which provides loans with a right off facility if projects do not go ahead. It also brings community and 'local' energy together, promoting links between communities and private landowner schemes. There is a lot more tangible ministerial support in Scotland."

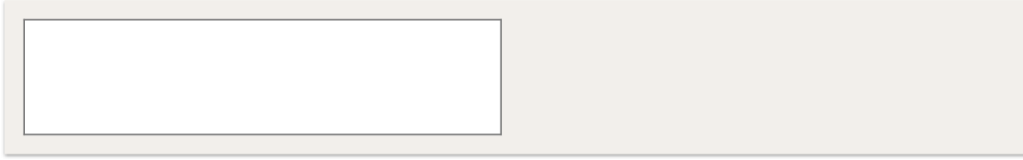
- ☐ Cytuno'n Gryf Agree Strongly
- ☐ Cytuno Agree
- ☐ Ansicr Undecided
- ☐ Anghytuno Disagree
- ☐ Anghytuno'n gryf Disagree Strongly

**35.a** Sylwadau Pellach / Further Comments:

**36** "...it is obvious that if the government puts its heart into it, it can move a lot faster and efficient...there are some technologies such as unconventional gas, has progressed a lot faster in this country, because the government helped pushed that by forming a new office within DECC (*Department of Energy and Climate Change*) to act as a coordinating unit between industry and public, incentives through tax subsidies and enhanced processes through planning etc. I don't think RE (*Renewable Energy*) has received the same kind of support on such short span, let alone community renewable."

- ☐ Cytuno'n Gryf Agree Strongly
- ☐ Cytuno Agree
- ☐ Ansicr Undecided
- ☐ Anghytuno Disagree
- ☐ Anghytuno'n gryf Disagree Strongly

**36.a** Sylwadau Pellach / Further Comments:



## Page 11: Datblygu i'r Dyfodol | Future Development

**37** "Byddai cefnogaeth ar ffurf swyddogion datblygu ar lawr gwlad a allai gynnig cefnogaeth a gwasanaeth 'hand holding' i grwpiau cymunedol...yn adnodd gwerthfawr iawn a allai bwyntio grwpiau cymunedol yn y cyfeiriad cywir a'u rhoi mewn cyswllt gyda cymunedau eraill sy'n gwneud yr un math o waith ""Support in the form of development officers that could offer support and a 'hand-holding' service for community groups would be a very valuable resource that could point community groups in the right direction and put them in contact with other communities that do the same sort of work"

- ☐ Cytuno'n Gryf Agree Strongly
- ☐ Cytuno Agree
- ☐ Ansicr Undecided
- ☐ Anghytuno Disagree
- ☐ Anghytuno'n gryf Disagree Strongly

**37.a** Sylwadau Pellach / Further Comments:

**38** "(Mae...) angen mwy o adnoddau i helpu ddatblygu Ynni Cymunedol Cymru (YGG) - (mae...)angen corff cynrychiadol cryfach fel Community Energy Scotland. Efallai gellir cael cyfran o incwm gan brosiectau cymunedol unwaith maen nhw'n cynhyrchu er mwyn helpu cynnal YCC. YCC i fod efo cynllun(iau) ei hun er mwyn cynhyrchu incwm.""More resources are needed to help develop Community Energy Wales (CEW) - there is need for a productive and stronger body like Community Energy Scotland. Perhaps a share of income from community projects once they're up and running could help support CEW. CEW should also have income generating plan(s) itself."

- ☐ Cytuno'n Gryf Agree Strongly
- ☐ Cytuno Agree
- ☐ Ansicr Undecided
- ☐ Anghytuno Disagree
- ☐ Anghytuno'n gryf Disagree Strongly

**38.a** Sylwadau Pellach / Further Comments:

**39** "There are programmes supporting individual projects (e.g. Ynni'r fro) and general advice from national or government sources (e.g. Plan local). What is lacking is the middle layer which brings projects in an area together to push each other forward and support each other."

- ☐ Cytuno'n Gryf Agree Strongly
- ☐ Cytuno Agree
- ☐ Ansicr Undecided
- ☐ Anghytuno Disagree
- ☐ Anghytuno'n gryf Disagree Strongly

**39.a** Sylwadau Pellach / Further Comments:

40 "Rwy'n credu os fyddai mwy o arian ar gael i gyflogi swyddogion i weithio ar brosiectau cymunedol byddai mwy yn cael eu sefydlu. Rhaid cymeryd y 'plunge' gan fuddsoddi i gael canlyniadau yn gynt." I think if there was more money available to employ officers to work on community projects, more would be established. The 'plunge' must be taken, and investment so that results can be achieved faster."

- ☐ Cytuno'n Gryf Agree Strongly
- ☐ Cytuno Agree
- ☐ Ansicr Undecided
- ☐ Anghytuno Disagree
- ☐ Anghytuno'n gryf Disagree Strongly

40.a Sylwadau Pellach / Further Comments:

41 "There is need for policy support, planning guidelines, set targets for community-ownership, and legal agreements on community benefit from large scale developments at a Welsh level. Welsh government intervention to enable timely, fairly costed grid connection would be welcomed as would the development of a Community Energy Strategy to compliment that of the UK government. All the above could be tied to a central body such as Community Energy Wales to ensure a focussed response to the needs of community groups interested in making RE (Renewable Energy) developments."

- ☐ Cytuno'n Gryf Agree Strongly
- ☐ Cytuno Agree
- ☐ Ansicr Undecided
- ☐ Anghytuno Disagree
- ☐ Anghytuno'n gryf Disagree Strongly

30 / 32

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**41.a** Sylwadau Pellach / Further Comments:

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## Page 12: Diolch yn Fawr! Thank you very much!

Diolch yn Fawr am eich cyfraniad! Mae eich ymateb wedi cael ei gofnodi

Thank you very much for your participation! Your response has been recorded.

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## APPENDIX 5

### SECOND ROUND OF THE DELPHI QUESTIONNAIRE: SCOTLAND

# Cumhachd na Coimhearsnachd ann an Alba (Cuairt 2) | Community Energy in Scotland (Round 2)

## Page 1: Sgeamaichean Cumhachd Ath-nuadhachail fo Shealbh na Coimhearsnachd: Taic, Sealladh agus Leasachadh san Àm ri Teachd | Community Owned Renewable Energy Schemes: Support, Vision and Future Development

*Taing mhòr dha-rìribh airson ur n-aontachaidh ri bhith an sàs san rannsachadh agam, le Oilthigh Bangor, a tha a' dèanamh coimheas air cumhachd na coimhearsnachd eadar a' Chuimrigh is Alba. Seo an dàrna cuairt den cheisteachan a tha a' dèanamh coimheas air eadar-dhealachaidhean ann an structaran-taice, buannachdan agus mòr-mhiannan do roinn chumhachd na coimhearsnachd, am measg ghnàthaichearan, oibrichean poileasaidh agus an riaghaltas ionadail is nàiseanta ann an Alba is sa Chuimrigh.*

*Ma tha beachdan eile agaibh a bu toil leibh innse dhomh, bhiodh sibh di-bheathte fios a leigeil thugam. Faodaidh sibh seo a dhèanamh uair sam bith; [sioned.haf@bangor.ac.uk](mailto:sioned.haf@bangor.ac.uk) / 07967771361*

*\* Thoiribh fa-near gu bheil a' cheisteachan seo dà-chànanach ann an Gàidhlig/Beurla seach gun deach an rannsachadh roimhe ga chumail am measg choimhearsnachdan sna h-Innse Gall. Tha làn fhios aig an rannsaiche air iomadachd chànan ann an Alba, ach gu mì-fhòrtanach cha robh e comasach gach fear a chleachdadh.-----*

*Thank you very much for taking part in my research at Bangor University comparing community energy in Wales and Scotland. I hope that you will find this final step of the process enjoyable and straightforward. This is the second round to a questionnaire comparing the differences in support structures, advantages and*

*visions for the community energy sector amongst practitioners, policy workers, local government and devolved government in Scotland and Wales.*

*If there are any other comments that you want to convey at any time, feel free to contact me at: [sioned.haf@bangor.ac.uk](mailto:sioned.haf@bangor.ac.uk) / 07967771361*

*\*Please note, as previous research has focused on communities in the Hebrides, the questionnaire is bilingual Gaelic/English. Although the researcher is aware of the linguistic diversity in Scotland, it was unfortunately not possible to incorporate all languages.*

## Page 2: Stiùireadh | Instructions

'S ann bho aithrisean nan daoine a ghabh pàirt sa chiad chuairt a chaidh a' cheisteachan seo a chruthachadh.

Bu mhath leinn ur beachdan fhèin air na beachdan seo chun na h-ìre a dh'aontaicheas sibh riutha. Tha àite ann cuideachd dhuibh, ma thogras sibh barrachd mhìneachaidh a thoirt seachad air na thaghas sibh. 'S e dòigh a tha seo ri beachdan coitcheann a lorg am measg na buidhne, no son suidheachaidhean a shònrachadh far nach gabh tè a ruigsinn ann.

Chaidh na h-aithrisean a chruinneachadh fo thiotalan cuspaireil - cuspairean a nochd bho mhion-sgrùdadh fhreagairtean a' chiad chuairt: **'Strì choitcheann?'; 'Taic'; 'Sealladh'; 'Eòlas am measg an t-sluaigh'; 'Àite, Àrainneachd is Dualchas'; 'Leasachadh deamocrasaidh'; 'So-sheasmhachd'; 'Riaghlachas is Ath-leasachadh Bun-reachdail'** agus **'Leasachadh san Àm ri Teachd'**.

Ma bhriogas sibh air a' phutan 'continue' aig bonn na duilleig, thèid ur freagairtean a chlàradh. Ma nì sibh sin, cha tèid agaibh air ur freagairtean a dheasachadh nas motha.

*Thoiribh fa-near nach ann ach airson eòlas an rannsaiche a bhios ur n-ainm agus ur dreuchd (a thèid iarraidh oirbh gu h-ìosal). Bidh sibh neo-ainmichte air feadh na suirbhidh seo.-----*

The following questionnaire is made up of a series of statements taken from respondents in the previous round.

You are asked to agree or disagree with these comments on a sliding scale. You are also given space to elaborate on your choice if you would like to explain your views further. This is a means of arriving at a consensus view amongst the group, or to highlight cases where consensus is unachievable.

The statements are listed under thematic titles - themes that became apparent in the analysis of the first round of questioning: **'A common struggle?'; 'Support'; 'Vision'; 'Awareness at grassroots'; 'Place, Landscape and Culture'; 'Democratisation'; 'Sustainability'; 'Governance and Constitutional Reform'** and **'Future Development'**.

Once you press the 'continue' icon at the bottom of the page, your answers will be logged. Once this is done, you will not be able to go back and edit your answers.

*Note that your name and occupation (to be filled in below) are for the researcher's notes only, and your identity will remain anonymous throughout the process.*

## Details

1 Ainm / Name:

2 Dreuchd/ Occupation:

3 Aois/ Age:

- ☐ 21-30
- ☐ 31-40
- ☐ 41-50
- ☐ 51-60
- ☐ 61-70
- ☐ 70+

## Page 3: Strì choitcheann? | A common struggle?

4 "It is difficult for most communities to find the time and capacity to spend working through all the necessary steps, gaining local support, finding a suitable project and obtaining the necessary agreements with landowners before even starting construction."

- ☐ Agree Strongly Seo mo bheachd-sa gu tur
- ☐ Agree Seo mo bheachd-sa gu h-ìre
- ☐ Undecided Chan eil beachd agam
- ☐ Disagree Chan e seo mo bheachd-sa
- ☐ Disagree Strongly Chan e seo mo bheachd-sa ann

4.a Further Comments / Tuilleadh bheachdan:

5 "There are... aspects that apply equally to community projects and private developers, such as access to the grid, the mismatch in the process of securing planning, grid connection and dealing with statutory consultees who may only object at the final stage of the planning process"

- ☐ Agree Strongly Seo mo bheachd-sa gu tur
- ☐ Agree Seo mo bheachd-sa gu h-ìre
- ☐ Undecided Chan eil beachd agam
- ☐ Disagree Chan e seo mo bheachd-sa
- ☐ Disagree strongly Chan e seo mo bheachd-sa ann

5.a Further Comments / Tuilleadh bheachdan:

6 "The complexity of balancing the planning, securing a grid connection and dealing with statutory consultees, particularly MoD (*Ministry of Defence*) (...*is a difficulty*). Additionally, the attempts by external lobby groups to impose environmental designations on rural land that prevent development of any sort. Rural economies need more than tourism to survive."

- ☐ Agree Strongly Seo mo bheachd-sa gu tur
- ☐ Agree Seo mo bheachd-sa gu h-ìre
- ☐ Undecided Chan eil beachd agam
- ☐ Disagree Chan e seo mo bheachd-sa
- ☐ Disagree strongly Chan e seo mo bheachd-sa ann

6.a Further Comments / Tuilleadh bheachdan:

7 "On the one hand there is clear support from the Scottish government to support 'community and locally owned' energy through the CARES funding and a 500MW target. However, there are also huge barriers...So it is certainly a lot easier than for example in Poland or Spain but that does not make it easy"

- ☐ Agree Strongly Seo mo bheachd-sa gu tur
- ☐ Agree Seo mo bheachd-sa gu h-ìre

6 / 29

- ☐ Undecided Chan eil beachd agam
- ☐ Disagree Chan e seo mo bheachd-sa
- ☐ Disagree Strongly Chan e seo mo bheachd-sa ann

**7.a** Further Comments / Tuilleadh bheachdan:



## Page 4: Taic | Support

8 "The Land Reform Act that increased and expanded the number of communities able to own their own land/estates...This has significantly increased the opportunities for communities to purchase the land and water resources essential to delivering such projects."

- ☐ Agree Strongly Seo mo bheachd-sa gu tur
- ☐ Agree Seo mo bheachd-sa gu h-ìre
- ☐ Undecided Chan eil beachd agam
- ☐ Disagree Chan e seo mo bheachd-sa
- ☐ Disagree Strongly Chan e seo mo bheachd-sa ann

8.a Further Comments/Tuilleadh bheachdan:

9 "The SG (*Scottish Government*) provides a wide range of advice and support, free at the point of use, through...Community and Renewable Energy Scheme (CARES) to support community wishes to be involved in renewable projects, as owners, in JV (*joint ventures*) or get the best deal from commercial developments happening on their doorstep."

- ☐ Agree Strongly Seo mo bheachd-sa gu tur
- ☐ Agree Seo mo bheachd-sa gu h-ìre
- ☐ Undecided Chan eil beachd agam
- ☐ Disagree Chan e seo mo bheachd-sa
- ☐ Disagree Strongly Chan e seo mo bheachd-sa ann

9.a Further Comments/Tuilleadh bheachdan:

10 "While Scottish Government support through CARES (*Community and Renewable Energy Scheme*) and membership organisations such as Community Energy Scotland should make the process easier, it remains the case that establishing a community energy project is rarely an easy process."

- ☐ Agree Strongly Seo mo bheachd-sa gu tur
- ☐ Agree Seo mo bheachd-sa gu h-ìre
- ☐ Undecided Chan eil beachd agam
- ☐ Disagree Chan e seo mo bheachd-sa
- ☐ Disagree Strongly Chan e seo mo bheachd-sa ann

10.a Further Comments/Tuilleadh bheachdan:

11 "SG (*Scottish Government*) offer support to land managers and farmer on the proviso that they must provide a wider community benefit to the local community in the form of £10,000 per MW. SG encourages landowners and farmers to enter into JVs (*joint ventures*), joint ownership arrangements with their local communities."

- ☐ Agree Strongly Seo mo bheachd-sa gu tur
- ☐ Agree Seo mo bheachd-sa gu h-ìre

- ☐ Undecided Chan eil beachd agam
- ☐ Disagree Chan e seo mo bheachd-sa
- ☐ Disagree Strongly Chan e seo mo bheachd-sa ann

**11.a** Further Comments/Tuilleadh bheachdan:

## Page 5: Sealladh | Vision

**12** "While there will always be a case for projects with high social or environmental benefits that are not captured by traditional economic valuation to be supported by grant funding, it also perpetuates a sense that community energy is a 'nice to have' rather than an integrated, fundamental part of our energy system."

- ☐ Agree Strongly Seo mo bheachd-sa gu tur
- ☐ Agree Seo mo bheachd-sa gu h-ìre
- ☐ Undecided Chan eil beachd agam
- ☐ Disagree Chan e seo mo bheachd-sa
- ☐ Disagree Strongly Chan e seo mo bheachd-sa ann

**12.a** Further Comments/Tuilleadh bheachdan:

**13** "Given the potential return on investment of renewable energy schemes, it is clear that these can massively benefit rural communities. Income could be used to set up collective benefit funds for retrofitting/sustainable community transport/creation of employment opportunities within the community etc."

- ☐ Agree Strongly Seo mo bheachd-sa gu tur
- ☐ Agree Seo mo bheachd-sa gu h-ìre
- ☐ Undecided Chan eil beachd agam
- ☐ Disagree Chan e seo mo bheachd-sa
- ☐ Disagree Strongly Chan e seo mo bheachd-sa ann

13.a Further Comments/Tuilleadh bheachdan:

14 "Active promotion of the benefits of such schemes to communities is required, as well as improved access to funding. Perhaps more engagement with local communities by local authorities would go some way to encouraging more applications."

- ☐ Agree Strongly Seo mo bheachd-sa gu tur
- ☐ Agree Seo mo bheachd-sa gu h-ìre
- ☐ Undecided Chan eil beachd agam
- ☐ Disagree Chan e seo mo bheachd-sa
- ☐ Disagree Strongly Chan e seo mo bheachd-sa ann

14.a Further Comments/ Tuilleadh bheachdan:

## Page 6: Eòlas am measg an t-sluaigh | Awareness at grassroots

**15** "There are plenty of examples of rural communities in Scotland that have developed community energy schemes which illustrates an awareness of this possibility. Saying that, and given the support available, uptake in Scotland is relatively small compared to citizen involvement for example in Denmark or Germany."

- ☐ Agree Strongly Seo mo bheachd-sa gu tur
- ☐ Agree Seo mo bheachd-sa gu h-ìre
- ☐ Undecided Chan eil beachd agam
- ☐ Disagree Chan e seo mo bheachd-sa
- ☐ Disagree Strongly Chan e seo mo bheachd-sa ann

**15.a** Further Comments / Tuilleadh bheachdan:

**16** "Awareness is particularly high in the Western Isles and Orkney for example, but lower in Sutherland and the Scottish Borders, where fewer projects have happened to date."

- ☐ Agree Strongly Seo mo bheachd-sa gu tur
- ☐ Agree Seo mo bheachd-sa gu h-ìre
- ☐ Undecided Chan eil beachd agam
- ☐ Disagree Chan e seo mo bheachd-sa
- ☐ Disagree Strongly Chan e seo mo bheachd-sa ann

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**16.a** Further Comments / Tuilleadh bheachdan:

**17** "Awareness appears to vary between communities but I believe it is increasing with more communities looking at their renewable energy options. This is perhaps as a result of them seeing the benefits that are arising from other community projects."

- ☐ Agree Strongly Seo mo bheachd-sa gu tur
- ☐ Agree Seo mo bheachd-sa gu h-ìre
- ☐ Undecided Chan eil beachd agam
- ☐ Disagree Chan e seo mo bheachd-sa
- ☐ Disagree Strongly Chan e seo mo bheachd-sa ann

**17.a** Further Comments / Tuilleadh bheachdan:

## Page 7: Àite, Àrainneachd is Dualchas | Place, Landscape and Culture

**18** "Communities are best placed to agree amongst themselves how to invest any profit generated, and this could well be in encouraging uptake of Gaelic, maintaining sites of interest or encouraging tourism to the area. Conversely, it is possible to see a gradual erosion of culture if schemes are not managed effectively."

- ☐ Agree Strongly Seo mo bheachd-sa gu tur
- ☐ Agree Seo mo bheachd-sa gu h-ìre
- ☐ Undecided Chan eil beachd agam
- ☐ Disagree Chan e seo mo bheachd-sa
- ☐ Disagree Strongly Chan e seo mo bheachd-sa ann

**18.a** Further Comments / Tuilleadh bheachdan:

**19** "...without funds to sustain local communities, many rural areas will continue to depopulate and that is certain to have negative effects on all cultural aspects."

- ☐ Agree Strongly Seo mo bheachd-sa gu tur
- ☐ Agree Seo mo bheachd-sa gu h-ìre
- ☐ Undecided Chan eil beachd agam
- ☐ Disagree Chan e seo mo bheachd-sa
- ☐ Disagree Strongly Chan e seo mo bheachd-sa ann



19.a Further Comments / Tuilleadh bheachdan:

20 "Tha ceangal ann eadar gnothaichean eaconamach, sòisealtach agus cànan, gus cothroman cosnadh ùra a thoirt dha òigridh bhon sgìre aig a bheil Gàidhlig. Ach, dh'fhaodadh seo a bhith toirt buaidh air a' Ghàidhlig le luchd-obrach aig nach eil a' chanain a' tighinn a-steach dhan sgìre agus a' lagachadh cleachdadh na Gàidhlig." There is a connection between economic, social and linguistic matters, which gives new employment opportunities to the Gaelic-speaking young people in an area. But, this can have an impact on Gaelic itself, as a result of workers, who don't speak the language, coming into the area and weakening the use of Gaelic.

- ☐ Agree Strongly Seo mo bheachd-sa gu tur
- ☐ Agree Seo mo bheachd-sa gu h-ìre
- ☐ Undecided Chan eil beachd agam
- ☐ Disagree Chan e seo mo bheachd-sa
- ☐ Disagree Strongly Chan e seo mo bheachd-sa ann

20.a Further Comments / Tuilleadh bheachdan:

21 "Relationship to place and local identity makes it easier to start a group, in that there are boundaries you can work to, places you can target and people you know better, but it is important to find people with a similar agenda, and that can require looking at a wider area."

- ☐ Agree Strongly Seo mo bheachd-sa gu tur
- ☐ Agree Seo mo bheachd-sa gu h-ìre
- ☐ Undecided Chan eil beachd agam
- ☐ Disagree Chan e seo mo bheachd-sa
- ☐ Disagree Strongly Chan e seo mo bheachd-sa ann

**21.a** Further Comments / Tuilleadh bheachdan:

## Page 8: Leasachadh deamocrasaidh | Democratisation

**22** "More needs to be done in addressing the monopolistic attitudes of the major power companies and their access to infrastructure. It was built (originally) by the nation, maintained and upgraded (until recently) by the nation and so should be accessible to communities of any size and aspiration."

- ☐ Agree Strongly Seo mo bheachd-sa gu tur
- ☐ Agree Seo mo bheachd-sa gu h-ìre
- ☐ Undecided Chan eil beachd agam
- ☐ Disagree Chan e seo mo bheachd-sa
- ☐ Disagree Strongly Chan e seo mo bheachd-sa ann

**22.a** Further Comments / Tuilleadh bheachdan:

**23** "It (*community energy*) creates a shift from energy dependency and dependency on fossil fuels to energy sovereignty and potential income generation."

- ☐ Agree Strongly Seo mo bheachd-sa gu tur
- ☐ Agree Seo mo bheachd-sa gu h-ìre
- ☐ Undecided Chan eil beachd agam
- ☐ Disagree Chan e seo mo bheachd-sa
- ☐ Disagree Strongly Chan e seo mo bheachd-sa ann

**23.a** Further Comments / Tuilleadh bheachdan:



## Page 9: So-sheasmhachd | Sustainability

**24** "Community ownership of a revenue generating renewable project brings financial sustainable income to the community and results in greater community confidence and capacity that will equip communities to maximise the impact from any income generated."

- ☐ Agree Strongly Seo mo bheachd-sa gu tur
- ☐ Agree Seo mo bheachd-sa gu h-ìre
- ☐ Undecided Chan eil beachd agam
- ☐ Disagree Chan e seo mo bheachd-sa
- ☐ Disagree Strongly Chan e seo mo bheachd-sa ann

**24.a** Further Comment / Tuilleadh bheachdan:

**25** "Larger scale projects can generate significant revenues for investment within a community to deliver social and economic regeneration. With a consistent long-term revenue stream longer term plans can be created that will deliver sustainable activity."

- ☐ Agree Strongly Seo mo bheachd-sa gu tur
- ☐ Agree Seo mo bheachd-sa gu h-ìre
- ☐ Undecided Chan eil beachd agam
- ☐ Disagree Chan e seo mo bheachd-sa
- ☐ Disagree Strongly Chan e seo mo bheachd-sa ann

25.a Further Comments / Tuilleadh bheachdan:

26 "Renewable energy projects can also be implemented to reduce fuel poverty and/or improve the viability/sustainability of rural businesses by reducing costs and improving competitiveness."

- ☐ Agree Strongly Seo mo bheachd-sa gu tur
- ☐ Agree Seo mo bheachd-sa gu h-ìre
- ☐ Undecided Chan eil beachd agam
- ☐ Disagree Chan e seo mo bheachd-sa
- ☐ Disagree Strongly Chan e seo mo bheachd-sa ann

26.a Further Comments / Tuilleadh bheachdan:

27 "It allows communities to take positive action on climate change instead of waiting passively for government to make decisions on their behalf."

- ☐ Agree Strongly Seo mo bheachd-sa gu tur
- ☐ Agree Seo mo bheachd-sa gu h-ìre
- ☐ Undecided Chan eil beachd agam
- ☐ Disagree Chan e seo mo bheachd-sa
- ☐ Disagree Strongly Chan e seo mo bheachd-sa ann

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27.a Further Comments / Tuilleadh bheachdan:

28 "It has the potential to help people make a connection between supporting a transition to renewables and their own energy consumption (easier where community groups are also suppliers)."

- ☐ Agree Strongly Seo mo bheachd-sa gu tur
- ☐ Agree Seo mo bheachd-sa gu h-ìre
- ☐ Undecided Chan eil beachd agam
- ☐ Disagree Chan e seo mo bheachd-sa
- ☐ Disagree Strongly Chan e seo mo bheachd-sa ann

28.a Further Comments / Tuilleadh bheachdan:

## Page 10: Riaghlachas is Ath-leasachadh Bun-reachdail | Governance & Constitutional Reform

**29** "I think the focus should not be on who has the legislative power but whether that power is or would be used to make changes that support community energy and the renewables transition at large."

- ☐ Agree Strongly Seo mo bheachd-sa gu tur
- ☐ Agree Seo mo bheachd-sa gu h-ìre
- ☐ Undecided Chan eil beachd agam
- ☐ Disagree Chan e seo mo bheachd-sa
- ☐ Strongly Disagree Chan e seo mo bheachd-sa ann

**29.a** Further Comments / Tuilleadh bheachdan:

**30** "Energy policy is not a devolved power, along with the regulation of energy markets, incentives and infrastructure. Nor is policy on State Aid, or taxation. Therefore if the Scottish Parliament wanted to pursue a radically different policy on community energy to the current UK government, it seems that additional legislative powers would be necessary."

- ☐ Agree Strongly Seo mo bheachd-sa gu tur
- ☐ Agree Seo mo bheachd-sa gu h-ìre
- ☐ Undecided Chan eil beachd agam
- ☐ Disagree Chan e seo mo bheachd-sa
- ☐ Disagree Strongly Chan e seo mo bheachd-sa ann



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30.a Further Comments / Tuilleadh bheachdan:

31 "There are areas already within the Scottish Parliament's control, such as planning, where the current government has failed to take a clear lead in favour of community energy. In the context of the referendum, calls for additional legislative powers are inevitably politicised; however unless firm commitments are made to the necessary changes there is no guarantee that additional powers will in themselves bring about an improvement."

- ☐ Agree Strongly Seo mo bheachd-sa gu tur
- ☐ Agree Seo mo bheachd-sa gu h-ìre
- ☐ Undecided Chan eil beachd agam
- ☐ Disagree Chan e seo mo bheachd-sa
- ☐ Disagree Strongly Chan e seo mo bheachd-sa ann

31.a Further Comments / Tuilleadh bheachdan:

32 "Independence for Scotland would allow the SG (*Scottish Government*) to set its own priorities, but who knows whether the funding would be sufficient to pay for it? Not sure whether this would be one of the areas covered by Devo-max should the referendum vote be No."

- ☐ Agree Strongly Seo mo bheachd-sa gu tur
- ☐ Agree Seo mo bheachd-sa gu h-ìre
- ☐ Undecided Chan eil beachd agam
- ☐ Disagree Chan e seo mo bheachd-sa
- ☐ Disagree Strongly Chan e seo mo bheachd-sa ann

**32.a** Further Comments / Tuilleadh bheachdan:

## Page 11: Leasachadh san Àm ri Teachd | Future Development

**33** "Unless the regulatory, planning, and financial systems are fundamentally changed to ensure a more even playing field, then I am personally doubtful that any level of targeted financial support will be able to release the full potential of the community sector."

- ☐ Agree Strongly Seo mo bheachd-sa gu tur
- ☐ Agree Seo mo bheachd-sa gu h-ìre
- ☐ Undecided Chan eil beachd agam
- ☐ Disagree Chan e seo mo bheachd-sa
- ☐ Disagree Strongly Chan e seo mo bheachd-sa ann

**33.a** Further Comments / Tuilleadh bheachdan:

**34** "Grid constraints are... a big issue in a lot of areas in Scotland, although sometimes these can be overcome by local energy use rather than putting energy onto the grid."

- ☐ Agree Strongly Seo mo bheachd-sa gu tur
- ☐ Agree Seo mo bheachd-sa gu h-ìre
- ☐ Undecided Chan eil beachd agam
- ☐ Disagree Chan e seo mo bheachd-sa
- ☐ Disagree Strongly Chan e seo mo bheachd-sa ann

34.a Further Comments / Tuilleadh bheachdan:

35 "More support for community projects in particular (i.e. there could be different levels of support for community projects compared to commercial projects)."

- ☐ Agree Strongly Seo mo bheachd-sa gu tur
- ☐ Agree Seo mo bheachd-sa gu h-ìre
- ☐ Undecided Chan eil beachd agam
- ☐ Disagree Chan e seo mo bheachd-sa
- ☐ Disagree Strongly Chan e seo mo bheachd-sa ann

35.a Further Comments / Tuilleadh bheachdan:

36 "Community projects should be given priority (over private developments) by policy makers as they deliver both economic and social benefit to remote rural communities that are often the most disadvantaged."

- ☐ Agree Strongly Seo mo bheachd-sa gu tur
- ☐ Agree Seo mo bheachd-sa gu h-ìre
- ☐ Undecided Chan eil beachd agam
- ☐ Disagree Chan e seo mo bheachd-sa

27 / 29

☐ Disagree Strongly Chan e seo mo bheachd-sa ann

36.a Further Comments / Tuilleadh bheachdan:

## Page 12: Tapadh leibh-se gu dearbh! | Thank you very much!

*Mòran taing airson ur cuideachaidh! Chaidh ur freagairt a chlàradh.*

Thank you very much for your participation! Your response has been recorded.

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