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Distributing power? Community energy projects' experiences of planning, policy and incumbents in the devolved nations of Scotland and Wales

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Distributing power? Community energy projects' experiences of planning, policy and incumbents in the devolved nations of Scotland and Wales.

Key words: Community Energy, Devolved Energy Policy, Scotland, Wales

Abstract: Community owned energy projects are viewed as compelling contributors towards renewable energy targets. They contribute to curtailing the use of carbon intensive energy sources, consequently aiding mitigation of climate change, and can contribute towards a sustainable, localised economy. The success and expansion of the sector varies. However, there is a lack of knowledge regarding the development of the sector between sub-state nations. This qualitative, comparative study looks at the sector in the sub-state, devolved nations of Wales and Scotland within the UK. Through a series of in-depth interviews with community energy practitioners in four case study sites in Scotland and Wales, this study shows how policy and governance practices can influence the sector and those working at grassroots level. The study shows a disparity in confidence and outlook for the sector, based on the perceived (in)effective governance in each devolved nation.

1. Introduction

Community energy is a branch of the renewable energy (RE) sector that has seen an increasing amount of interest in political and public spheres. This is attributed to the assumption of a range of beneficial social, economic and environmental impacts that community energy groups could have in the transition towards a low carbon energy society (Toke, 2005; Rogers et al, 2012). Definitions of community vary, and preconceptions of a community are diverse. 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). Community energy projects (CEPs) also vary in their definition. They can range from projects that generate RE locally, to community micro generation (on community buildings or private housing), energy conservation projects, and campaigns encouraging behavioural change (Seyfang et al, 2012; Department of Energy and Climate Change [DECC], 2014). General support for community energy is high, with a study by the former UK DECC in 2012 finding that 79% of people surveyed support RE generally, and 78% believe that local communities should be benefiting from such developments in their area (Co-operative Group and Co-operatives UK, 2012).

There are mounting arguments that the centralised energy system needs to change and become distributed and networked, and in the process, engage more with communities and consumers (Johns, 2015). [Becker and Kunze \(2014\) argue that the main driver for this is the commonly held view that renewable community energy is an important issue in of itself, regardless of any particular political leaning or allegiance.](#) In spite of such arguments, the established norm of centralisation has in no doubt created limitations for community projects in the field of sustainable RE (Yadoo *et al*, 2011). There is uncertainty, within UK communities, as to the viability of creating successful CEPs (Rogers et al, 2008). A centralist approach to energy

generation, and the lack of local devolved decision making in the energy field, can result in reification of traditional political, economic and behavioural patterns – meaning that rather than encouraging efforts to decentralise, there is instead a recentralisation of power (political and electrical) (Groves *et al*, 2013; also see Möller *et al*, 2012; Strachan *et al*, 2015).

Beyond the valued-added benefits (e.g. income, energy provision, fuel poverty alleviation) that CEPs may bring to community members, they ~~also have a significant role to play in importance of CEPs to wider socially just energy system provision is further emphasised by their possible role in enhancing encouraging~~ support for renewable energies more generally (Toke *et al*, 2008; Li *et al*, 2013, Walker *et al*, 2010, Willis and Willis, 2012). Considering the pockets of apparent resistance towards large scale RE projects (particularly onshore wind developments) this finding is significant, ~~and~~ provides a further impetus for carefully examining the mechanisms that may hinder or support the development of CEPs. This paper contributes particularly to the mechanisms at play at sub-state nation levels within the UK, a focus that has been to date, quite rare.

2. Background: The Community Energy Landscape in Europe, the UK, Scotland and Wales

The focus of this research is within two of the sub-state nations of the UK: Wales and Scotland. This ~~was in able to explore the~~enables the exploration of the experiences of CEPs in two devolved nations within one nation state, specifically reflecting on how such groups perceive devolution systems have impacted on theirs, and the community energy sectors, development. Such insights can be of relevance for community energy development beyond the UK, particularly within federalised nations and amongst devolved nations. ~~Indeed, initial work into CEPs across federalised nations show that innovations, such as ‘Bürgerenergie’ (‘citizens’ energy’) in Germany (Radtke, 2013) can offer a new relationship between society and energy systems centred on social embeddedness and collectivism. Yet such important work, has not fully unpacked, from the perspective of CEPs in devolved nations, what governance mechanisms facilitate or hinder their development. —However, f~~For such insights to be meaningful, community energy needs to be understood within the wider context of the RE sector and the goals that it has been set, all of which are dependent on specific socio-political and geographical contexts and histories. For the present paper, this involves a careful exploration of relevant UK policies and targets.

Previous UK governments have set targets for generating 10% electrical energy from renewable sources by 2010, and 20% by 2020, based on an EU goal (Warren and McFadyen, 2010). The UK failed to reach the first goal, only generating 6.5% of electrical RE 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% by 2020. However, the ability of other European member states to reach the same 2010 target for 10% electrical energy from renewables (European Commission, 2011) suggests that success or failure in delivering RE is partly dependent on institutional arrangements and whether “institutional space...includes not only the absence of constraints but also the presence of enabling conditions” (Oteman *et al*, 2014, p.4).

Objectives and targets of governments can vary widely which is “often a question of national context as shaped by different cultures and histories” (Lipp, 2007, p.5481). [They can also vary within nation states, at devolved nation and federalised regional levels, as embodied by the collective ownership drivers of projects in Catalonia and the Canary Islands \(Becker and Kunze, 2014\) and the democratisation and collectivism of the ‘Bürgerenergie’ movement in Germany \(Radke, 2013\).](#) It is therefore useful to look in depth, as in this paper, at different political cultures and histories of sub-state nations (such as Wales and Scotland) and their institutional arrangements, as a way of exploring such inter, and intrastate differences. This can contribute towards understanding the best ‘conditions’ (Musall and Kuik, 2011) that make community energy projects possible in different circumstances.

By 2012, only 10% of renewables in the UK were owned by individuals or communities, while in Germany, a federalised nation state, the figure was 65% (Carrington, 2012). Nevertheless, the role that community energy has in the future energy generating mix of the UK has, [in the past](#), been acknowledged, with the UK Government of 2011-15 pledging support for the sector through the publication of the Community Energy Strategy (DECC, 2014). However, there remain a number of barriers that hinder the sector at UK level and in its sub-state nations. These include challenges relating to grid access, planning consent, support systems, distributional issues (Harnmeijer et al, 2013; Giddings and Underwood, 2007) and moving away from deep rooted methods of energy generation and dominant energy ‘incumbents’ (Strachan et al, 2015, p.97). An extensive UK survey amongst community energy schemes revealed that CEPs themselves admit that there is a limit to what they can achieve alone – they require external support (Seyfang et al, 2013). Structural factors, such as market conditions, subsidies and governmental support can encourage or limit the growth of the sector (Oteman et al, 2014). [In the UK context, this is particularly problematic given the lack of policy development related to CEPs since the aforementioned Community Energy Strategy.](#)

Climate policy and energy policy in the devolved, sub-state nations of Scotland and Wales, although driven by European targets in tandem with UK policy, are nevertheless distinct and ambitious (Royles and McEwen, 2015). Scotland and Wales have similarly devolved politics, to a degree. In the referenda of 1998, the Welsh Assembly and the Scottish Parliament were established as devolved governments with limited legislative powers in various policy and regulatory areas. Scotland has executive powers for developing RE and full powers for planning approval, whereas Wales initially had authority to approve planning for energy projects under 50MW (Strachan et al, 2015), a figure that has risen to 350MW under the new Wales Act (2017). Scotland has more devolved powers overall in other legislative fields such as law and order and the judiciary, therefore having more autonomy in comparison to Wales. The disparity in allocation of energy related governance powers amongst the devolved nations of the UK could potentially influence each sub-state nations’ success or failure in delivering on renewable and/or community energy targets. These devolution settlements (see Strachan et al, 2015), and the multi-level interfaces between sub-state and UK Government are argued to be constraining. This has certainly been found to be the case in Scotland in aiming for their desired low-carbon initiatives (see Sugden et al, 2012; Markantoni, 2016). –There are also limitations due in part to the centralised regulation of energy markets and infrastructure (Yadoo et al, 2011).

In comparison to England and Northern Ireland, the community energy sector seems to have been given more policy and framework support in Wales and Scotland in the past (Strachan et al, 2015). In Scotland, these supportive measures have included the Community Renewable Energy Scheme (CARES), and a 500MW target for the community owned and locally owned renewables sector by 2020, a Scottish Government manifesto commitment to reach 1GW of community and locally owned renewable energy capacity by 2020, and 2GW by 2030 in Scotland (Energy Savings Trust, 2018). In Wales, assistance has come through the Ynni'r Fro and current Ynni Lleol/Local Energy support service (including grant and loan funding for community projects) in Wales. A target has also, very recently, been set for the sector - 1GW of locally owned renewable electricity is to be generated in Wales by 2030 (Welsh Government, 2017). However, Scotland has ~~seemingly apparently~~ shown more enthusiasm in its pursuit of overall RE deployment in comparison to Wales (Royles and McEwen, 2015) and, particularly, community renewables (Strachan et al, 2015). Recent data shows that in terms of numbers, Scotland has indeed been the most progressive nation within the UK regarding community energy delivery, having had an installed capacity of approximately 35MW in comparison to versus 22MW, 4MW and less than 1MW in England, Wales and Northern Ireland respectively (Harnmeijer et al, 2013).

However, to date, there has been little academic scrutiny as to why such differences exist between the different sub-state nations of the UK. This paper looks at the support mechanisms and structural context of CEPs in the devolved nations of Scotland and Wales, and how they may encourage or inhibit grassroots community and cooperative energy, whilst also answering whether or not community members' confidence and trust differs in both sub-states. As a means of answering these queries we compare the experiences of the community energy sector from the perspective of those involved in CEPs coupled with background research into policy development and implementation in both sub-states. This research sheds new light on experiences of government and policy contexts under which CEPs develop, bearing particular international relevance to other smaller nations, federalised nations and particularly those with elements of devolved policy ~~contexts~~.

3. Methods

The focus of this paper sits within a wider programme of research that sought to thoroughly explore the barriers and opportunities for the development of CEPs. Whilst other published work has paid attention to how CEPs can facilitate the cultural sustainability of the marginalised communities developing the energy project (Haf and Parkhill ~~Authors~~, 2017), the analytical focus of this paper is on understanding perceptions of governance, relationship to government, policy, confidence and trust amongst CEPs towards their local government, sub-state national government and the UK government. This section outlines our methodological approach to data collection and analysis.

3.1 Case Sites

Illustrative sampling (Valentine, 2001) was used as a means of choosing a demonstrative population from the community energy sector in Wales and Scotland. The first stage of the

research design focused on policy research and meetings and communication with community energy practitioners. This allowed for a deeper understanding of the main issues facing the sector. The second stage focused on identifying comparative CEP groups in both nations. Desktop research, followed by initial inquiries and preliminary meetings with CEP organisers, led to the selection of four comparative energy groups; two in each sub-state: Ynni Talybolion, Llanfellech, Anglesey and Ynni Aelhaearn, Llanaelhaearn, Gwynedd (figure 1.1) in Wales, and Horshader Trust, Siabost, Western Isles and Tiree Trust, the Isle of Tiree, Argyll (figure 1.2.) in Scotland.

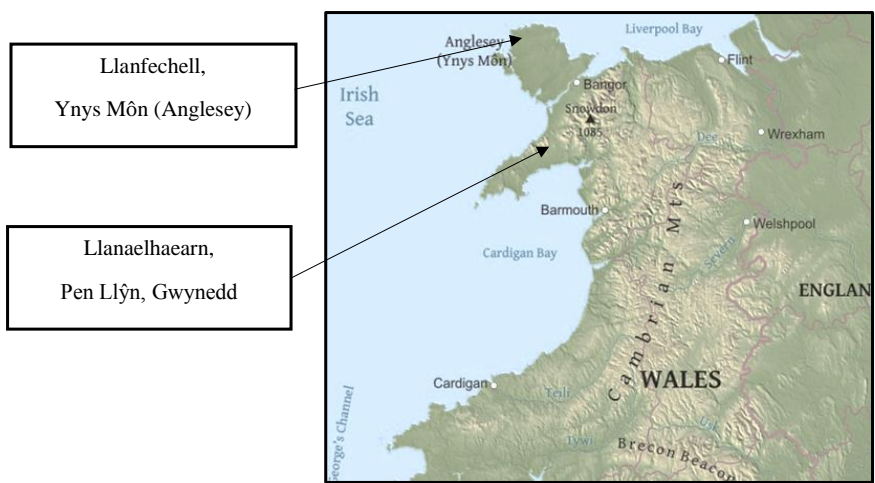


Figure 1.1 Map of Wales showing location of Llanfellech and Llanaelhaearn (Free World Maps, 2015a)

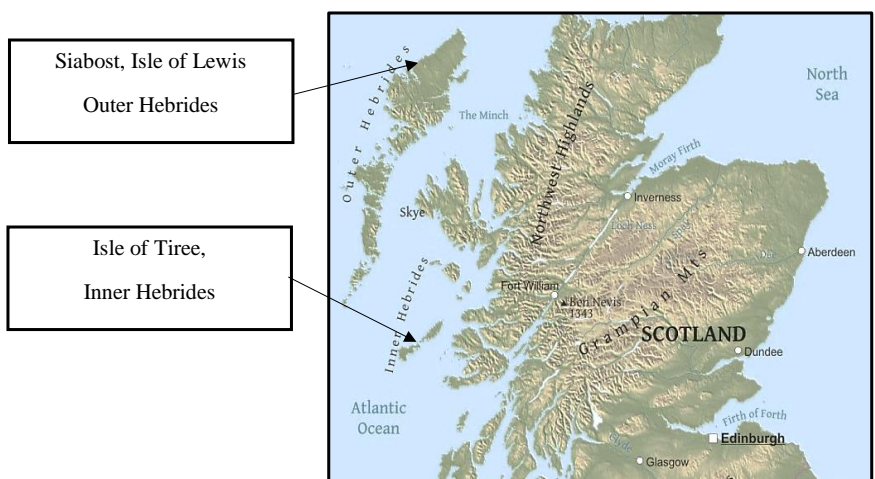


Figure 1.2 Map of Scotland showing Siabost and Tiree (Free World Maps, 2015b)

These case studies were chosen based on their similarities including objectives, demographics, rurality and the similarity of technology being utilised. All four groups proposed to, or already had, installed a community wind turbine (ranging between 500-900KW turbines). All four case sites are situated in different local authority areas, allowing for some insight into the nature of local government in different places.

3.2 Interviews

34 semi-structured, face to face, in-depth interviews were conducted in the four case studies between November and December 2013. The interviews were conducted with active members of the community energy groups (e.g. involved in the start-up of the project, on a steering committee or members of the coop/trust), and members who were on the periphery of these projects (e.g. residents of the area). The interviews lasted, on average, 1.5 hours. Questions were formed with an aim to understand the relationship and perceptions of government, policy and governance of the community energy sector at sub-state nation level and UK level. Themes explored included government policy, devolution, perceived support, governance, confidence, trust and, future developments for the sector.

The interviews were analysed in a cyclical way, through organising the transcripts of interviews under codes. The analysis method was based on bricolage analysis which allows for a “free interplay of techniques during the analysis” (Kvale, 2008, p.115). This involved the use of several approaches to examine a wide array of aspects comprising the interview, including narrative analysis, thematic analysis and content analysis. ~~Meaning was constructed through themes, narrative and content.~~ Themes were driven by theoretically informed codes (based on literature review and discussions with a number of experts and CEPs at the outset of the research) and empirically driven codes. In the following analysis sections, all participants’ names have been changed to pseudonyms to ensure participants’ anonymity.

4. Results and Discussion

Themes deriving from this research project ranged from topics such as isolation, frustration, confidence, trust and doubt in the relationship between the case study sites and a number of stakeholders and institutions active in the governance of CEPs, including government (local, devolved and UK government), District Network Operators (DNOs¹), and other actors ~~working with community energy groups.~~ Due to their geography, the four case studies are remote from all of their seats of national government, be it from the National Assembly in Cardiff Bay for Wales, the Scottish Parliament in Edinburgh for Scotland, and even more so from the

¹ Companies that distribute electrical energy across the UK. A Distribution Network Operator is a company licensed to distribute electricity from transmission network to local homes and businesses. In the UK there are 14 different DNO regions, managed by just six operators (all Private Limited Companies) (Anaya and Pollitt 2013).

centralised UK Government in London. Even closer centres of government, such as local governments, were sometimes perceived as distant, although this was considered more constitutionally distant than geographical. Local governments were sometimes seen to be out of touch with the needs of these rural communities. Others felt that their devolved governments (and local authorities) were more democratic, concerned and close at hand (in comparison to the UK Government). To explore these topics, the discussion is separated into three parts, looking in turn at experiences in Wales, then Scotland, and then from all case sites, perspectives of the UK Government in Westminster, London.

4.1 Policy and Support in Wales

Ynni'r Fro was the programme developed by the Welsh Government to support community renewables in Wales (now currently run as Ynni Lleol/Local Energy [which aims to support social enterprises and SMEs²](#)). The scheme offered small start-up grants, and support officers with technical knowledge to help guide CEPs. All of the interviewees in the north Wales case sites spoke highly of Ynni'r Fro and were pleased with the level of support given to them by their regional officer, who also played an important role as a go-between for interviewees and government agents, as well as updating them on developments in the [renewables](#) sector. Interviewees were particularly appreciative of the personal commitment and enthusiasm that the officer applied to his role. It was, however, speculated that it was impossible for one person to push the community energy agenda forward in north west Wales, and that this individuals' work load was excessive. This is particularly noteworthy when compared to Community Energy Scotland (CES) staff resources. At the time of interviewing, CES, the most easily comparable group in Scotland to Wales' Ynni'r Fro, had 30 members of staff during its delivery of the CARES scheme. Local Energy Scotland (LES) who are currently running the scheme, have 18 members of staff. This is in comparison to 7 members of staff for the Ynni'r Fro programme working across the whole of Wales, with only one officer covering the counties of Gwynedd, Anglesey, Conwy, Denbighshire, Wrexham and Flintshire together. The current programme in Wales, Ynni Lleol/Local Energy, also only employs 7 development officers. Nevertheless, it was felt that the Ynni'r Fro officer could help groups with information and skills that were lacking, particularly technical knowledge,

“I think one thing that ...we feel we don't have in our ranks [is] 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 [the Ynni'r Fro officer] has been really helpful...in making it possible.”

(Gerald, Llanfechell)

Guidance on how to project manage renewable schemes was also given by the Ynni'r Fro officer. The officer also helped the Llanaelhaearn group search for a company to develop their

² [Small to medium sized enterprises.](#)

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 CEPs. 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 a RE company in mid-Wales to complete a feasibility study on behalf of the community.

“[He] has worked terribly hard in the background, because [Ynni'r Fro] helped us fund a lot of the project. [He] 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 offered through their grant scheme, according to some interviewees, these grants were insufficient given the multitude of other challenges. These challenges included overwhelming administrative and organisational work in preparing a CEP, planning permission applications, community activities and being up to date with the most recent information on regulations, along with the necessary technical knowledge needed for grid access and specifications of the renewable technology being used. These challenges were described as time-consuming and frustrating for small, voluntary run community projects. The Ynni'r Fro officer alleviated some of these frustrations, but there was a consensus that more help was needed.

Other supportive groups that were cited in the interviews included The Wales Coop Centre who helped Ynni Talybolion to register their company, along with drawing up their mission statement. The Wales Coop Centre gave legal advice and assisted with the wording of Ynni Aelhaearn's 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 (Industrial and Provident Society) model that Ynni Aelhaearn would ultimately adopt, along with clarifying in writing the relationship between the group and the landowners on whose land the wind turbine was set to be placed.

In terms of strategic policy, almost all interviewees in the case studies in Wales made clear their desire for a clearer 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 TAN8³ (Parkhill and Cowell, 2016), there had remained little strategy to guide the community energy sector in Wales. This disconnect between what was said by the Welsh Government and how local government dealt with applications for CEPs caused frustration. The temporal rhythms - what was said and done between the process of policy, guidance and practice - appeared to be uncoordinated. Interviewees were particularly critical of the planning departments of local authorities for focusing too narrowly on visual impact of wind turbines without considering local economic

³ Technical Advice Note 8: Renewable Energy.

gain. An apparent lack of knowledge by local authority actors about national policy objectives was also a source of frustration for interviewees,

“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 inconsistency caused confusion amongst interviewees as to whether or not the sub-state government in Wales was in fact supportive of community renewables becoming a key player within the RE sector (see also, Foreman, 2017). Cwm Arian, a CEP in Ceredigion, was used as an example to illustrate the disjointed relationship between the Welsh Assembly Government and local councils,

“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 say – ‘what the hell is going on here?’ Like what happened to Cwm Arian, where they were refused [planning]. In my opinion Carl Sargeant⁴ 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 negates the visual impact, end of story - they’re having their planning.’”

(Owain, Llanaelhaearn)

In general, interviewees described some Welsh Assembly Members as forward-thinking and innovative, with many named as being particularly keen on the development of the community energy sector. There was also a belief that the Welsh Assembly Government would consent to the project in Llanaelhaearn if planning was denied by Gwynedd Council. Some interviewees saw the Welsh Assembly as broadly supportive, and local authorities as uninterested or uninformed. Interviewees desired a stronger, more coherent policy that was thoroughly understood and practiced by all levels of government. Many of the interviewees in Wales also suggested that more legislative powers for all energy developments should be devolved. Some interviewees perceived that this would ensure greater support for CEPs.

Another suggestion made [by some interviewees](#) in relation to policy development was that the Welsh Government should give preferential treatment to community wind turbines (see also Clubb, 2017), with clarification given over what is considered a community development. This preferential treatment, it was posed, could be a way of resetting the balance between the ingrained [preferential/privileged](#) treatment that the incumbents of the energy sector have had (Strachan et al, 2015), and the emergence of locally owned, distributed CEPs.

4.2 Policy and Support in Scotland

⁴ Minister for Local Government and Communities, 2011–2013; Minister for Natural Resources in the Welsh Government 2013-2016

In Scotland, interviewees described having more confidence in the Scottish Government and its vision for developing the community energy sector and RE in general than the UK Government,

“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 perceived support was evidenced through the initiatives for CEPs that had been put together by the Scottish Government in Edinburgh. Introduced by a Labour Government in 2011 and continued under the Scottish National Party (SNP) Government, the CARES scheme represents Scotland’s vision for increased community renewables generation. This scheme, delivered by Community Energy Scotland (CES) at time of interviewing, appeared to play a pivotal role in the development of CEPs in both case study sites. Funding that was available to the case sites 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. CES also helped with community attempts to tackle fuel poverty and insulation of old housing stock, through offering guidance and grants. Interviewees in both case studies implied there was a two-way exchange in learning how to manoeuvre within the emerging community energy sector. In particular, interviewees in Tiree noted how their experiences had led to all groups involved becoming more skilled at navigating the complexities of developing CEPs,

“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 and others have gone through that route...”

(Henry, Tiree)

Despite not having possibly received much help at the beginning of setting up the Tiree community wind project, interviewees nevertheless believed that CES’ help was essential for other community groups just starting up. The Tiree scheme was in a position (at time of interviewing) where some interviewees felt that they no longer needed much guidance or help from a body like CES. However, the availability of CES (and other networks such as Local Energy Scotland) was still 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 know that we can, if we’ve got any issues, we can get in touch with them specifically to get support...it is a good support network.”

(Thomas, Tiree)

Other support networks that were mentioned included the Big Lottery Fund (both Scottish projects having received some of their funding from the lottery), and Oscar, the Scottish Charity Commission. Apart from CARES and guidance offered through the Community Renewable Energy Toolkit (Community Energy Scotland, 2011) developed by CES through commission by the Scottish Government and the Energy Saving Trust, there were also several announcements made by the Scottish Government to illustrate their overall vision for RE (Royles and McEwen, 2015). Interviewees could see direct support coming from the CARES scheme, and also support from 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, Tیره)

However, despite this belief in the ability of the Scottish Government to develop community RE 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 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 ... you have to support the upgrade of the network system as well...I think it’s a common problem ... 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, Tیره)

This contradiction echoes the inconsistency in support that interviewees in Wales had described between the Welsh Government and local governments. Whereas interviewees in Wales saw this as an internal matter, whereby the Welsh Government needed to act, in Scotland, some interviewees alluded to the fact that too much energy related power was confined in Westminster, —or monopolised by DNOs. During time of interviewing, the Scottish independence referendum was on the horizon (the following autumn of 2014), meaning that discourses exploring the power relations between the Scottish and UK governments were more prominent in comparison to Wales (although an issue explored by some interviewees). Whilst some Scottish interviewees suggested that further legislative powers for the energy sector were not overly important, others believed that independence was symbolically and practically important as it could encourage a sense of self-reliance and confidence for communities,

“I think independence would be beneficial for Scotland...and by extension beneficial for Tیره as part of Scotland...I think any group, any community, when it feels that it

has a bit more control over what's happening... 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)

4.3 The role of UK Government in Westminster (London)

The interviewees' responses in accounting for the support given to them and the community energy sector by the UK Government were subdued. In general, most of the interviewees did not think that the UK Government were sufficiently supportive of community energy. Most interviewees, when talking about Westminster, also described the need for more devolved powers – viewing further devolution, and independence in Scotland's case, as a way of strengthening the cause for local, community RE production.

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 RE 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 ('Tory') members of the government, who failed to differentiate between community and commercial developments, despite their advocacy of community participation through the 'Big Society'⁵ and the Community Energy Strategy.

"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, [that] nuclear is going to cost them..."

(Huw, Llanfechell)

Huw's view above was an opinion shared in Scotland. There were also numerous criticisms of Westminster's (former) energy department, DECC, and the governments inconsistencies in changing rules and regulations in the RE field, thereby creating confusion and the need for community energy groups to adapt quickly. Small changes at UK government level seemed to ripple down and cause great upset at community level,

"DECC for instance...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...because you had to quickly adapt, and comply with what they had...all these government departments...not working in conjunction with each other, but working separately, and making up their own rules as they go along."

⁵ 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).

(Stephen, Siabost)

This complaint by Stephen was also supported by others in Siabost who were a part of developing the CEP. Changes to the Feed in Tariff⁶ (FIT) were seen as especially challenging;

“There were small [changes] all along the way... the Feed in Tariff, the [UK] 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 UK government level to FIT tariffs could have a damaging and off-putting effect on CEPs on the ground. It was clear that communities wanted more consistent and stable policy for community energy from the UK Government, reflecting findings in research looking at community energy and governance (Seyfang et al, 2013; Willis and Willis, 2012).

“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, because that...it loses loads of time...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...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 only be supporting CEPs as a consolation for the continued development of commercial energy developments;

“There is a certain feeling as well, because...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... 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 what Strachan et al (2015) conclude regarding the UK Government being entrenched in aiding and expanding large-scale energy providers. However, some Westminster MPs were attempting to aid the sector's development despite the centralised norm of the energy sector, pushing for meetings between DNOs and the CEPs, particularly in Siabost,

“In the end, it was the MSP and MP who made Scottish and Southern Electricity [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.”

⁶ A payment for small renewable energy producers.

(Gladys, Siabost)

This quote above gives insight into the difficulties facing community energy schemes. The ability of ~~MPs and MSPs~~politicians to influence large energy companies, was seen as critical for community energy groups. However, for a more streamlined process, a policy that ensured that DNOs had to ensure a connection for CEPs without exception, was desired. This has been the case in the *Energiewende* movement in Germany which focuses on the decentralisation of renewables allowing for higher community and cooperative ownership (Oteman, 2014).

Finally, the role of Westminster was questioned in ethical and financial terms. CEPs 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 ROCS⁷ 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 interviewee above 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. This reflects what was said by Welsh contributors, who wanted preferential treatment for community energy schemes. 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 in this case. This is a commitment that would encourage the energy sector to become more democratised and communitarian. This, according to some academics, 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)

5. Conclusions

Energy, in the UK, has ~~traditionally historically (and up until recently)~~ been resourced, converted and sold on a large scale and from a centre of power. Small, distributed, community renewable projects have not been the norm. The ingrained centralised approach to energy generation has created limitations for community projects in the field of sustainable renewable energy (Yadoo et al, 2011). Strachan et al (2015) suggest that the community renewables sector

⁷ Renewables Obligation Certificates

remains an under-funded, under-supported subdivision of the energy sector. This research upholds this conclusion.

It has become apparent that the community energy sector ~~has been~~^{is} operating within an energy and planning system that does not appear to be ambitious about the growth of community owned renewable projects. The lack of strategic governance and policy support feeding from national or devolved governments to local governments, ~~had created~~^{creates} difficulties for the community renewable groups in this study – particularly in Wales (see also Cowell, 2016; Clubb, 2017; Foreman, 2017). Interviewees often depicted their experience of developing their CEPs as a battle rather than a process. Furthermore, it became apparent that communities ~~were~~^{are} averse to having to bow to the demands of certain energy incumbents – especially the DNOs in the case of Scotland. This was also the case with planning departments in Wales where procedures were perceived as cumbersome and highly administrative - especially 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 UKs energy system. Interviewees in this research upheld this conclusion, pinpointing also that there was a general lack of support from local government, Westminster and, albeit to a lesser degree, the devolved governments of Scotland and Wales.

In Scotland, ~~285MW of community or locally owned energy capacity was operational by June 2013 (Energy Saving Trust, 2013)~~^{approximately 666MW of community or locally owned energy capacity was operational by June 2017 (Energy Saving Trust, 2018). Their original ~~and their target of 500MW~~ was successfully hit and surpassed in 2015 (Energy Saving Trust, 2015)}~~leading to further targets for the sector of 1 GW by 2020 and 2 GW by 2030~~. Despite constitutional restraints under the devolution settlement, Scotland has been able to promote and maximise its capacity in the renewables field (Bomberg & McEwen, 2012), particularly so in the community renewables sector. 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. They often referred to the Scottish approach to community energy development as an example to be followed.

Constitutional conditions (legislative and planning powers) are, however, different in Wales, which might partly explain this disparity with Scotland. Nevertheless, most community energy projects are small ventures, 500KW in the case studies included in this paper, and could have been supported under the previous devolution settlement (consenting powers for projects under 50MW at time of data collection, a figure that has risen to 350MW under the new Wales Act

(2017)). 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. Northern Ireland is illustrative of this, having the most legislative powers over energy decision making amongst the devolved nations (Strachan et al, 2015) but the least number of community-led developments (Harnmeijer et al, 2013).

Apart from competence powers, it remains unclear what the targets ~~were~~ for community owned projects in Wales, as reflected in the perplexity experienced amongst the interviewees when working with local councils. Although there have been a number of allusions towards the importance of communities benefiting from energy developments, interviewees reiterated the apparent lack of a coherent plan and set target for the community energy sector. There has since been an announcement by the Cabinet Secretary for Environment and Rural Affairs in Wales, to aim for 1GW of renewable electricity to be locally owned by 2030 (Welsh Government, 2017). The term 'locally owned' has not yet been defined and, at this point, it is unclear what structural support will be given in order to reach the above target. It is also unclear how the barriers outlined in this paper will be overcome, i.e the disconnect between national and local scales of government, access to the national grid, relations with DNOs, finances and funding and planning procedures. If these barriers are not addressed, how such a national target will benefit the sector remains uncertain. Nevertheless, it is a promising development indicating support and the beginnings of a strategy that could benefit the community energy sector in Wales.

It has become evident through this research that there is a conflict between what the ~~apparent~~ sub-state nations' apparent visions are for the community energy sector and what is actually possible whilst how incumbent regimes of the energy system ~~remain~~ block such visions. Examples of regimes that overshadow community renewable 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. The ingrained centralist approach to energy generation and distribution, as epitomised by the workings of the national grid and the DNOs, has created a number of socio-technical limitations for community projects (Yadoo et al, 2011). Such limitations include barriers to grid access ~~to the grid~~ and a lack of an authentic working relationship with DNOs. 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. This is an issue that must be addressed if the community energy sector is to flourish. Perhaps one possibility in overcoming the difficulties between CEPs and DNOs, is to widen the role of communities in the energy system. Indeed, some European countries, such as Italy and Germany, have seen the development of community DNOs (Magnani and Osti, 2016). However, given the difficulties outlined relating to starting up and developing CEPs, it would appear that a seismic shift would be needed in both the regulation of DNOs and structural support put in place for community groups, to fully facilitate the development of CEPs and community DNOs.

~~In relation to moving away from the traditional energy generation 'regime', the sub-nation~~
~~a in-civil society.~~ There is evidence to show that Scotland benefits from having a strong civil society (strengthened through devolution) which has been 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 Welsh 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 statement supports the notion ~~acknowledges~~ that there has been a 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). From this research, it seems that CEPs cultivate actors that are willing to change the status quo, as evidenced through the insights that have been discussed here.

However, policy and support facilitating their success within the current energy regime seems lacking. This ~~lack~~observation, as perceived~~made~~ by interviewees, ~~might~~ could be further exacerbated by more recent political developments, including the ~~new~~ Conservative-led UK Government's moratorium on onshore windfarms, the withdrawal of renewable subsidies, and the dissolution of DECC in July 2016. Our findings indicate that CEPs have a greater trust in the devolved government of their respective nations than in the government of Westminster. Due to this, devolved governments may be required to play an important role in lessening the negative effects that such policy making could have on the future of community energy development within the sub-state nations. Nevertheless, it seems~~Given our findings indicate that the communities themselves~~CEPs have~~and~~ more trust in their devolved nation's government over Westminster in this sense, such ~~devolved governments might have a crucial role to play in cushioning the blow that such manoeuvres could entail,~~ and thereby supporting the community energy sector.

Anaya, K.L. and Pollitt, M.G. (2013) Distributed Generation: Opportunities for Distribution Network Operators, Wider Society and Generators, EPRG Working Paper, 1510, Cambridge Working Paper in Economics <https://www.eprg.group.cam.ac.uk/wp-content/uploads/2015/04/EPRG-WP-1510.pdf> [Accessed 07/02/18]

BBC (2010) David Cameron launches Tories' 'big society' plan. 19 July, 2010. <http://www.bbc.co.uk/news/uk-10680062>

Bomberg, E., and McEwen, N. (2012) Mobilizing community energy. *Energy Policy* 51, 435-444. <http://dx.doi.org/10.1016/j.enpol.2012.08.045>

Becker, S. and Kunze, C. (2014) Transcending community energy: collective and politically motivated projects in renewable energy (CPE) across Europe, People, Place and Policy: 8/3, pp. 180-191

- Carrington, D (2012) Germany's renewable energy revolution leaves UK in the shade. <https://www.theguardian.com/environment/2012/may/30/germany-renewable-energy-revolution> [Accessed, 17.8.17]
- Clubb, D, (2017) The Clubb Doctrine; presumed consent for community energy projects. Institute of Welsh Affairs, June 19, 2017.c <http://www.iwa.wales/click/2017/06/clubb-doctrine-presumed-consent-community-energy-projects/> [Accessed, 23.6.17]
- Community Energy Scotland (2011) Community Renewable Energy Toolkit. Scottish Government and Energy Saving Trust document available online only at: <http://www.gov.scot/Publications/2009/03/20155542/CRETkPDF>
- Community Energy Wales (2018) Unpublished report, personal communique
- Cowell, R. (2016) Decentralising energy governance? Wales, devolution and the politics of energy infrastructure decision-making. *Environment and Planning C: Government and Policy*, 1-22. <http://dx.doi.org/10.1177/0263774X16629443>
- Cowell, R., Ellis, G., Sherry-Brennan F., Strachan P.A., Toke, D. (2013) Promoting Renewable Energy in the UK. What difference has Devolution Made? A research project funded by the Economic and Social Research Council (RES-062-23-2526)
- DECC (2014) Community Energy Strategy. <https://www.gov.uk/government/publications/community-energy-strategy>
- Energy Saving Trust (2015), Community and Locally Owned Renewable Energy in Scotland, September 2015. <http://www.energysavingtrust.org.uk/community-energy-reports>
- Energy Saving Trust (2017) Community and locally owned renewable energy in Scotland, June 2017. http://www.energysavingtrust.org.uk/sites/default/files/Community%20and%20locally%20owned%20renewable%20energy%20report_2017.pdf
- European Commission (2011) Renewable Energy: Progressing towards the 2020 target. *Communication from the Commission to the European Parliament and the Council*, Brussels
- Environment and Sustainability Committee (2012) Energy Policy and Planning in Wales National Assembly for Wales Commission, Cardiff
- Foreman, A. (2017) Energy justice at the end of the wire: Enacting community energy and equity in Wales. *Energy Policy* 107, 649-657 <http://dx.doi.org/10.1016/j.enpol.2017.05.006>

- Giddings, B., Underwood, C. (2007) Renewable energy in remote communities, *Journal of Environmental Planning and Management*, 50:3, 397 – 419
- Groves, C., Munday, M., Yakovleva, N. (2013) Fighting the pipe: neoliberal governance and barriers to effective community participation in energy infrastructure planning, *Environment and Planning C: Government and Policy*, 31, 340-356.
- Gusfield, J.R. (1975) *The Community: A critical Response*. Harper Colophon, New York.
- Harnmeijer, J., Parsons, M., Julian, C. (2013) *The Community Renewables Economy: Starting up, scaling up and spinning out*. Respublica, Lincoln. Available to download: <http://www.respublica.org.uk/our-work/publications/community-renewables-economy-starting-scaling-spinning/>
- Johns, H. (2015) *Energy Revolution: Your Guide to Repowering the Energy System*. Permanent Publications, East Meon
- Kvale, S. (2008) *Doing Interviews: The Sage Qualitative Research Kit*. Sage, London
- Li, L.W., Birmele, J., Schaich, H., Konold, W. (2013) Transitioning to community-owned renewable energy: Lessons from Germany, *Procedia Environmental Sciences* 17, 719-728
- Lipp, J. (2007) Lessons for effective renewable electricity policy from Denmark, Germany and the United Kingdom. *Energy Policy* 35, 5481-5495
- Local Energy Scotland (2018) *The Community Renewables Register*
<http://www.localenergyscotland.org/view-the-register/>
- Magnani, N., and Osti, G. (2016) *Energy Research & Social Science*, 13, pp. 148–157
- Markantoni, M. (2016) Low Carbon Governance: Mobilizing Community Energy through Top-Down Support? *Environmental Policy and Governance* 26, 155-169
- Musall, F. D., Kuik, O. (2011) Local acceptance of renewable energy – A case study from southeast Germany, *Energy Policy* 39, 3252-3260
- Oteman, M., Wiering, M. and Helderma, J-K (2014) The institutional space of community initiatives for renewable energy: a comparative case study of the Netherlands, Germany and Denmark. *Energy, Sustainability and Society* 4, 11.

- Parkhill, K.A. and Cowell, C. (2016) Wind Energy: revisiting the debate in Wales, in D. Mannay (ed), *Our Changing Land: Revisiting Gender, Class and Identity in Contemporary Wales*, University of Wales Press.
- Renewable Energy Foundation (2012), *Renewables Output 2010*, <http://www.ref.org.uk/publications/229-renewables-output-in-2010> [Accessed: 11/12/12]
- Radtke, J. (2013) Bürgerenergie in Deutschland ein Modell für Partizipation? In: Jörg Radtke and Bettina Hennig (eds), *Die deutsche Energiewende nach Fukushima: der wissenschaftliche Diskurs zwischen Atomausstieg und Wachstumsdebatte*. Marburg: Metropolis - Verlag, pp 139 - 82.
- Rogers, J.C., Simmons, E.A., Convery, I., Weatherall, A. (2008) Public perceptions of opportunities for community-based renewable energy projects. *Energy Policy*, 36, 4217-4226.
- Rogers, J.C., Simmons, E.A., Convery, I., Weatherall, A (2012) Social impacts of community renewable energy projects: findings from a wood fuel case study. *Energy Policy*, 42, 239-247. <http://dx.doi.org/10.1016/j.enpol.2011.11.081>
- Royles, E. and McEwen, N. (2015) Empowered for Action? Capacities and constraints in sub-state government climate action in Scotland and Wales. *Environmental Politics*, 24, 6, 1034-1054
- Seyfang, G., Park, J., Smith, A. (2012) *Community Energy in the UK 3S Working Paper 2012-11*. Science, Society and Sustainability Research Group, Norwich.
- Seyfang, G., Park, J., Smith, A. (2013) A thousand flowers blooming? An examination of community energy in the UK, *Energy Policy* 61, 977 – 989. <http://dx.doi.org/10.1016/j.enpol.2013.06.030>
- Strachan, P.A., Cowell, R., Ellis, G., Sherry-Brennan, F. and Toke, D. (2015) Promoting Community Renewable Energy in a Corporate Energy World. *Sustainable Development*, 23, 96-109
- Sugden, D., Werrity, A., Webb, J., Caldwell, E., Campbell, C., Dlugolecki, A., Hanley, N., Kerr, A. (2012) Multi-level governance: opportunities and barriers in moving to a low-carbon Scotland. *Earth and Environmental Science Transitions of the Royal Society of Edinburgh*. 103, 175-183 <https://doi.org/10.1017/S1755691013000078>
- Toke, D. (2005) Explaining wind power planning outcomes: some findings from a study in England and Wales. *Energy Policy*, 33, 1527-1539

Toke, D., Breukers, S., Wolsink, M. (2008) Wind power deployment outcomes: How can we account for the differences? *Renewable and Sustainable Energy Reviews*, 12, 1129 – 1147

Valentine, G (2001) At the drawing board: developing a research design *from Qualitative Methodologies for Geographers, Issues and Debates ed. by Melanie Limb and Claire Dwyer (p41-54)*, Arnold, London

Walker, G., Devine-Wright, P., Hunter, S., High, H., Evans, B. (2010) Trust and community: Exploring the meanings, contexts and dynamics of community renewable energy. *Energy Policy* 38, 2655 – 2663. <http://dx.doi.org/10.1016/j.enpol.2009.05.055>

Warren, C.R., McFadyen, M. (2010) Does community ownership affect public attitudes to wind energy? A case study from south-west Scotland. *Land Use Policy* 27, 204 – 213

[Welsh Government \(2016\) Energy Generation in Wales.](#)

<http://gov.wales/docs/desh/publications/171207-energy-generation-in-wales-en.pdf>

[Welsh Government \(2017\) Policy Forum for Wales keynote speech, 7 December 2017](#)

<http://gov.wales/newsroom/articles/environment/171220-policy-forum-for-wales-keynote-speech/?lang=en>

Field Code Changed

Field Code Changed

Willis, R., and Willis, J. (2012) Co-operative renewable energy in the UK: A guide to this growing sector, Cooperatives UK, Manchester.

Yadoo, A., Gormally, A., Cruickshank, H. (2011) Low carbon off-grid electrification for rural areas in the United Kingdom: Lessons from the developing world. *Energy Policy* 39, 6400 – 6407

Ynni'r Fro (2015) Ynni'r Fro community programme

<http://www.energysavingtrust.org.uk/organisations/ynnir-fro-community-programme>

[Accessed

7/8/15]