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What Is The Benefit Of Community Benefits? Exploring Local Perceptions Of The Provision Of Community Benefits From A Commercial Wind Energy Project

CATRIONA MACDONALD¹, JAYNE GLASS^{2*} & EMILY CREAMER¹

¹ *School of Geosciences, University of Edinburgh, Edinburgh, UK*

² *Centre for Mountain Studies, Perth College, University of the Highlands and Islands, Perth, UK*

*Corresponding author (jayne.glass.perth@uhi.ac.uk)

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Where community ownership of renewable energy projects is not feasible, there remains potential for residents to profit from locally-sited projects through a 'community benefits' package from a commercial developer, usually as an annual cash payment to a community organisation. Despite support from policymakers and developers for community benefits packages, the relationship between the benefit package and acceptance of renewable energy projects is not straightforward. Drawing on semi-structured interviews with local residents and other community actors near a wind development in central Scotland, this paper examines the 'process' and 'outcome' dimensions of the design and provision of community benefits and considers how the relationship between these two dimensions affects local perceptions of the benefit of community benefits. Analysis of interviewees' perceptions of the community engagement 'process' at the planning stage and the community benefit package 'outcome' reveals how a poorly defined engagement process, combined with a benefits package that is not deemed suitable for the needs of the community, can lead to negative associations with the project, even when initial perceptions were positive. These findings have implications for renewable energy policy in Scotland, particularly as there is currently no legal obligation for developers to consult communities on community benefit arrangements.

KEY WORDS: community energy; community benefit; community engagement; wind energy; renewables; Scotland.

Introduction

Despite the fact that public support for renewables, at a national scale, is believed to be high across the UK (Bell *et al* 2013), the rapid expansion of onshore wind energy capacity has been controversial (Pollitt 2010). In addition to concerns regarding the particular impacts of wind energy developments, such as noise and visual disturbance, and an uncertainty about the merits of the technology itself (Devine-Wright 2011), those opposing large commercial onshore projects have increasingly raised concerns over potential inequalities, in both the process and the outcomes of the development. Specifically, the lack of power felt by local communities to influence the decisions made about the size and siting of commercial wind farms, coupled with the absence of tangible local material benefits from the projects, have elicited objections to the level of government support for the onshore wind sector (Warren and Birnie 2009). In response to these concerns, there has been an increasing awareness, across policy, industry, and academia, of the importance of enabling 'local communities to become better informed about, and more closely involved in, energy development in their locality' (Devine-Wright 2005, p.59).

Community ownership of energy projects has been observed to increase public acceptance of specific developments (Warren and McFadyen 2010) and renewable energy in general (Walker and Cass 2007). Full community ownership maximises the potential economic and social benefits for communities (Van Veelen and Haggett 2016, Forman 2017), but also carries significant risk and responsibility for communities, and requires significant resources, both personal and financial. Securing finance for the project can be particularly challenging for community groups, due to a lack of collateral with which to secure a loan (Haggett *et al* 2013). The economic challenges of community ownership became even greater at the start of 2016 as a result of significant reductions to the rates of the UK Government's Feed-in Tariff (a scheme designed to support the development of small-scale renewable energy projects) that rendered many traditional models of community energy no longer viable (Community Energy England 2017).

In situations where communities do not deem any form of (full or partial) ownership to be a feasible option, there is still potential for residents to profit from locally-sited projects through a 'community benefits' package from a commercial developer. This voluntary, relatively informal arrangement between the developer and community can take many forms, but is typically provided as an annual cash payment to a community organisation (Strachan *et al* 2015). For communities, these types of arrangements provide a means by which local

residents can capture some of the economic benefit of local renewable energy developments without the demands of ownership. For developers and policymakers, offering local communities a share of the revenues of a development is expected to infer some form of symbolic ownership and, thereby, help gain local acceptance – and subsequently planning consent – for proposed renewables infrastructure (Cass *et al* 2010).

Increasing support for the provision of community benefits as a means of accelerating the development of onshore and offshore wind energy infrastructure (Cowell *et al* 2011) has resulted in the publication of several sets of government and industry guidelines and toolkits (e.g. CSE 2009, Community Energy Scotland 2011, RenewableUK 2013, DECC 2014, FLOWW 2015, Local Energy Scotland 2015a, 2015b). Despite this support from policymakers and developers, previous research has demonstrated that the relationship between community benefits packages and acceptance of renewable energy projects is not straightforward. For example, Cass *et al* (2010) found that, whilst perceived personal benefit was the most significant factor explaining local residents' support for projects, there was widespread scepticism and dismissal of the benefits on offer from developers. As Cowell *et al* (2011) highlight, in the UK, where national planning priorities appear to limit local influence over development decisions, 'the role of community benefits in fostering an acceptable outcome is more complex' (p.552).

Within the UK, the Scottish Government has led the way in actively encouraging greater community involvement in the energy transition (Markantoni and Aitken 2015), and there are a range of Scottish policies that commit to improving local engagement in planning decisions and delivering greater local benefits from renewable energy developments (Scottish Government 2015a, 2015b, 2016, 2017). The Scottish Government encourages developers to offer communities a stake in the project wherever possible and they have championed the establishment of a minimum rate of community benefit payments 'equivalent to at least £5,000 per MW per year' (Local Energy Scotland 2015, p.4). This, they believe, has 'transformed industry practice across the UK' (Scottish Government 2015a, p.28). It is worth noting, however, that in England the industry-developed 'Community Benefit Protocol' commits wind developments over 5 MW to provide 'no less than £5,000 per MW per year or benefits-in-kind to an equivalent value' to the community (RenewableUK 2013, p.2) and that some companies in Wales were exceeding the £5000 per MW payment before 2010 (Cowell *et al* 2012).

When considering community benefits within a Scottish context, it is interesting to note that the most recent community energy policy statement from the Scottish Government

(2015b) includes ‘community benefit from externally-owned projects’ alongside ‘100% community-owned’ and ‘shared ownership’ projects within the typology of ‘community energy’. This inclusion of ‘non-ownership’ models as a form of community energy is arguably at odds with traditional conceptions of community energy (Van Veelen 2017): although there is the promise of some form of local economic return, there is no guarantee of active community involvement in the project. Walker and Devine-Wright (2008) suggest that, through distributing some of the economic benefits locally, community benefits payments may help to move ‘utility-developed’ projects closer to conceptions of ‘community energy’ in terms of their outcomes. They are skeptical, however, that this would do anything to address the ‘process’ dimension required for community energy projects, namely, who is involved and has influence over the project. This has implications for engendering support for projects (and renewable energy more generally) which, they argue, is more likely to materialise ‘when projects are characterised by substantial levels of local involvement’ (Walker and Devine-Wright 2008, p.499).

With these points in mind, there remains a need for empirical evidence to examine *both* ‘process’ and ‘outcome’ dimensions of the design and provision of community benefits and explicitly consider how the relationship between these two dimensions affects local perceptions of the benefit of community benefits. To contribute to existing theory explained thus far and in the literature review that follows, we explore a case study of a commercial wind energy project in Scotland in which the developer provided a community benefit fund for distribution within the local community. We present empirical evidence about the ‘process’ and ‘outcome’ dimensions in this case and evaluate how local perceptions were affected by the relationship between the dimensions. In the same way that Walker and Devine-Wright express a concern ‘that there is something significant and important about a community approach to renewable energy that is lost’ when projects do not deliver both local and collective outcomes and an open and participatory process (2008, p. 499), the evaluation of our case study data suggests that the value of a community benefits package may be diminished if the outcomes are not perceived to be local and collective and the process through which it was arranged is not considered open and participatory.

The Relevance of ‘Process’ and ‘Outcomes’ for Understanding Community Benefits

Historically, there has been no standard approach to the allocation of community benefits from renewable energy developments (Aitken 2010a) and arrangements have been made on a case by case basis (Bristow *et al* 2012). As a result, the landscape of ‘community benefits’ is

highly diverse. In seeking to make sense of the plurality of conceptions of ‘community renewables’, Walker and Devine-Wright (2008, p.498) provide a two-dimensional framework that can be used to analyse a renewable energy project in terms of both the ‘process’ through which decisions are made (‘who is involved and has influence’) and the ‘outcomes’ of the project (‘who it is that benefits particularly in economic or social terms’).

When considering a commercially-owned, large-scale renewables project, the design and delivery of a community benefits package is an embedded component of the broader design and delivery of the development. Asking ‘who is involved and has influence’ over *the benefits package* and ‘who it is that benefits particularly’ from *the benefits package*, is distinct from – but potentially critical to – the question of who is involved in, or benefits from, the project as a whole. Due to the context of their analysis, Walker and Devine-Wright (2008) consider only the latter – the project as a whole – and not the process or outcome dimensions of the benefits themselves. As Bristow *et al* (2012) note, the focus is usually on the ‘outcome’ dimension of community benefits, but ‘inclusive development processes may be critical to realizing meaningful support and public trust in development projects’ (p.1110). They go on to suggest that ‘(t)here may also be a process dimension to ensuring an equitable and agreed distribution of community benefits’. It is this that we explicitly explore in this paper, providing empirical evidence to improve understanding of the relationship between these two dimensions.

In this section we examine the existing literature to draw out what is already known about the relevance of process and outcome dimensions for community benefits arrangements, and establish the theoretical context for our empirical analysis of the role of community benefits in engaging the public in renewable energy transitions.

Local Outcomes of Community Benefit Packages

The diversity of understandings of what community benefits packages should achieve (Walker *et al* 2010) has caused an element of uncertainty regarding what kind of ‘outcomes’ can, and should, be expected by local communities. The wider practice of planning gain has also always been of contested validity and this feeds into debates about what community benefits can consist of, where they stand in law, and how they can be offered. Therefore, a large diversity of community benefit packages has been provided by commercial developers (Munday *et al* 2011). A typology of community benefits is shown in Table 1, alongside examples of where these are being delivered in practice in Scotland.

Categories of ‘community benefit’	Example benefits	Case studies
Financial payments to local communities	<ul style="list-style-type: none"> • Some form of community fund, with lump sum and/or annual payments. • Reduced electricity prices. • Direct sponsorship of local events. 	Meikle Cawere Wind Farm (Aberdeenshire) developed a Local Electricity Discount Scheme for local residents and businesses.
Contributions in kind to local assets and facilities	<ul style="list-style-type: none"> • To landscape and ecological enhancement measures, perhaps that mitigate or compensate for any environmental costs caused by the wind farm. • To tourism/ visitor facilities. 	Aikengall Community Wind Farm (East Lothian) provides funding for the enhancement of Lammermuir Deans SSSI.
Provision of other local services	<ul style="list-style-type: none"> • Educational visits or other educational programmes. 	Sneddon Law Community Wind Farm (East Ayrshire) aims to create an educational/field centre.
Conventional economic benefits	<ul style="list-style-type: none"> • The use of local goods and services. • Employment of local people. • Land rental income to landowners and any royalties. • Local business rates and/or taxes. 	Solwaybank Wind Farm (Dumfries and Galloway) aims to create short and medium term jobs during the construction of the wind farm.
Involvement in the development process	<ul style="list-style-type: none"> • Various forms of engagement activity. 	Freasdail Wind Farm (Argyll and Bute) engages with schools and young people.

Table 1: Typology of community benefits

The view that there should be a standard, minimum level of economic benefit for communities within a certain proximity of a development, regardless of the community’s attitudes towards the development, implies that ‘community benefits constitute a compensation device for affected communities’ (Munday *et al* 2011, p.4). This assumes that the costs of a wind development can be neutralised by the provision of commensurate local benefits (Cowell *et al* 2011). Evidence has suggested, however, that estimating the relevant losses and gains associated with a particular development, and providing a lump sum to compensate those affected, has mixed results (Munday *et al* 2011), sometimes serving to alienate those within communities who hold strong principles that are ‘not for sale’ (Bell *et al* 2005, p.473, Aitken 2010b). This is linked to a well-documented risk that offers of a cash payment can lead to perceptions of developers attempting to bribe community members, which undermine the potential for benefits payments to engender local support for the project (Cass *et al* 2010, Aitken 2010a, Walker *et al* 2017).

Previous research has found a dominant view amongst developers and communities that they should be free to negotiate the level and nature of the benefits between themselves, rather than there being a standardised package or involvement of a third party (Cowell *et al* 2011). In theory, this provides the developer with the opportunity to identify the particular needs and wants of the communities in question, and, subsequently, devise a suitable benefits package (Devine-Wright *et al* 2001, Meacham 2012). However, as Cowell *et al* (2011) state, the concept of a benefits package being locally negotiated ‘raises questions about whether just outcomes can be achieved through bilateral negotiations between what are often large corporations and small rural communities, given the inequalities of power and resources between them’ (p.554). As a result, the *process* through which community benefit packages are negotiated, and the extent to which communities are involved in and have influenced over this, is an important for ensuring community benefits are of benefit to the community (Warren *et al* 2005, Aitken 2010a, Cowell *et al* 2011, Bristow *et al* 2012).

The Process of Arranging Community Benefit Payments

The lack of regulation of community benefits extends to the process through which the benefits packages are determined. Currently, in the UK, the power to control and design the benefits ultimately lies with the developers, rather than with the local communities (Munday *et al* 2011), and it is up to the developer to engage the community in that process.

In Scotland, under the terms of Planning Advice Note 3/2010, all renewable energy developers are required ‘to consult with relevant community councils and hold at least one public event which is advertised in the local press’ (Scottish Government 2010, p.16), but there is no additional specific legal obligation for commercial developers to consult communities specifically on community benefits arrangements. In the Scottish Government’s ‘Good Practice Principles’ on community benefits, developers are advised to discuss potential benefit packages with communities in the early, pre-consent stages of the development, through ‘flexible, well-planned consultation processes which are inclusive, meaningful and which respond to the communities’ needs’ (Local Energy Scotland 2015a).

A transparent process, which provides sufficient and timely information to the public and enables the public to understand how and why decisions are being made, has been identified as a key criterion for ‘good’ public participation in policy and planning (Rowe and Frewer 2000). This is recognised within the context of wind energy developments, where local acceptance has been described as ‘crucially dependent [upon] transparency from the outset’ (Jobert *et al* 2007, p.2759). Transparency can work towards building and improving

relationships of trust between the developer and communities (Firestone *et al* 2012), alleviating suspicions that are often held towards commercial developers (Jones and Eiser 2009), and avoiding claims of hidden agendas and ulterior motives.

If community benefits are to be viewed as a means of fostering public support, or as a ‘product of good neighbourliness’ (Cowell *et al* 2011, p.553), transparency and information provision alone is arguably not sufficient. It has been observed that providing information about the potential financial benefits of a project for local people before planning consent has been granted can in fact increase the risk that the developers are perceived as attempting to ‘buy planning permission’ (Aitken 2010a, p. 6074). This underlines the value of ensuring that community benefits are arranged through a participatory process that is ‘underpinned by a philosophy that emphasises empowerment, equity, trust and learning’ (Reed 2008, p.2422). As Cowell *et al* (2011) have argued, the rationale linking community benefit provision and social acceptance can only be expected to hold true if the community has the power to determine the benefits being provided, and to block a development in situations where they are not satisfied. Previous research has suggested that, whilst communities can sometimes influence the *form* of the benefits, for example, as a lump-sum payment or in-kind provisions, they are rarely given control over the *level* of the benefits provided (Bristow *et al* 2012). As a result, it is questionable whether communities are necessarily being empowered in the process of arranging community benefits provisions.

A key issue in enabling the community to participate effectively in decision-making is the well-rehearsed problem of defining ‘the community’ (Aitken 2010a, Munday *et al* 2011, Bristow *et al* 2012). Due to the developer-led nature of community benefits, it is typically the developer who defines the community and, commonly, this takes the form of a readily identifiable, place-based community, represented by some form of institutional body, such as a community council (Bristow *et al* 2012). This relatively arbitrary definition of *the community* may fail to encompass all those who feel that they have a right to participate in the process of determining the scope of the benefits provided, including who should receive the benefits.

In the next section, we introduce the case study of a wind energy project in Scotland, through which we examine the way in which these tensions play out in practice. We investigate local perceptions of the community benefits provided and the process through which these were arranged, and draw out the key elements of this case that provide lessons for future policy and practice. Based on the review of literature presented thus far, the issues of who is involved in and/or benefits from community benefits, the potential negative impacts

of offering a community benefits package at all, and the importance of engaging communities in determining benefits packages are of particular interest to our analysis.

Methodology

This paper presents an empirical examination of a single case study in central Scotland. All names have been removed from the subsequent presentation and analysis of data to ensure participants' anonymity, and the name of the development site (Glenburn) is a pseudonym to prevent the locations of members of the communities from being identified beyond doubt.

Case Study

Glenburn is a wind development surrounded by several ex-mining communities, with a total population of approximately 28,000 residents. Glenburn was chosen as the focus of the case study as, although there are a number of operational wind farms in the surrounding areas, Glenburn has experienced the largest amount of opposition within the local community to community benefits. It is this phenomenon that made the Glenburn case attractive for in-depth study as the opportunity arose to consider the extent to which the relationship between 'process' and 'outcome' dimensions had affected these negative local perceptions of community benefits. Situated in a landscape with a history of energy production (coal mining), the area is relatively deprived and would benefit from further investment in community services and infrastructure. The initial planning application for a wind farm on the site was rejected by the local authority in 2008, after information sessions were held within the local communities and a statutory consultation was conducted with community councils. This local rejection was subsequently overruled by the Scottish Government in 2009 and the development received planning consent. The development has been operational since 2012. Due to the timing of the development, it preceded the establishment of the Scottish Government's 'Good Practice Principles' for the provision of community benefits from onshore wind, including the recommended minimum payment of £5,000 per MW per year (Local Energy Scotland, 2015a).

The development at Glenburn has an installed capacity of 24 MW, and the developer opted to provide a community benefit package of £2,000 per MW per year (a decision made without consulting the local community). As this is index-linked, this sum increased to an overall annual payment of £54,000 per year, but is still considerably lower than the current Scottish Government recommendation. The community fund collected from these payments is administered by Glenburn Community Trust (GCT), made up of four representatives from

the local area. In addition to the conventional financial benefits provided, the developer has sponsored a local youth sports team, and supported students from a local college studying subjects relevant to employment in the wind energy industry.

Interviews

Semi-structured interviews were conducted within the case study area during June and July 2014. Interviewees were identified and selected using a stakeholder analysis, with ‘stakeholders’ defined as those within the surrounding towns who affect or are affected by the wind farm (Reed 2008). This avoided the identification of interviewees on an *ad hoc* basis, which can often marginalise certain community members, or add bias to the whole process. As resource management typically deals with conflicting interests of various stakeholders, stakeholder analysis was used as it provides a tool for recognising ‘multiple perspectives of the ‘truth’ where ‘reality’ is socially constructed’ (Reed *et al.* 2009, p.1936). This type of approach was considered appropriate in our study where understanding the local perceptions of community benefits was paramount. Stakeholders were categorised into stakeholder groups, then classified and characterised through an interest *versus* influence matrix, in order to identify the ‘key players’ who had both high interest and influence within the community (Reed *et al.* 2009). The stakeholder analysis identified 30 stakeholder groups as ‘key players’ who were contacted and invited to take part in an interview. A non-random purposive sampling approach was employed to identify the most appropriate interviewee(s) within each group (Noy 2008), with initial contacts identified via a local development trust, the community council and the developer. Twelve stakeholders agreed to be interviewed, representing a range of roles in the surrounding communities, including: local politicians; community council members; local councillors; and local residents. An interview was also conducted with a representative of the wind farm development company. Although the interviews conducted in the study yielded in-depth data for analysis, it was a limitation of the study that more interviews were not conducted. Interviewee recruitment was challenging with many of those invited declining to take part within the timeframe available for the research. In order to mitigate this limitation and to triangulate data collected in the 12 interviews, two local meetings were also observed: a GCT meeting and a community council meeting. Observing these meetings helped to contextualise the interviews, particularly through observing the types of funding applications submitted to the GCT and the process via which they were assessed.

In the results section, quotes are attributed to interviewees using the reference codes shown in Table 2. Interview questions focused on three themes, designed to draw on the direct experience of the interviewees:

- 1) How the overall community engagement ‘process’ was viewed by the community (with regards to the planning process surrounding the development itself);
- 2) Community perceptions of the community benefit package (the ‘outcome’) and how it was agreed; and
- 3) Alternative ‘outcomes’ of interest to the community.

The third theme was included to understand both the community’s preferences in terms of benefits (the ‘outcomes’) and the extent to which the actual community benefits package matched these preferences. The questions used were exploratory in nature, seeking to understand each respondent’s views and reactions in relation to the wind farm and the associated engagement strategy and benefits package offered. The questions followed a loose question format similar to the stages of discussion proposed by Arthur and Nazroo (2003), however, the questions were individually tailored depending upon the identity of each respondent, and their role within the case study.

Interviewee affiliations	Codes
2 x Community Council Members	CC1-CC2
3 x Local Residents	LR1-LR3
2 x MSPs	MSP1- MSP2
4 x Local Councillors	LC1-LC4
1 x Developer	DVP

Table 2: Interviewee codes

A visual aid was used as a prompt during the interviews to provide information which would enable a greater level of specificity and depth in discussions of alternative community benefits arrangements (Theme 3) (Gillham 2000). The aid (Figure 1) provided examples of different forms of community benefits from wind developments, based on Meacham (2012).

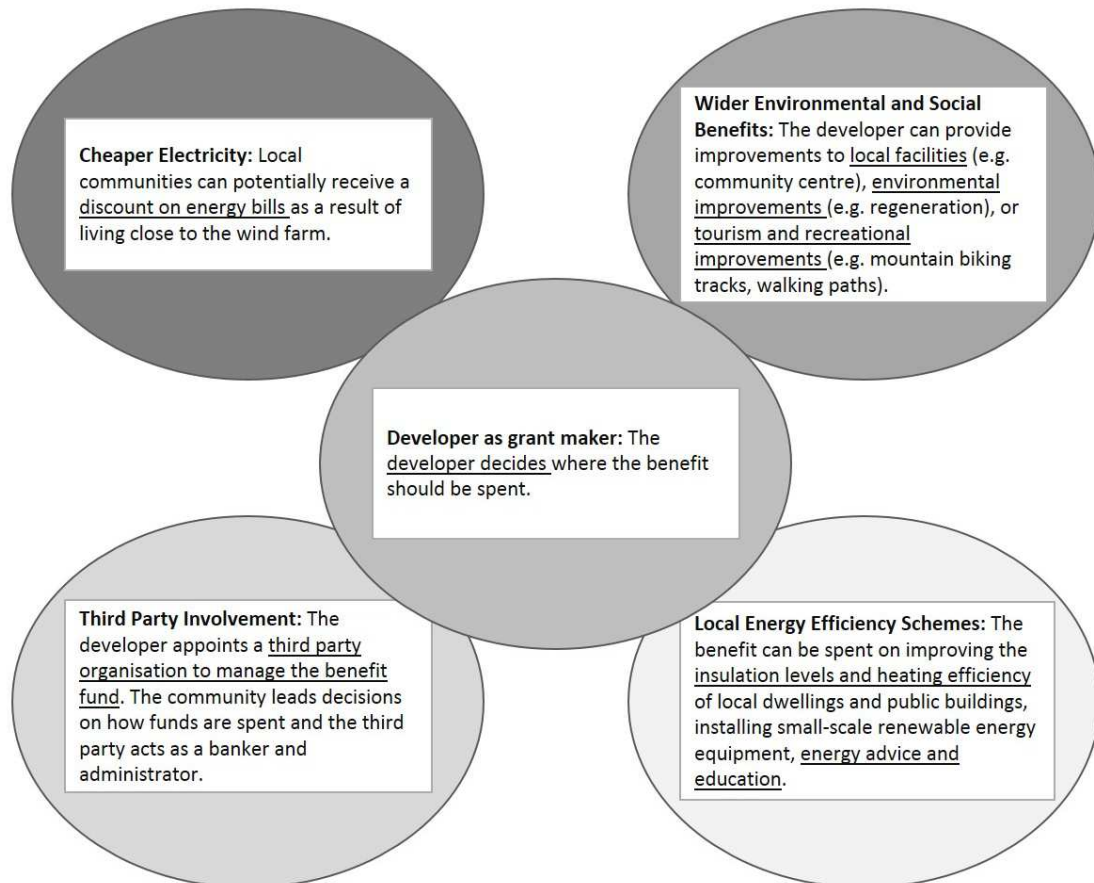


Figure 1: Example of handouts used during interviews (Meacham 2012)

Results

Process: Community Engagement

The community engagement process carried out by DVP focused on the wind farm development process and involved one information session with each of the community councils and two information sessions for the wider public. During the community council meetings, DVP gave a presentation about the proposed development, and asked for feedback on behalf of the community. The community councils each attempted to gauge community opinion to form a response to DVP regarding the proposed Glenburn development, however seven interviewees felt that this task was poorly carried out due to a lack of time and resources on the part of the community council, leading to ineffective canvassing of the community opinion. Community information sessions similarly offered the community information about Glenburn, however these sessions were poorly advertised, and as a result, poorly attended.

A recurrent theme during the interviews was the local residents' lack of awareness of the proposed development while it was in the initial planning stage. Described as going '*completely under the radar of the wider community*' (LR2), community members recounted not '*know[ing] anything about [the development] until it started going up*' (LR3). Relevant information about the development was not disseminated to the community directly. Instead, information was distributed to community councils and published on the local authority's website. Although '*the information was there if you wanted to go and find it*' (LC4), the use of community council consultations as the primary channel through which to disseminate information and gauge community opinion was deemed inappropriate by nine interviewees. One interviewee noted that certain residents living in close proximity to the Glenburn site lay outside the catchment areas of the community councils: '*[this area] wasn't really spoken to at all because it's not got a community council, so it's been excluded, and its needs have pretty much been excluded*' (MSP2). Even in areas that were represented by a community council, engagement was perceived to be minimal, and interviewees identified a need to make '*community engagement more visible to the public*' (LR2). It was noted by seven of the interviewees that, as volunteers, community council members often lacked the resources to canvas community opinion or to disseminate information. The poor advertisement of community engagement sessions was seen as a major barrier preventing the local community from engaging and participating in discussions about the development:

'A lot of people didn't know it was happening, unless you checked out the notice board or checked out the wee clip in a [local authority] building... They could have advertised it a lot better' (LC4).

This bred negative attitudes towards the developer, with interviewees expressing feelings of distrust and dishonesty, particularly when they had been unaware of the community consultation sessions that had taken place: '*it was kind of kept hush-hush*' (LR3); '*...it was almost like they don't want people to come*' (LR2). Furthermore, interviewees suggested that, when people were aware of consultation sessions, the timing of the sessions, often held in the early evenings, prevented some residents from attending the meetings due to work or childcare commitments. The developer working in Glenburn acknowledged that there were low levels of attendance at community consultation sessions, with those who did attend being either vocally opposed the development or attending as part of their role as a local councillor.

The information provided by the developer to community members was also described as inadequate and lacking impartial facts about the project's construction and

operational phases, insufficiently preparing local residents for the reality of the development. One interviewee described the community's shock upon seeing the scale of the completed development, as they *'just couldn't quite believe what it was'* (MSP1). The information that was disseminated in the planning stages was regarded as promotional material, and contributed towards decreasing trust in the developer. The developer acknowledged that the information they provided about the design and development process of the wind farm was *'just positive glossy material [...] focusing on green energy, homes that the wind farm supports and CO₂ reductions'* (DVP), raising questions about the motivations behind the design of the consultation process.

The consultation sessions were perceived to undertake the minimum requirement necessary to achieve commercial goals, with little evidence of the developer's aspiration to provide a platform for meaningful engagement which would canvas and incorporate the opinions of community members. Many of the interviewees felt that local residents were powerless to the actions of a large company, and any attempt to participate in discussions was futile: *'I would say, every developer, they've only got the developer's interests at heart along with the person that's going to make money, not necessarily the community'* (CC1). These perceptions were supported by comments from the developer who accepted that they did not attempt to engage with 'outspoken' community voices: *'We just left the radicals to get on with doing their own thing and did not directly engage with them'* (DVP). Such a statement questions the meaningfulness of the community engagement that was undertaken. Community members felt their concerns were often not acted upon or incorporated within the development process. Through removing the ability of the community members to exercise any actual power, interviewees often felt that the developer was undertaking the community engagement process as a *'tick-box exercise... for the [planning] application to go forwards'* (LC4). As such, the process as a whole was widely viewed by local residents as a 'commercial exercise': *'they were trying to... make some money and build some turbines'* (LC2).

Overall, the community engagement process focused almost entirely on the wind farm development process as opposed to specific issues arising with the community benefits package. The benefits package was not discussed or negotiated with the wider community, with community councils and *'local councillors and MSPs'* (DVP) being contacted by the developer instead. This was particularly highlighted in relation to the benefits provided to the local college to support students studying subjects relevant to employment in the wind energy industry, as this was not seen as a *'community decision [or] a community engagement*

process to come up with the decision [...] just a discussion with councillors' (LR2). Although the local councillors had aimed for “*the communities to be more involved in taking the decisions [about] how the money is spent'* (LC3), the lack of awareness amongst the interviewees of the different benefits offered by the developer suggest that this was not achieved.

Outcome: Community Benefits Package

Interviewees reported local dissatisfaction and a lack of a sense of ownership of the community benefits package delivered by Glenburn wind farm. The developer currently issues an annual payment of £54,000 per year to local residents, managed by GCT. However, the majority of the interviewees believed that the community fund was *'inadequate and not comprehensive'* (MSP2) in relation to the size of the development and the extent of the impact on local people: *'we had actually calculated it out, it's actually £1 odd per person per year if you take all the actual residents in the community'* (LR2). The developer set up the GCT and stipulated the rules for awarding funding, including a restriction on the amount of money that can be awarded to each project. This was set at a maximum of £1000, which severely restricted the types of projects which could be funded by the community benefit fund. The large returns reaped by the developer were also noted in a number of the interviews as a point of contempt. Comparisons were made between *'massive profits... [and] very little payback that communities are getting'* (MSP1), demonstrating the discontent felt through the lack of apparent balance of monetary benefits. In contrast, the developer believed they had offered *'a very generous community benefit fund'* (DVP), highlighting the gap between the perceptions of the local community and the developer.

Contrary to the opinion of the developer, several interviewees reported a lack of understanding about what was actually being offered to the wider community. For example, CC2 suggested that there was a common misconception amongst local residents that the electricity bills of local communities surrounding Glenburn would have been reduced, once the wind farm was constructed:

'[The developers] said it would cover say [Community 1], [Community 2]...and it would power the whole place, and I think some people, especially the elderly, thought that their bills would come down... what the elderly people can't see is how [Glenburn] is benefiting them' (CC2).

Echoing the criticisms of the developer's engagement processes, it was widely reported by interviewees that there was a lack of local awareness of the funding that was available for community members from GCT: *'They [GCT] are not advertising. They're not putting up posters. They're not saying anything, at all'* (LR1). Representatives of GCT acknowledged the wider community's lack of awareness about the extent of the funds available as a key challenge that was restricting the benefits from being fully experienced by all community members: *'they don't know how to apply to it, they don't know where to get the application form, they don't know who would be eligible for the grant'* (CC2).

Interviewees also expressed disappointment at the way in which the benefit funds were being awarded by GCT. Grant application forms were available through the GCT website, which had been set up by the developer. The grants, each up to a value of £1000, targeted community projects run by constituted groups within the local communities surrounding Glenburn. Successful grant applications awarded by GCT included trips for a local Scout group, and a day trip for a local nursing home. The projects that had been funded were described by interviewees as short-term and low impact: *'little jollies here and there... [which would have] no actual benefit other than people's memories'* (LC3). Many stated a preference for the funds to be consolidated into a *'bigger pot of money'* (LC4) which could be used for a larger, more *'tangible benefits'* (MSP2):

'It would have been nice to see a plan for some sort of legacy project, whether it's sports or community facilities...it's not going to deliver any of that. There's going to be nothing at the end that you can point to and say "that's what we got"' (MSP2).

Interviewees linked dissatisfaction with the allocation of the benefit fund to the fact the decisions are made by GCT, an isolated group of four community representatives, with minimal input from other community members.

The community benefits package was also described by interviewees as not compensating for the negative impacts on the amenity value of the area, caused by the development. This perception of the *'non-substitutability'* of the community benefit package with the local negative impacts of a wind farm was a recurrent theme, which transpired to suggestions of bribery on the part of the developer, both within the planning process and in exchange for local support of the project. Some saw the provision of a community benefit as *'corruption of the planning process'* (LC2), whereby the community benefit was *'pushed by the developer'* (LC3), providing greater motivation for planning permission to be granted: *'the bigger the sweetener, the bigger the problem'* (LR1).

Connecting process and outcome

The findings from the interviews suggested that the community engagement process and the allocation of community benefits have not increased the local acceptance of the wind farm. The developer believed that *'the community were divided'* (DVP) in the initial stages of the development, both in relation to wind farms generally and to Glenburn specifically. This was supported by the interviewees, who themselves held a range of views towards the development, and suggested that the community as a whole was split in its attitudes towards the development. Interviewees who were initially supportive of Glenburn made a link between the historical *'industrial landscape'* (LC1) of the coal mining industry in the past and the *'industrial structures'* (MSP1) of wind turbines in the present. Those who expressed negative initial opinions of the development were often found to have negative views in relation to wind farms more generally, and their opinion towards the specific development was therefore likely to be derivative: *'Well...I mean, we just didn't want them'* (LR1). Most interestingly, interviewees who expressed an initial neutrality towards Glenburn communicated a *'hardening'* of their opinion over time, revealing a shift towards a more negative view of the development, across a variety of interviewee groups. Three of the interviewees started neutral and became negative about the development, and another three of the interviewees were initially negative and hardened their opinion over time. None of the interviewees suggested that the community benefits package had converted them from a negative or neutral position to a supportive view. There was evidence that this failure to achieve a positive change in local opinion was directly influenced by the perceived failures of the community engagement process undertaken by the developer throughout the project:

'The first that the community [had] known was when we were two months into construction, and there was a press release to say they had been approved and had started work, and it was at that point that we started doing our research, we were neither opposed or supportive of the development, but we started looking into it, and then we became opposed from what we had seen' (LR2).

Discussion

In what follows, we discuss three key features of this case that enable us to consider an answer to how local perceptions of community benefits are affected by the relationship between process and outcome dimensions.

The Limitations of Representational Community Consultation

The results of this study revealed a feeling of ‘disconnect’ between the community benefits package offered and the preferences of the community as to what they wanted and needed. This issue may be attributed to the primary use of community councils as the vehicle for community engagement. Whilst operating through a community council is explicitly suggested as a means of community engagement (Scottish Government 2010), in the Glenburn case, employing such a narrow channel of engagement as a proxy for the community removed the potential for community-wide communication and cooperation and, therefore, for a ‘just’ outcome (Walker *et al* 2010). As Bristow *et al* (2012) identify: ‘Although developers and policy-makers might find it convenient for there to be clear, extant communities “out there” ready to be the recipients of community benefits, any assumption that such communities exist is problematic’ (p.1109).

Proactively recruiting a variety of different community members and welcoming a diversity of individual and collective preferences can enable a process of ‘needs-led planning’ (Richards *et al* 2007, p. 20). Through this process, community engagement can reflect a conscious effort to acknowledge and incorporate community preferences and requirements into the design of community benefits or ownership structures, thus encouraging opinion through the creation of an open and inclusive platform to inspire creative solutions. This is in stark contrast to the case in Glenburn, where the consultation process adopted by the developer was viewed locally as an instrumental procedure to increase social acceptability and ‘expedite the decision-making process’ (Cowell *et al* 2011, p.540).

A recurrent theme evident throughout the interviews was a perception of the developer as ‘big business’ which held the money and power to control and influence participatory and planning decisions to suit its own specific commercial agenda. There was a failure on the part of the developer to incorporate, or at least acknowledge, the concerns of community members who voiced negative opinions. The developer’s initial assumption that these community members were ‘radicals’ removed the legitimacy of their opinions from the community engagement process, creating and concealing an unjust process of exclusion (Aitken 2010c). This echoes the warnings throughout much of the existing literature on public engagement of the risk of an ‘us and them’ relationship forming between community members and the developer, creating a significant barrier to collaborative participation (Wolsink 2007).

Reed (2008), amongst others, has argued, ‘it is not enough to simply provide stakeholders with the opportunity to participate in decision-making; they must actually be

able to participate' (p.2422). Empowering people to participate can include interpreting technical information or providing context to local plans, with the key principle being that the information is 'presented in a way that the public can understand and it must be easy for them to obtain it' (Bell et al 2005, p.469). The interviewees suggest that this was not achieved in the Glenburn case, leaving local residents feeling excluded from the decision-making process.

The Community's Trust in The Community Trust

In terms of the distribution of the benefit funds in Glenburn, applications by the community were considered, and subsequently accepted or rejected, by the four individuals running the GCT. Described as an isolated community group, it is likely that they have a nuanced position within the community, which will evolve over time as a result of the power they hold as managers of the fund. These findings echo recent observations of Goedkoop and Devine-Wright (2016), within the context of shared ownership renewable energy projects. In considering the justice implications of these projects, they found that some of the developers themselves expressed concerns regarding the (un)representativeness of the community actors with whom they worked, and noted the difficulty of engaging with a diversity of local residents. This highlights the importance of acknowledging that, as a small, self-selecting, agenda-driven group, community groups such as GCT will not necessarily be representative of the geographic community in which they operate, which links to wider, longstanding debates around how 'the community' is framed and made operational within this context (Raco and Flint 2001, Bristow *et al* 2012, Creamer 2015).

Although '[c]onsensus over how a community fund should be managed and/or allocated may never be fully possible' (Aitken 2010a, p.6073), the Glenburn case highlights that there is significant scope for improvement in this regard. The diverse interests of the community need to be incorporated into the management of this fund, through broadened community participation and decision-making processes (Markantoni and Aitken 2015). According to the interviewees, the community as a whole did not feel empowered, or feel a sense of ownership over the community benefit or the associated decisions being made. Therefore, the way in which the benefits are being distributed, and the types of projects being funded (described as intangible, invisible and/or short-term, rather than legacy projects) has served to highlight – rather than resolve – issues of equity and powerlessness amongst those members of the community who are not linked directly with those involved in managing the fund. These sentiments again highlighted feelings of disempowerment, both within the design

of the community benefit and its administration via GCT, with the sense that final decisions rested, in both contexts, with ‘outsiders’ (Hinshelwood 2001). If local representatives had had some influence in the design of the community benefit package, there may have been more legacy projects, which may have positively affected the long-term associations the residents have with the development (Fast and Mabee 2015). However, low levels of motivation to engage in discussions with the developer and within the community may have hindered such a transition in practice (Kalkbrenner and Roosen 2016).

These findings support previous research that has found that, whilst the provision of community benefits is now routine, they are rarely planned and implemented in a strategic way that will have long-term local welfare or development outcomes (Munday *et al* 2011). Moreover, it has been observed that – even where there is a shared ambition for meaningful, long-term benefits – developers and community members found it difficult to agree on what this would mean in practice (Aitken 2010a). Similarly, Bristow *et al* (2011, p.1115) note that ‘small, highly localized bodies’ operating on an *ad hoc* basis, may not be best placed to grasp and manage the scale of the benefits presented by increasingly large renewable energy developments. This raises a significant challenge for policymakers and developers who are genuinely interested in delivering a positive legacy for local communities, in terms of the mechanisms through which communities are engaged in the design and delivery of community benefits packages.

The Boomerang Effect

The provision of community benefits in Glenburn was not linked with a positive participation process, nor was the outcome (the benefit package) seen as a positive result for the majority of those interviewed, as the benefits provided were not well-advertised locally and were generally considered inadequate. Instead, as with other examples in the literature (Cass *et al* 2010, Aitken 2010a, Walker *et al* 2017), the community benefits package in Glenburn was viewed by many interviewees as a bribe, or as a means with which to expedite and ensure a successful planning application.

This was further underlined by the declining levels of support for the Glenburn development amongst those who were initially positive or neutral towards the project, which rings alarm bells with regards to the negative impacts that the community benefits package bestowed on local opinion. We suggested at the outset of this paper that the value of a community benefits package in promoting support or acceptance of a renewable energy project may be diminished in cases where the community does not perceive the process or

outcomes to be collectively fair. Our results indicate that, under these circumstances, not only can community benefits fail to engender additional support, but can result in a ‘boomerang’ effect, whereby resistance to the development increases locally (Walker *et al* 2014).

Conclusion

This paper has analysed the perceptions of community actors towards a commercial wind energy project in central Scotland. Our empirical data has highlighted the critical relationship between the ‘process’ and ‘outcome’ dimensions of the design and distribution of community benefits from wind energy developments. The interviewees reported local dissatisfaction with the outcomes of the Glenburn development for the community, with the most significant cause of this dissatisfaction being an ineffective community engagement process regarding the project as a whole, and the benefits package itself. Our findings support the observations of Aitken (2010a), who found it was not possible to separate people’s perceptions of how ‘fair’ the community benefits package was from their perceptions of the way in which the planning process as a whole had been conducted. By failing to achieve a satisfactory engagement process, the potential positive outcomes of the development for community members have been significantly compromised. Deemed ‘community energy’ under current Scottish Government community energy policy, due to the annual community benefit payment made to the local Community Trust to administer within the local area, the analysis has also revealed a number of important factors that have limited the effectiveness of the community benefit arrangement and the extent to which the project could be termed ‘community energy’.

The findings highlight the inadequacies of current community energy policy and associated wind developer practice in relation to the process of engaging communities in the planning process and delivering a community benefit fund. The lack of a legal obligation for developers to consult communities on community benefit arrangement poses an important challenge if community benefits are to tackle issues of equity and justice. However, issues may also arise if there were to be a legal obligation to consult communities on community benefits when the benefits packages themselves cannot be legally mandated. In the case of Glenburn, a poorly designed and delivered community engagement process, which relied on the community council as the main vehicle of information dissemination, led to negative associations with the development amongst the community. This negative association was amplified by the nature of the community benefit arrangement, which was seen as ineffective

and a vehicle for increasing the developer's chances of receiving planning permission for the development.

Further work is required to ascertain how far one can extrapolate from the Glenburn case and, in particular, whether similar experiences exist in other communities where community benefit funds have been designed and delivered by developers. If similarities exist, questions could be raised about the effectiveness of community benefits as a positive component of strategies to empower communities within the renewable energy transition.

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References

- Aitken, M. (2010a) Wind power and community benefits: challenges and opportunities, *Energy Policy*, vol. 28 (10), pp. 6066-6075.
- Aitken, M. (2010b) Why we still don't understand the social aspects of wind power: A critique of key assumptions within the literature, *Energy Policy*, vol. 38 (4), pp. 1834-1841.
- Aitken, M. (2010c) A three-dimensional view of public participation in Scottish land-use planning: empowerment or social control, *Planning Theory*, vol. 9 (3), pp. 248-264.
- Arthur, S. & Nazroo, J. (2003) Designing Fieldwork Strategies and Materials. In: Ritchie, J., and Lewis, J. (eds.) *Qualitative Research Practice* (London: SAGE Publications Ltd.).
- Bell, D., Gray, T. & Haggett, C. (2005) The 'Social Gap' in Wind Farm Siting Decisions: Explanations and Policy Responses, *Environmental Politics*, vol. 14 (4), pp. 460-477.
- Bell, D., Gray, T., Haggett, C. & Swaffield, J. (2013) Re-visiting the 'social gap': public opinion and relations of power in the local politics of wind energy. *Environmental Politics*, vol. 22 (1), pp.115-135.
- Bristow, G., Cowell, R. & Munday, M. (2012) Windfalls for whom? The evolving notion of 'community' in community benefit provisions from wind farms, *Geoforum*, vol. 43, pp. 1108-1120.
- Cass, N., Walker, G. & Devine-Wright, P. (2010) Good Neighbours, Public Relations and Bribes: The Politics and Perceptions of Community Benefit Provision in Renewable Energy Development in the UK, *Journal of Environmental Policy and Planning*, vol. 12 (3), pp. 255-275.
- Community Energy England (2017) *Community energy state of the sector: A study of community energy in England, Wales and Northern Ireland*. [Online] Available at: https://communityenergyengland.org/files/document/51/1498251872_CommunityEnergy-StateoftheSectorReport.pdf
- Community Energy Scotland (2011) '*Community Renewable Energy Toolkit*', [Online] Available at: <http://www.scotland.gov.uk/Resource/Doc/917/0115761.pdf>

- Community Windpower Ltd. (2014) 'Projects', [Online] Available at:
<http://www.communitywindpower.co.uk/projects/information.asp?ProjectID=15>.
- CSE [Centre for Sustainable Energy] (2009) Delivering community benefits from wind energy development: A Toolkit. *Report for the Renewables Advisory Board*. [Online] Available at: <https://www.cse.org.uk/downloads/toolkits/community-energy/planning/renewables/delivering-community-benefits-from-wind-energy-toolkit.pdf>
- Cowell, R., Bristow, G., & Munday, M. (2011) Acceptance, acceptability and environmental justice: the role of community benefits in wind energy development, *Journal of Environmental Planning and Management*, vol. 54 (4), pp. 539-557.
- Cowell, R., Bristow, G. and Munday, M. (2012) Wind Energy and Justice for Disadvantaged Communities. Viewpoint produced for the Joseph Rowntree Foundation, York. [Online] Available at: <https://www.jrf.org.uk/report/wind-energy-and-justice-disadvantaged-communities>
- Creamer, E. (2015). The double-edged sword of grant funding: a study of community-led climate change initiatives in remote rural Scotland, *Local Environment*, vol. 20, pp. 981-999.
- DECC. (2014). Community Energy Strategy: People Powering Change. [Online] Available at:
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/275171/20140126_Community_Energy_Strategy_summary.pdf
- Devine-Wright, P. (2005) Local Aspects of UK Renewable Energy Development: Exploring Public Beliefs and Policy Implications, *Local Environment*, vol. 10 (1), pp. 57-69.
- Devine-Wright, P. (2011) Public engagement with large-scale renewable energy technologies: breaking the cycle of NIMBYism, *Wiley Interdisciplinary Reviews: Climate Change*, vol. 2 (1), pp. 19-26.
- Devine-Wright, P., McAlpine, G. & Batley-White, S. (2001) 'Wind turbine in the landscape: An evaluation of local community involvement and other considerations in UK wind farm development', *Conference Proceedings: 'Old world – new ideas: environment and change and tradition in a shrinking world', Edinburgh, 3-6 July 2001* [Online]

Available at: http://www.edra.org/sites/default/files/publications/EDRA32-Devine-Wright_1.pdf.

- Fast, S. & Mabee, W. (2015) Place-making and trust-building: The influence of policy on host community responses to wind farms, *Energy Policy*, vol. 81, pp. 27-37.
- Firestone, J., Kempton, W., Blaydes, M., Samoteskul, L. & Samoteskul, K. (2012) Public acceptance of offshore wind power: does perceived fairness of process matter? *Journal of Environmental Planning and Management*, vol. 55 (10), pp. 1387-1402.
- FLOWW [Fishing Liaison with Offshore Wind and Wet Renewables Group] (2015) FLOWW Best Practice Guidance for Offshore Renewables Developments: Recommendations for Fisheries Disruption Settlements and Community Funds [Online] Available at: <https://www.thecrownestate.co.uk/media/501902/floww-best-practice-guidance-disruption-settlements-and-community-funds.pdf>
- Forman, A. (2017) Energy justice at the end of the wire: Enacting community energy and equity in Wales. *Energy Policy*, vol. 107, pp. 649-657.
- Gillham, B. (2000). *Case Study Research Methods* (London: Continuum).
- Goedkoop, F. & Devine-Wright, P. (2016) Partnership or placation? The role of trust and justice in the shared ownership of renewable energy projects, *Energy Research and Social Science*, vol. 17, pp. 135-146.
- Haggett, C., Creamer, E., Harnmeijer, J., Parsons, M. & Bomberg, E. (2013) 'Community Energy in Scotland: the Social Factors for Success', [Online] Available at: http://www.climateexchange.org.uk/files/4413/8315/2952/CXC_Report_-_Success_Factors_for_Community_Energy.pdf
- Hinshelwood, E. (2001) Power to the People: community-led wind energy-obstacles and opportunities in a South Wales Valley, *Community Development Journal*, vol. 36 (2), pp. 95-110.
- Jobert, A., Laborgne, P. & Mimler, S. (2007) Local acceptance of wind energy: Factors of success identified in French and German case studies, *Energy Policy*, vol. 35, pp. 2751-2760.
- Jones, C.R. & Eiser, J.R. (2009) Identifying predictors of attitudes towards local onshore wind development with reference to an English case study, *Energy Policy*, vol. 37, pp. 4604-4614.

- Kalkbrenner, B.J. & Roosen, J. (2016) Citizens' willingness to participate in local renewable energy projects: The role of community and trust in Germany, *Energy Research and Social Science*, vol. 13, pp. 60-70.
- Local Energy Scotland (2014) 'Aberdeenshire Community Energy Event Marks First Wind Farm Electricity Discounts' [Online] Available at:
<http://www.localenergyscotland.org/news-events/2014/august/aberdeenshire-community-energy-event-marks-first-wind-farm-electricity-discounts/>
- Local Energy Scotland (2015a) 'Scottish Government Good Practice Principles for Community Benefits from Onshore Renewable Energy Developments', [Online] Available at: <http://www.localenergyscotland.org/media/82523/good-practice-principles-sept-2015.pdf>
- Local Energy Scotland (2015b) 'Scottish Government Good Practice Principles for Community Benefits from Offshore Renewable Energy Developments', [Online] Available at: <http://www.localenergyscotland.org/media/77721/Good-Practice-Principles-for-Offshore-Community-Benefits.pdf>
- Markantoni, M. & Aitken, M. (2015) Getting low-carbon governance right: learning from actors in Community Benefits, *Local Environment*, vol. 21 (8), pp. 969-990.
- Meacham, T. (2012) 'SPICe Briefing: Renewable Energy: Community Benefit and Ownership', [Online] Available at:
http://www.scottish.parliament.uk/ResearchBriefingsAndFactsheets/S4/SB_12-71.pdf
- Munday, M., Bristow, G. & Cowell, R. (2011) Wind farms in rural areas: How far do community benefits from wind farm represent a local economic development opportunity? *Journal of Rural Studies*, vol. 27 (1), pp. 1-12.
- Noy, C. (2008) Sampling knowledge: The hermeneutics of snowball sampling in qualitative research, *International Journal of Social Research Methodology*, vol. 11 (4), pp. 327-344.
- Pollitt, M. (2010) UK renewable energy policy since privatization. In: Moselle, B., Padilla, J. & Schmalensee, R. (Eds), *Harnessing renewable energy in electric power systems: theory, practice, policy* (Abingdon, UK: Earthscan).

- Raco, M. & Flint, J. (2001) Communities, places and institutional relations: assessing the role of area-based community representation in local governance, *Political Geography*, vol. 20 (5), pp. 585-612.
- Reed, M.S. (2008) Stakeholder participation for environmental management: a literature review, *Biological Conservation*, vol. 141, pp. 2417- 2431.
- Reed, M.S., Graves, A., Dandy, N., Posthumus, H., Hubacek, K., Morris, J., Prell, C., Quinn, C. H. & Stringer, L. C. (2009) Who's in and why? A typology of analysis methods for natural resource management, *Journal of Environmental Management*, vol. 90, pp. 1933-1949.
- RenewableUK (2013) *Onshore Wind: Our Community Commitment. A commitment by the onshore wind industry to local communities*. London: RenewableUK
- RES (2014a) 'Freasdail Wind Farm' [Online] Available at: <http://www.freasdail-windfarm.co.uk/the-project/local-benefits>
- RES (2014b) 'Solwaybank Wind Farm' [Online] Available at: <http://www.solwaybank-windfarm.co.uk/the-project/local-benefits>
- Richards, C., Blackstock, K. & Carter, C. (2007) 'Practical Approaches to Participation', *SERG Policy Brief Number 1* [Online] Available at: <http://www.macaulay.ac.uk/socioeconomics/research/SERPpb1.pdf>
- Rowe, G. & Frewer, L.J. (2000) Public Participation Methods: A Framework for Evaluation, *Science, Technology & Human Values*, vol. 25 (1), pp. 3-29.
- Scottish Government (2010) 'Onshore Wind', [Online] Available at: <http://www.scotland.gov.uk/Topics/Business-Industry/Energy/Energy-sources/19185/17852-1>
- Scottish Government (2015a) 'Community Empowerment (Scotland) Act 2015', [Online] Available at: <http://www.legislation.gov.uk/asp/2015/6/contents/enacted>
- Scottish Government (2015b) 'Community energy policy statement – Final version', [Online] Available at: <http://www.gov.scot/Resource/0048/00485122.pdf>
- Scottish Government (2016) 'Land Use Strategy 2016-2021', [Online] Available at: <http://www.gov.scot/Topics/Environment/Countryside/Landusestrategy>

- Scottish Government (2017) Scottish Energy Strategy: The future of energy in Scotland, [Online] Available at: <http://www.gov.scot/Resource/0051/00513466.pdf>
- Strachan, P.A., Cowell, R., Ellis, G., Sherry-Brennan, F. & Toke, D. (2015). Promoting community energy in a corporate energy world, *Sustainable Development*, vol. 23, pp. 96-109.
- Van Veelen, B. (2017). Making sense of the Scottish community energy sector - an organizing typology, *Scottish Geographical Journal*, vol. 133 (1), pp. 1-20.
- Van Veelen, B. & Haggett, C. (2016) Uncommon Ground: The Role of Different Place Attachments in Explaining Community Renewable Energy Projects, *Sociologica Ruralis*, DOI: 10.1111/soru.12128
- Walker, G. & Cass, N. (2007). Carbon reduction, 'the public' and renewable energy: engaging with socio-technical configurations, *Area*, vol. 39 (4), pp.458-469.
- Walker, B.J.A., Russel, D. & Kurz, T. (2017) Community Benefits or Community Bribes? An Experimental Analysis of Strategies for Managing Community Perceptions of Bribery Surrounding the Siting of Renewable Energy Projects, *Environment and Behaviour*, vol. 49 (1), pp. 59-83.
- Walker, B.J.A., Wiersma, B. & Bailey, E. (2014) Community benefits, framing and the social acceptance of offshore wind farms: An experimental study in England, *Energy Research & Social Science*, vol. 3, pp. 46-54.
- Walker, G. & Devine-Wright, P. (2008) Community Renewable Energy: What should it mean? *Energy Policy*, vol. 36, pp. 497-500.
- 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*, vol. 38, pp. 2655-2663.
- Warren, C.R. & Birnie, R.V. (2009) Re-Powering Scotland: Wind Farms and the 'Energy or Environment?' Debate, *Scottish Geographical Journal*, vol. 125 (2), pp. 97-126.
- Warren, C.R., Lumsden, C., O'Dowd, S. & Birnie, R.V. (2005) 'Green on Green': Public perceptions of wind power in Scotland and Ireland, *Journal of Environmental Planning and Management*, vol. 48 (6), pp. 853-875.

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*, vol. 27, pp.204-213.

Wolsink, M. (2007). Planning of Renewables Schemes: Deliberative and fair decision-making on landscape issues instead of reproachful accusations of non-cooperation, *Energy Policy*, vol. 35, pp. 2692-2704.