

Understanding community benefit payments from renewable energy development



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ABSTRACT

It is increasingly common for renewable energy projects to make financial, or in kind, payments to local communities. These arrangements are variously described as ‘benefits payments’ or ‘compensation schemes’. Similar approaches are now being recommended for other forms of development with potential to engender opposition from local communities (e.g. nuclear power and fracking). While such payments are common, the level of payment, the institutional frameworks involved, and the nature of discourse, varies greatly. Existing literature has sought to record, rather than explain, the diversity of arrangements. To a large extent this diversity is rooted in the power dynamic between developer and community. Three UK case studies are used to highlight the diversity of arrangements, meanings, and power balances, within benefits arrangements. Finally, a typology is developed to illustrate the spectrum of potential arrangements. This typology gives insight into why various arrangements emerge in response to their specific contexts.

1. Introduction

It is increasingly common for renewable energy projects to incorporate financial packages that make payments directly, or in kind, to local communities. These packages are separate and additional to any trickledown economic benefits (e.g. employment, local expenditure). In the case of UK onshore wind there are clear expectations that community payments will be put in place. These expectations are now extending to other controversial forms of energy development, notably fracking and new nuclear power builds (BEIS, 2016; DECC, 2013).

In practice, individual benefit arrangements vary from situation to situation, ranging from *ad hoc* gifts to legally binding annual payments. The rhetoric surrounding payments is equally diverse and occasionally contradictory. Central government guidance is at pains to emphasise that these transfers are “benefit payments” and “not compensation” (DECC, 2014). Conversely, local government may be happy to talk about “compensation to the community” (Aberdeenshire Council, 2016). Different language is being used to describe the same thing because the messages are intended for different audiences. Central government is emphasising that there is no legal compulsion, which might be inferred from the word compensation. At the same time, local government is indicating to communities that payments are recompense for “negative impact of the development” (Aberdeenshire Council, 2016).

In reality there are multiple motivations, interpretations, and mechanisms in place. Different economic, legal, and institutional context results in different arrangements. This plurality is the focus of the research presented here, which has four key objectives:

- To establish the root causes of plurality in compensation arrangements
- To understand how these vary between contexts
- To develop an explanatory typology
- To explain the policy implications of this plurality

Policy makers wishing to encourage such benefits payments have a variety of tools at their disposal. These range from light-touch ‘guidance and recommendations’, to more interventionist statutory requirements. Other alternatives include the extension of property rights to communities. However, one size does not necessarily fit all; selecting effective policy measures, and predicting outcomes, requires a clear understanding of the situation on the ground.

Various authors have studied community benefits arrangements. These can be described as: ‘definitional’, where a list of alternative benefits arrangements or best practice is described, (e.g. Rudolph et al., 2014; Cowell et al., 2012; Meacham, 2012); or ‘discursive’ where meanings and motivations are explored (see Aitken, 2010; Cass et al., 2010; Munday et al., 2011; Rennie and Billing, 2015; Walker et al., 2014; Warren and McFadyen, 2010).

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The approach taken here attempts to explain how compensation arrangements have emerged in response to specific contexts. This is achieved by examining three UK case studies, which have been selected to highlight heterogeneity in the arrangements, relationships, and motives underpinning benefit payments.

The following background section explores the language and meaning behind the terms compensation and power (which underpins the subsequent methodology and analysis) followed by a discussion of current issues, and examples, from the literature. Sections 3 and 4 describe the methodology used to analyse the three case studies. Finally, a typology of community benefit arrangements is presented, together with policy considerations.

2. Background

2.1. Compensation or not?

Enter the word compensation into an internet search engine and one is immediately confronted with advertisements for lawyers working in the field of personal injury. The narrative generally involves a less powerful *victim* supported by an *agent* (a lawyer) attempting to extract compensation from a more powerful but *responsible party*. Negotiations take place within a legal framework that establishes both the right to compensation, and the level of payments. Legal institutions also act as witnesses, ratifying any act of compensation and extinguishing any further liability.

Of course, the language of compensation is not exclusive to the highly charged field of personal injury. It can describe almost any payment or remuneration. In the case of energy developments, compensation may be sought for loss of public good. Economists use the term more broadly describing prices as compensation paid in exchange for goods and services. Econometricians describe wages as “compensation of employees” (OECD, 2013).

Even gifts can be described using the language of compensation. The existence or not of a ‘pure gift’ is a classic debate in anthropology. It has been argued that a gift is always given in the expectation of reciprocity. Consequently a gift is part of an exchange rather than a unilateral act of kindness (see Malinowski, 1922; Mauss, 1970). Even acts which are ostensibly altruistic may provide the giver with reward in the form of utility (Parry, 1986).

In a legal context compensation has a specific meaning; beyond this it can describe any payment or exchange where there is reciprocity. Despite the varying contexts within which compensation (or benefits) payments can take place, some common features exist:

- An **exchange**, often financial, in return for: a good or service; a favour or recognition; the relinquishment of a right; access to resources; or some other reciprocal benefit.
- Two or more **actors** between whom compensatory payments are exchanged.
- Some form of **reflexive discourse**: e.g. direct negotiation; market behaviour or social interaction. This may or may not involve **agency** in the form of lawyers; traders and brokers; community leaders; or other forms of representation.
- An **institutional framework** which establishes the rules of engagement as well as witnessing and recording any exchange. This may take the form of a formal legal system; customary practice; or cultural norms.

2.2. Power

A key factor in any compensation scenario is ‘power’ and how it influences negotiations and the final settlement. In broad terms ‘power’ may be described as the ability of one individual to make another submit to their will. Galbraith (1985) identified three forms of power: *condign* (submission through force or punishment); *compensatory*

(submission secured by payment); and *conditioned* (submission gained through persuasion). These forms of power are often combined. In the case of renewable energy compensation, *condign* (legal), *conditioned* (social norms), and *compensatory* (financial) powers may exist together. Galbraith argues that, as society advances, there has been a general shift from *condign* towards increasing use of *compensatory* and *conditioned* power. While usefully describing how power is exercised, this tells us little about the origin and nature of power.

Conventionally power has been viewed as something that is possessed and ‘wielded’ at the will of the individual. Michel Foucault challenged this, arguing that power is dispersed and pervasive; not a ‘thing’, but rather something that exists in relationships between individuals (Foucault, 1996). In this worldview, individuals are not the recipients, or holders, of power. Instead, interactions between actors are the points where power is enacted, resisted, and created (Mills, 2003). “Discourse transmits and produces power, it reinforces it, but also undermines and exposes it, renders it fragile and makes it possible to thwart” (Foucault, 1998, p. 100-1). This challenges the simple Marxist interpretation of power as something inevitably negative, used by the powerful to oppress the powerless; *the repressive hypothesis* (Foucault, 1998). For Foucault, power is seldom evenly distributed and it is never absolute. In the context of neo-liberal economics, power asymmetry is normal, and not necessarily harmful. In markets a net social gain, and arguably fairness, is achieved through equivalence of exchange. Colloquially we talk about a ‘fair price’ even if it is exchanged between unequal parties (Whyte, 2013).

From Foucault’s perspective power is pervasive; it is neither created nor possessed by individuals. Power is unevenly distributed, but it is never absolute. Power exists in discourse between parties and it is in a constant state of flux. This perspective would predict that, in the context of renewable energy compensation, power relations will: (i) be a key determinant of outcomes; (ii) vary between contexts; and (iii) change over time.

2.3. Community benefits: trends and examples

The past few decades have shown that there is a demand for compensation from communities sited close to renewables developments, particularly from onshore sites (Aitken, 2010; Cass et al., 2010). The rise in the philosophy of ‘corporate social responsibility’ (CSR) provided a part of the drive for benefits payments (Jo and Na, 2012). CSR activities, such as charitable donations to worthy causes, are designed to send positive messages and maintain positive relations with external stakeholders (investors, customers and society at large) (Deng et al., 2013). CSR activity can help reduce longer-term and diffuse forms of risk by helping maintain trust, legitimacy and social acceptability.

Demand for compensation has also been associated with developments that may otherwise be rejected by the local population. Current and proposed renewables infrastructure is routinely sited adjacent to smaller rural communities, commonly associated with continuing economic disadvantage, which renewables developments can contribute to via various externalities (Munday et al., 2011). Social acceptance of renewables infrastructure has been widely researched, and whilst provision of community benefits from renewables could seem unexpected given the general acceptance that greener energy is necessary in this age of climate change, renewables are not without the same opposition as other energy amenities (Wustenhagen et al., 2007; Cowell et al., 2011). Previous thought stipulated the need for community benefits as a way of bypassing widespread NIMBY-ism.¹ However, recent arguments call for the exclusion of the ‘NIMBY’

¹ NIMBY (Not In My Back Yard) has been used as a blanket term to describe the conflict between ‘general support for wind energy and local opposition to specific developments’ (Devine-Wright, 2005).

concept as a way to explain all local opposition, especially given its pejorative indications (Devine-Wright, 2009; Walker et al., 2014). Instead, more attention is being paid to specific facets of potential opposition, such as visual impact (Johansson and Laike, 2007), which was found to be the most significant element to consider when placing a renewable development (Brittan Jr, 2002), or place attachment (Devine-Wright, 2011), and the symbolic value placed on specific sites. Commentators have previously criticised the use of simple cost and benefit balances in the context of wider, more complicated issues such as those nuanced aspects of symbolism and place attachment, which can be constructed through equally complex matters like historical relations or rural idyllicism (Cowell et al., 2011). Additionally, social acceptance of a project can come not through payments but through participation in the planning process. Local involvement in the development stage allows for a form of community control over the environment that can result in greater acceptance (Bell et al., 2005). Opposition to developments by local communities has been, partly, circumvented by the introduction of property rights into the negotiations. Community ownership, or at least co-ownership, of infrastructure has been shown to improve acceptance of renewable developments in numerous countries, including Scotland (Warren and McFadyen, 2010) and Germany (Musall and Kuik, 2011).

Nevertheless, community benefits, in their myriad forms, establish a crucial financial link between developers and the local community that predominantly aids in the acceptance of developments (Walker et al., 2014). In doing so, the potential negative effects are seen to be recompensed, at least from the view of local authorities (Aberdeenshire Council, 2016). Simultaneously, significant benefits payments allow for the formation of trust, defined as the "belief that someone... will act in your best interest", between communities and developers (Bellaby, 2010, p. 2615). A rise in the demand for community benefits for host communities comes concurrently with the increased implementation of non-statutory 'good practice' principles. The rationale behind these principles is guided by the need to equitably share the remunerations extended from exploiting a public natural resource (LES, 2015). The concept of 'benefit-sharing' is used routinely in environmental legislation to spread the costs and profits of sustainably harnessing ecosystems and their services (Wynberg and Hauck, 2014). However, often the underlying rationale behind such principles is viewed not as a measure of good intention, but as an attempt at bribery (Aitken, 2010; Cass et al., 2010).

Whilst the renewables industry provides the majority of compensation schemes, there are numerous other industries that have begun to implement benefits payments to local communities. In 2013, United Kingdom Onshore Oil and Gas (UKOOG), which specialises in shale gas extraction and fracking, announced the establishment of pilot schemes for exploration sites that include hydraulic fracturing (UKOOG, 2013). The schemes could pay up to £100,000 to nearby communities; with payments administered by a third-party charity foundation, plus an additional 1% of all gross revenues should the site be commercially viable. Furthermore, the UK coalition government announced in 2013 that communities which are set to host new nuclear power stations could potentially receive benefits payments of up to £1000/MW over 40 years (UK Government, 2013). Other examples come from outside the energy sector. The Scottish Landfill Communities Fund is a tax credit scheme that urges the provision of funds to local projects generally relating to environmental issues. Similar methods have been applied to landfill in the US (Jenkins et al., 2004).

Defining the term 'community' has been a constant issue within community benefits literature and policy, as placing constraints on heterogeneous groups can be counterintuitive, and geographical boundaries are often unclear. Whilst most policies use community to mean a 'community of locality' i.e. a community based on geographical location, it is important to note that other definitions exist. The DTI (2005) references 'communities of interest' as an alternative, grouping

those who have common social outlooks. However, the process of establishing limits to communities of interest is still highly complicated. This work predominantly uses the 'community of locality' definition.

3. Method

The approach adopted here relies heavily on work by Dobson (1996) who developed a strategy to analyse multiple interpretations of environmental sustainability. Dobson's approach is used to explore the plurality that lies within community benefit arrangements; their contexts, arrangements and motives. Dobson argues that traditional approaches to such a task tend to be either 'definitional' or 'discursive'. Attempting to give a single definition fails as it seeks to make the plural singular when it is this very plurality that is of interest. A method is required that teases apart the elements of plurality. Equally unhelpful is the slavish description of all possible definitions, which can simply overwhelm the reader providing little actual insight or explanation. By contrast, discursive approaches (based on reasoning and argument) may offer useful analysis and explain the evolution of a concept. However, if such approaches attempt to give a comprehensive account, they can suffer from being out of date as soon as they are written. Furthermore, it can be difficult to define the terms under discussion. Consequently discursive approaches can be highly individual, lacking analytical rigour and difficult to replicate (Dobson, 1996).

One solution is the development of an analytical typology with the terms of the analysis justified and explicitly stated. This approach can provide an explanatory framework, or "a map with which to find one's way around the territory" (Dobson, 1996, p. 403). Such a typology is developed by identifying questions to which the concept under investigation must have an answer. Questions are selected that highlight, rather than obscure, plurality. Ultimately, the selection of questions is a matter of judgement. However, these questions must be both clearly stated and justified, thus providing some analytical rigour.

This paper explores different compensation/benefit scenarios using a series of analytical questions. The hope is that groupings of related answers will emerge; in turn this may reveal a spectrum of different conceptions. A schematic representation is given in Table 1. A list of analytical questions produces the vertical axis. The answer to these questions forms the content of the table. This, in turn, reveals the conceptions described on the horizontal axis.

There are three principal advantages to this approach:

- The terms of the analysis are clear
- It helps us understand the critical differences between conceptions
- It provides a framework within which alternative approaches to compensation can be located

While this approach provides a degree of analytical rigour, there is a significant 'chicken and egg' problem. The questions used to interrogate each conception are themselves derived from an analysis of the literature or some prior understanding of the issue. Nevertheless, the questions are transparent and the advantages over a purely discursive approach are significant.

Table 1
Conceptions of Compensation: a schematic typology.

	Conception A	Conception B	Conception C
Question 1
Question 2
Question 3

(after Dobson, 1996)

4. Analytical questions

A set of six questions were identified which illustrate diversity in compensation arrangements. These questions flow from the following sources: (i) features of compensation – institutional frameworks, agency, and discourse; (ii) the theory of power – its distribution, its fluidity, and its locus; (iii) observations from compensation scenarios – the basis of calculation and the role of property rights.

The list of questions is not exhaustive. However, the selection is sufficient to observe plurality. It would be possible to merge some questions. Arguably, the first three questions about *power*, *compulsion* and *motivation* are similar. Indeed, if you have no power, and you are compelled to do something, the motivation is clear! However, in the context of the compensation schemes the selected questions have a specific resonance highlighting key differences between compensation arrangements. The questions selected are as follows.

(1) What is the balance of power?

The balance of power is a fundamental determinant of the outcome of any transaction. It is clear that the power relations can be highly uneven. At the extreme, compensation negotiations may take place between a multinational energy company and the smallest of community groups. From Foucault's perspective it is normal for power to be unequally distributed, never absolute and always in a state of flux. Even in a situation with the greatest power imbalance, the law may afford weaker parties some protection. Equally, the ability to protest and attract public attention through the media can rapidly change power relations.

(2) What is the level of compulsion?

There are two contradictions within this question. First, how can there be 'levels of compulsion'? Someone is either compelled to do something or not. Second, if you accept Foucault's view that power is not absolute, how can there be any compulsion? Ultimately, the contradiction is not in the question but in the observed world of community benefits. For example, the law may compel developers to negotiate benefit payments or establish a co-ownership model, as is the case in Denmark where wind turbines must be at least 20% owned by local communities following the introduction of a statutory governmental policy (Anker and Jørgensen, 2015). However, the level of payment may be negotiable. Equally, a developer may choose not to proceed with a project where compensation would be compulsory. Evidently, in the real world, elements of compulsion sit side by side with negotiated outcomes and choice.

(3) What is the motivation?

The overarching motivation of renewable energy developers is clear - creating a portfolio of profitable projects. While individuals (employees, investors, or owners) may have alternative personal motives, individual project decisions are generally based on profitability. Standard investment appraisal techniques embody principles such as *Separation Theorem*, which specifically eschews considerations other than profitability (Lumby, 1988). However, within this overarching objective, the motives behind compensation payments do vary. In some cases, compensation payments are simply required to gain access to resources, such as land or sea space. In other circumstances, compensation payments may be part of a risk management strategy – in the hope of reducing public opposition or influencing decision makers around a specific project. Less targeted CSR activity can provide benefit payments to communities (Jo and Na, 2012). CSR activity attempts to maintain a social contract, between operator and community; sometimes referred to as a "social licence to operate" (Hall et al., 2015). Even if a developer is operating within the law, the loss of this social licence can make it difficult or impossible to proceed. Shell UK's failed 1995 disposal of the Brent Spar floating oil storage facility is one of the most celebrated examples. Despite

having all the necessary official permissions, to dispose of the Spar at sea, mounting public opposition resulted in a humiliating climb down on the part of Shell (Side, 1997).

(4) What is the role of property and property rights?

Ultimately, renewable energy developers must gain access to energy resources. If land is in community ownership, compensation may take the form of rent. In this case property rights are exchanged as part of a highly formal, legalistic process. Alternatively, where the state (or regulator) has a role, quasi-property rights, in the form of planning and other permissions, are often a significant feature of renewable energy developments. In this case formal property rights are not exchanged. However, compensation payments may be made in order to influence decision makers and gain access to these quasi property rights (Aitken, 2010). Negotiations around the exchange of property rights are moments where power is enacted, resisted and created.

(5) What is the nature of the institutional framework?

Compensatory scenarios exist within institutional frameworks. These establish rules and codes of conduct. They simultaneously record and provide recognition of agreements and exchanges. While the purpose is consistent, the nature of these frameworks varies significantly. In cases involving property rights, contracts are exchanged within a formal legal framework. Transfers of title over land may be formally recorded by the state (e.g. land registration). In other compensation schemes, third parties such as local authorities may establish rules and act as agents helping broker deals then record and manage payments. Less formal compensation arrangements (e.g. CSR payments) are routinely accompanied by ceremony and publicity. Indeed this will often be an explicit requirement of the giver. In agreeing to participate, the recipient is publicly demonstrating their acceptance. Publicity ensures the exchange becomes part of the *public record*. Organisation theory uses the term 'psychological contract' to describe implicit expectations about the nature of a relationship between an organisation and individual (Blackler and Shimmin, 1984).

(6) What is the basis of the calculation?

If compensation is agreed then both parties have clearly made an evaluation of costs and benefits. This valuation process may be highly technocratic. If the recipient of compensation is in a powerful position (e.g. controlling access to the resource) then compensation may take the form of *economic rent*. This may be calculated using a *residual valuation*, i.e. the surplus the development is able to generate after the costs of production have been met (see Darlow, 1988). In the case of compulsory purchase compensation, claims are typically based on estimation of what has been lost, plus some recompense for disturbance. Indeed rules governing compensation require valuations to be conducted in a *no scheme world*, explicitly ignoring the proposed development (Rowan-Robinson, 2009). Less technocratic processes may take the form of an expert judgement of what is fair. This may involve searching for precedents or proxy measures of profitability (e.g. rated capacity). In the case of CSR scenarios, payments may simply be an allocation of an internal corporate budget made available for such activities. The size of CSR budgets are determined by corporate attitudes to risk and public acceptability (Barena and Rubin, 2010).

5. Case studies

In the following section, we present three UK case studies where renewable energy projects deliver community benefits, specifically: (i) offshore wind; (ii) commercial onshore wind; and (iii) community ownership schemes. Many alternative benefit scenarios do exist. The intention here is not to be comprehensive, but to demonstrate a diversity of answers to the questions posed above. Furthermore, wind energy technology is the largest generator of both renewable energy

and benefit payments in the UK, while the case of community ownership represents an emerging alternative means of securing benefits payments for local communities.

5.1. Case 1: Offshore wind in the UK – corporate social responsibility

The UK has been the world leader in offshore wind since October 2008. At present, there are 27 wind farms operating off the coast of the UK, and another twenty or so in development (RenewableUK, 2016). Excluding demonstration sites, 24 working developments amount to 5064.6 MW of installed capacity in the waters around the UK, the largest, at 630 MW, being the London Array (I&II). As a result, offshore wind developments generated 4.7% of the UK's electricity generation in Q3 of 2016. The increase in offshore wind developments is concurrent with the rise in the opinion that local people prefer renewable projects to be developed "away from people and precious vistas" (Haggett, 2008, p. 289). The belief that placing developments offshore provides the 'solution' to the range of problems established by onshore developments has become widespread in both popular and academic opinion, despite evidence to the contrary (see Gibbons, 2015; Haggett, 2008).

Where developments are sited at sea, the role of property rights takes on a very different guise than on land. There is a well-known dichotomy found in literature, and routinely played out in legal systems, which places the ocean in direct opposition to the land, where the land has "emerged as a commodity or property which has an economic value" and the sea remains beyond this remit (Jackson, 1995, p. 87). This binary, in part constructed through imperialistic notions of bounded territories and landscape (see Steinberg, 2011; Jackson, 1995), has endured through centuries of UK legislation that asserts property, particularly private property, ceases at the mean high water mark (although lesser-used traditional legal systems, such as Udal or Brehon law, state property can surpass this mark).

The UK's territorial sea, which begins at the mean low-water mark and extends out to 12 nm, is administered by the Crown Estate on behalf of the state, as decreed by the Crown Estate Act 1961. These waters are established as 'state property' under the basic property typology outlined by Bromley (1989). In order to gain access to areas of seabed and the water column, developers must lease sites at the discretion of the Crown Estate. Development sites are made available by the Crown Estate via leasing rounds, of which there have been four (three UK-wide rounds, and one Scotland-only round). Given that, under the UK legal systems, there is little opportunity for individuals or communities to gain bundles of rights that amount to a sense of ownership at sea, communities similarly have little jurisdiction over adjacent waters. That is not to say that community groups have a complete inability to enact change from their terrestrial positions. Local opposition to past offshore developments, sometimes in the form of quite visceral protestation, has at times ensured potential developments are refused consent by authorities (e.g. the Navitus Bay project off the Dorset coast was refused consent after almost unanimous opposition from local communities and authorities).

However, it still remains difficult for communities to voice their opposition. In order to develop any infrastructure over 1 MW in the marine environment, developers must gain consent in the form of Section 36 consent by way of applications put to the relevant governmental departments. Marine licences are either issued by Marine Scotland for Scottish developments, or the Department for Business, Energy and Industrial Strategy (BEIS), which superseded the Department for Energy and Climate Change (DECC) in mid-2016, for English developments. These ministerial departments, individually responsible for the governance of a wide range of environmentally-linked issues, form part of a highly centralised planning process. Due to the nature of this process, the ability for input by local individuals is considerably lesser than in the local planning process (Kerr et al., 2014).

Table 2

Community benefit arrangement from UK offshore wind projects.

	Annual community fund	One-off community fund	Bursary and/or education scheme	One-off 'in-kind' payment	No benefit package found
No. of projects offering benefit arrangement	7	5	3	8	6

Data source: See Appendix 1. Information correct as of September 2016.

With limited ability by the public to intervene in consent processes, and without formalised property rights at sea, the compulsion of developers to provide benefits payments must come from a type of corporate social responsibility; a way of simultaneously promoting a positive public image and reducing corporate risk. They are usually at the discretion of the company, who can ultimately choose what and how much to give.

Companies and authorities have been quick to point out the 'difficulties' in providing benefits payments from offshore developments, specifically a) identifying nearby communities, and b) the infancy of the industry and project economics. This comes in spite of the range of non-statutory guidance for community benefits from offshore developments being recommended by regional councils and the government. For example, The Highland Council policy states that developers should provide £5000/MW installed capacity per year from offshore renewables projects, equal to onshore developments (Highland Council, 2013). The Highland Council confirmed that, as of 2016, no developers had signed up to this concordat (Bain 2016, pers. comm.). Rather, as Table 2 below shows, the community benefit arrangements from offshore wind appears to centre on either community funds, unrelated to the capacity of the development, or benefits in kind. For example, when E.ON Energy developed their Scroby Sands project, they provided funding for the construction of a visitor centre which could provide information about renewable energy.

Whilst the monetary values of some of these benefits are in no way insignificant,² they are yet to be concurrent with onshore benefits packages. Some developers have offered no formal benefits packages, instead alluding to the idea that the benefits would come in the form of employment during the construction and operation phases of the wind farm (Cowell et al., 2012).

5.2. Case 2: Onshore wind – community benefit funds in Scotland

By March 2016 there was 7888 MW of installed renewable energy capacity in Scotland with 5520 MW of this in the form of wind turbines (DECC, 2016). This capacity generated 13,387 MWh, approximately two thirds of all renewables generation which is equivalent to 38% of Scotland's electricity demand. This is set to expand with another 3.9 GW of capacity already consented and a further 4.1 GW in planning (Scottish Renewables, 2016). Typical turbines range in size from 900Kw to 3 MW. Developments range in scale from single devices to farms with scores of devices. The largest, Whitelee Wind Farm in East Renfrewshire, has 215 turbines with a combined capacity of 539 MW.

Typically, developers will lease land from private landowners with rent taking the form of a pre-negotiated sum or a share of profits. All developments require planning consent. Smaller developments (<50 MW) require planning permission from the relevant local authority (LA). Larger developments (> 50 MW) must apply to Scottish

² See Appendix 1 for a full breakdown of benefits arrangements offered by operational offshore wind farms in the UK (does not include demonstration sites)

Government for Section 36 (S36) consent.³ In the case of S36 consent, the Government consults the relevant LA regarding the appropriateness of the development. Consequently, local communities have some leverage. They are able to influence the planning outcomes directly through local planning process or via their LA (for S36 consent). In England and Wales, an analogous process differentiates between large and small projects. Parliament retains decision making powers in respect of larger projects classed as Nationally Significant Infrastructure Projects (NSIPs). In 2016 onshore wind projects (> 50 MW) were removed from the NSIPs classification and decision making power devolved to local planning authorities (Smith, 2016). This is part of a wider drive for devolution of planning powers (Holman and Rydin, 2012). The planning process for onshore wind in the UK has not been smooth. Landscape issues are the focus of public concern. Characterised by individual and community values rather than normative science, this is a challenging issue for planners (Kerr, 2006; Wolsink, 2007).

Earliest benefit payments tended to fund one-off projects in the community (Vento Ludens, 2012). As the pace of development increased, local authorities began to demand annual payments linked to capacity. In 2004 Argyle and Bute Council requested £2000 MW/pa (Argyle and Bute Council, 2005), following the claim from The Highland Council that payments should be raised from the customary £1000 MW/pa (Highland Council, 2003). In 2011 The Highland Council again adopted a strong policy position insisting that “Developers will provide Community Benefit of not less than £5000 per installed Megawatt that will annually appreciate in line with the UK Retail Price Index” (Highland Council, 2013, p.1). This figure was quickly adopted as a norm, across the UK, by industry as well as national and local government (DECC, 2014; RenewableUK, 2013; Scottish Government, 2013). Currently 87 Scottish projects were making payments based upon installed capacity, with over £10 m of annual community payments (LES, 2016).

In both England and Scotland, government/industry initiatives have established public registers of community benefits, that can be viewed online (ERCBE, 2016; LES, 2016). These public databases offer a form of third party verification and public recognition. This is analogous to the public registration of land purchase, where a private exchange between two parties, is confirmed by the state, and then made public.

LAs are central to this emerging situation; they have driven expectations regarding the level of payment. It is possible to explain the enhanced role of LAs in the context of decentralisation of the state, increasing localism, and community empowerment, observable within UK planning systems (Holman and Rydin, 2012). LAs act as agents on behalf of the community, negotiating with developers, collecting and then distributing payments. LAs are also key players in the consenting process. Official guidance is quick to note that payments are voluntary and not a material consideration in the planning process (PPG, 2014).⁴ However, the level of public opposition is a consideration for planners particularly with regard to visual impact. Benefits payments are naturally a feature of local discourse around proposed developments (Cowell et al., 2012). The rationale for payment is to compensate for loss of public good. From the developer’s perspective, payments serve to reduce public opposition and help secure consent (Aitken, 2010; Cass et al., 2010). This represents what we might call a *shadow contract*. All actors understand, and expect, that payments will be made, even if they are technically voluntary and often described as a “goodwill contribution” (Highland Council, 2016).

5.3. Case 3: Community ownership - the power in the land

Renewable energy developers generally secure access to land through private agreements with individual landowners. Community benefit payments are something separate and additional. Community ownership of land presents an alternative scenario where compensation for impacts on the public good becomes part of the negotiated rent. Community ownership of land creates a rare example of genuine Coasian bargaining. The community effectively holds property rights in the environment.

Holding property rights in land gives communities the power of choice. They can elect to proceed with development and maximise rent or reject developments that fail to compensate sufficiently. This, of course, presupposes that communities have: (i) the capacity to negotiate, and (ii) an awareness of their negotiating strength. It is also true that achieving consensus, or even majority decisions, within a community can be a fraught process.

Economists have long recognised how wealth, created by economic growth, is captured in land values. John Stuart Mill noted that landowners “grow richer... in their sleep without working, risking or economizing” (Mill, 1848, V.2.28). Despite this, markets play an important role in allocating the land resource and the socialist remedy of nationalization is criticised as grossly inefficient (Harrison, 1983). Community ownership of land may offer an alternative with three benefits:

- Market structures are still in place and should lead to efficient use of land
- Communities can factor environmental and social impacts into their bargaining position
- Surpluses are returned to the community rather than a private landowner

Recent land reform in Scotland seeks to redistribute land, the ownership of which has over centuries become highly concentrated (Wightman, 2013). The Land Reform (Scotland) Act of 2003 gives communities the opportunity to purchase and hold land on a collective basis. In certain circumstances, the sale of land to community groups may even be forced. The Scottish Government aspires to see over a million acres in community ownership by 2020 (Land Reform Review Group, 2014). Many of these newly formed Land Trusts are looking to renewable energy as a source of income. Two broad options are open to communities: (i) to rent land to a developer; or (ii) to undertake the development themselves.

The largest land buyouts have happened in the Scottish Highlands and Islands region. The Western Isles now have over 100,000 ha (one third of the land area) in community ownership. The Galson Estate is typical. In community ownership since 2007, this 22,600 ha estate is managed by a limited company, Urras Oighreachd Ghabhsainn, which operates as a trust. The Trust has 10 directors and a voting membership of 850, (45% of the population). The Trust’s objectives are to:

“... promote, for the public benefit, rural regeneration, following principles of sustainable development, and the development of the areas of social and economic deprivation within the Galson Estate” (Galson Trust, 2016)

The Trust owns a commercial wind project (3×900 kW), creating a new income stream for the community. The project has been funded with a mix of: private investment from within the community (£705,800 from 167 investors), commercial loans, and grants (see OREF 2016). Profits from this commercial activity are used to realise the wider aims of the Trust and its membership. This model is typical of other community projects across Scotland. It does present several challenges: (i) achieving community consensus; (ii) establishing the administrative capacity; (ii) securing commercial finance; and (iv) deciding how to redistribute incomes. Rennie and Billing (2015)

³ This refers to Section 36 of the Electricity Act 1989.

⁴ In England, this has now been tested in law, see High Court ruling in Wright, R v Forest of Dean District Council, 2016. www.bailii.org/ew/cases/EWHC/Admin/2016/1349.html (accessed 9/9/16)

describe a shift from external dependency to long-term solution driven by local priorities. Increased social capital and the development of management skills are now leading to larger, more ambitious projects.⁵

Where the community acts as developer, returns are maximised. However, the risk of project failure also lies with the community; project (and incomes) may also be slow to materialise. In order to reduce risk, and hasten projects, some community trusts have elected to rent land to external developers (e.g. *North Harris Trust*, 2016).

In a second example, the Galson Trust negotiated a rental for landfall from two proposed marine energy projects: (i) the 4 MW Siadar project promoted by Voith, consented in 2007, and (ii) a 40 MW project promoted by Aquamarine, consented in 2012. All marine energy projects require a seabed lease from the Crown Estate. However, projects also generally require an adjacent land base for cables, switch gear, and electrical plant etc. Consequently, with a monopoly over landfall sites, the Trust found itself in a powerful position. For the Siadar project, land rent, together with a levy of £2/MWh on electricity exports, was agreed with the Trust (N. Mackinnon 2016, pers. comm.). Assuming a device efficiency of 35% this is equivalent to £6k/MW installed capacity. This agreement informed later negotiations around the larger Aquamarine project, the details of which remain 'commercial in confidence'. Eventually, technical and financial difficulties stopped both projects. However, the negotiations have set an important precedent. This case illustrates how the monopoly ownership of land can put communities in a powerful position, even in the case of offshore developments. This has resonances with the oil industry in Shetland in the 1970's where compulsory purchase powers were used to lever in revenue streams for the community (Wills, 1991; Johnson et al., 2013).

6. Analysis

It is now possible to consider the six investigative questions in the context of the three scenarios described above: *Case 1* offshore wind; *Case 2* onshore wind; and, *Case 3* community ownership.

(1) What is the balance of power?

The balance of power clearly shifts between scenarios. In *Case 3* land ownership gives local communities the power to maximise benefit payments in the form of rent. Indeed the transfer of land rights to communities is routinely, and specifically, described as an act of 'empowerment' (Rennie and Billing, 2015; Skerratt, 2013; Bryden and Geisler, 2007). Communities may even elect to maximise profits by becoming project developers themselves. In *Cases 1 & 2* the power balance shifts towards developer, with communities having progressively less influence over the allocation of physical space.

(2) What is the level of compulsion?

In *Case 1* developers are not compelled to give community benefit. Where they do, it is part of a wider CSR agenda promoting a positive image. In *Case 2*, even though not compelled legally to give community benefits, there is tacit acceptance that compensation payments are a *de facto* requirement. This norm is recognised by the state, communities, and industry. In *Case 3* payments to the community cannot be avoided if the project is to proceed.

(3) What is the motivation?

In *Case 3* the motivation for payment is clear; without payment there is no access to land and no project. In *Cases 1 & 2*, benefit payments could be described in terms of mitigating risk. In *Case 2* payments are not compulsory, however there is a strong expectation from government, local communities, and industry peers, that payments will be made (DECC, 2014; RenewableUK, 2013;

Scottish Government, 2013). Not to do so would put the project at significant risk of failing to secure planning permission. As these payments are viewed as the established norm by industry and government, few developers are willing to accept the risks associated with not paying. In *Case 1* benefit payments are at the discretion of developers. When made, these payments are often characterised as gifts. These exchanges form part of a wider strategy of corporate risk reduction and maintaining a 'social licence to operate'. Not all developers choose to make these payments and where they do occur, they are non-standardised and frequently one-off.

(4) What is the role of property and property rights?

In *Case 3*, property rights are central to the community benefits dialogue. Communities may exchange rights of access to land in return for financial remuneration. Communities that elect to develop their own projects are empowered to do so through access to property rights. In *Case 2* planning permission is a quasi-property right which gives permission to develop land to a named individual (legal person). Not legally required benefits payments form part of a *shadow contract* through which planning permission is secured. In *Case 1* developers must secure a lease from the Crown Estate and planning permission in the form of a marine licence. However, relative to *Cases 2 & 3*, communities have little leverage in this process. Community benefits are not linked to the process of securing these permissions.

(5) What is the nature of the institutional framework?

In *Case 3* institutional frameworks are highly formalised and legalistic. Discourse will normally take place through appointed legal intermediaries. If land is bought, legal title will be exchanged and recorded in a public register. Where land is rented, contracts are exchanged between two parties (a lease). Individual contracts are private and potentially covered by non-disclosure agreements. However, public laws establish rules of conduct, together with obligations, and penalties if obligations are not met. In *Case 2* local government assume the responsibility of agent, acting on behalf of communities. This involves negotiating with developers, accepting payments, and then disbursing monies to communities. There is no legal requirement to make benefit payments. However there is tacit understanding that payments are required. There is also no legal contract between community and developer, and yet benefits arrangements are recorded in an online register. While it is publicly accessible, this registration has no legal status. In *Case 1* the payment takes the form of a gift; there is no obligation on the giver and no legal contact. However, these arrangements are typically accompanied by significant publicity. This publicity is a form of ratification, which thereafter becomes part of the 'public record'.

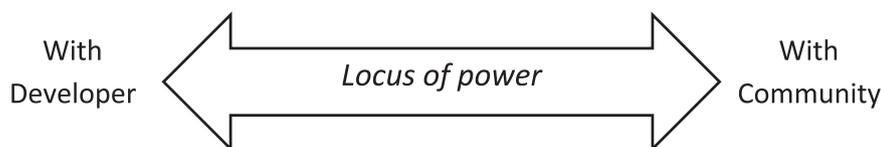
(6) What is the basis of the calculation?

In *Case 1* the level of payment is not directly linked to either the capacity or profitability of the development. All other things being equal, one might expect larger CSR budgets to be associated with larger projects. However, there is no obligation to make payments. Some developers make no payments. The size of the CSR budget, and its use, is usually at the discretion of the developer. By contrast in *Case 2* the level of *expected* payment is directly linked to the rated capacity of the development. This is transparent to all sides. This figure of £5000/MW, which is now the industry norm, was established through an iterative process, driven by local authorities testing what the market could bear. In *Case 3* the payment is directly linked to the profitability of the specific project in question. Both sides estimate the surplus profit that the project can generate; this forms the basis of subsequent negotiations. The final arrangement must be acceptable to both parties, each taking into account various costs and benefits. When a community owns a project (i.e. the community is the developer), estimates of profitability are balanced against anticipated negative impacts.

⁵ Point and Sandwich Development Trust on the Isle of Lewis, Western Isles, operate a 9MW project <http://www.pointandsandwick.co.uk/>

Table 3
A Typology of Community Benefit Arrangements.

	[1] CSR Benefits Package	[2] Benefits Schemes	[3] Fair Shares
What is the balance of power?	Developer has power to decide.	An intermediary acts, with tacit/assumed support of community.	Community can demand payment.
What is level of compulsion?	None.	No legal obligation. <i>De facto</i> requirement.	High. Legal obligations
What is the motivation?	Maintaining a “social licence to operate”.	Removing obstacles to consent	Agreement essential for development to proceed
What is the role of property and property rights?	Irrelevant. Separate from any payment decisions.	Quasi-property rights provide leverage.	Critical. Property rights are exchanged.
What is the nature of the institutional framework?	Social norms.	Sectoral norms & stakeholder expectations.	Legal.
What is the basis of the calculation?	Internal budget allocation.	Standardised payments.	Directly linked to the profitability of the development.



7. Conclusion and policy implications

The results of this analysis have been summarised in Table 3, which presents a typology of community benefit arrangements.

Three columns broadly correspond to the cases identified above.

- Column [1] is the domain of corporate social responsibility
- Column [2] is typified by standardized benefits arrangements
- Column [3] is characterised by direct negotiation between community and developer

Table 3 is not intended to imply that there are only three potential conceptions of community benefit. Many alternatives already exist, including shared ownership and profit sharing arrangements, providing varying levels of benefit (Allan et al., 2010; Kunze & Becker, 2015). New alternative benefits arrangement will continue to emerge. The three cases used here were selected specifically to highlight plurality.

Table 3 actually illustrates a spectrum of possibilities. Compensation arrangements are differentiated according to the analytical questions. It should be possible to position any compensation arrangement within this typology. Towards the right-hand side of Table 3, the locus of power is with the community. Within this part of the spectrum, gaining access to property rights is a key focus of discourse; a legal process is in place; payments are directly linked to the profitability of the project; and the community has the power to decide if any arrangement is acceptable.

By contrast, moving towards the left-hand side of Table 3 sees the locus of power shift towards the developer; social norms provide the framework within which discourse takes place; property rights are not a feature of negotiations; there is no legal obligation; and payments are at the discretion of the developer.

Much has already been written about community benefits. However, the existing literature has tended to either document various arrangements; or discuss the implications of particular scenarios. By contrast, this work explains why a diversity of benefits scenarios have emerged and the reasons underlying this.

This topic has significant policy relevance, not only to the future of renewable energy, but also in the context of alternative forms of development where benefit schemes are being recommended to assuage the concerns of local communities (e.g. nuclear and fracking).

Power relations are at the heart of the matter. If policy makers are inclined to encourage benefits payments, they can adopt various

strategies. However, light-touch approaches, in the form guidance and recommendations, may have limited effect in the absence of any institutions or arrangements through which communities can exercise power. To the right of Table 3, payments are *ad hoc* and largely discretionary, as is the case with offshore wind in the UK. Guaranteeing, or increasing, community payments in this sphere may require direct intervention with government using *condign* (statutory powers) on behalf of communities. As noted above, this approach has been taken in countries like Denmark (Anker and Jørgensen, 2015). Alternatively, if property rights are extended to communities, payments may be maximised in the form of rent. This moves us to the left of Table 3.

This last issue is of particular resonance in the UK, with the 2017 transfer of the Crown Estate (CE) management duties to the devolved Scottish Government (Scottish Government, 2017). Currently the CE acts on behalf of the UK state leasing the seabed on a commercial basis. Further devolution of these rights, from the Scottish Government, to the local level could allow rent for from offshore energy development to pass directly to local communities. Precedents exist, including the transfer of marine rights to the Shetland community in anticipation of oil and gas development (Johnson et al., 2013).

The work presented here demonstrates that achieving, optimum benefit payment, outcomes requires policy that is adapted to underlying power relations, and institutional frameworks. Simply picking a preferred option from a list of “best practice” policy alternatives will not necessarily achieve the desired outcome.

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Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at doi:10.1016/j.enpol.2017.02.034.

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