Social Impact Assessment offers local decision-makin	ıg
support for the siting of onshore wind farms in Englar	nd

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Abstract

Over the last five years, England has seen a decline in the number of onshore wind applications gaining planning permission. This research investigates the key reasons renewable energy policy is stifled in the local planning system and the threat this poses to the country's ability to tackle climate change. The research aims to show how Social Impact Assessment as part of Environmental Impact Assessment (EIA), could support the successful siting of onshore wind farms. Directed content analysis, examines the activities of wind developers, central government, local planning authorities, anti-wind campaigners and community energy cooperatives. The content analysis is supported using surveys and face-to-face interview with developers, action groups and community energy cooperatives. The research finds SIA is not a statutory obligation in England, yet many of its activities and processes employed by stakeholders. However, without recognition of the outcomes of SIA activity in EIA, benefits of onshore windfarm proposals are not considered in the weighting of the planning balance. The impact means local people participating in community energy projects are disempowered by the planning system to the disservice of local democracy.

Part 1

Part one has three chapters. Chapter one offers a background to the research to detail the research problem, the aims, hypothesis, objectives and the research questions. Chapter two outlines the current United Kingdom (UK) context for planning wind energy developments. The history, regulation and governance to support its development. Discussed are the issues of social acceptance for wind energy developments. An introduction to Social Impact Assessment, as a method to support project level decision making for onshore wind farms. Chapter three, introduces an analytical framework, on the role of communicative planning theories and their critique through agonistic pluralism. Examining participation and power in decision making for onshore wind farm proposals through the role of local Development Control, as a space for agonistic debate using SIA methodology.

Chapter One: The Research

1. Introduction to Chapter

Chapter one introduces the research project, describing its background in legal, financial and public support for renewable energy in the UK and identifies the research problem. The rate of planning refusals for onshore wind farms evidences the research problem. SIA proposes methods to aid decision-making for the siting of onshore wind farms. The chapter ends by defining the research aims, hypothesis, objectives and research questions.

1.1 Background

The UK Labour government of 2005 to 2010 introduced the Climate Change Act (2008) which was the world's first legal provision for reducing greenhouse gas emissions. The carbon target set at reducing emissions by 80% of the 1990 starting point by 2050 (DECC, 2011). Action taken by the Coalition government of 2010 to 2015 to meet this duty includes investing in low carbon and renewable technologies.

Investment in low-carbon electricity generation in the UK includes: advanced conversion technologies; anaerobic and sewage sludge digestion; biomass; hot dry rocks; landfill gas; hydroelectric; shoreline wave; solar, tidal, wind, nuclear and carbon capture and storage. The European Commission (EC) defines renewable energy in the Renewable Energy Directive (2009) as,

'energy from renewable sources means energy from renewable nonfossil sources, namely wind, solar, aero thermal, geothermal, hydrothermal and ocean energy, hydropower, biomass, landfill gas, sewage treatment plant gas and biogases' (European Directive 2009/28/EC, article 2a)

Within policy, 'renewable energy' falls within the term low carbon technologies or green, clean and environmental technologies, which includes nuclear power and carbon capture and storage technologies. To develop renewable energy in the UK, the Labour government introduced the Renewables Obligation (RO) in 2002 (discussed further in Chapter 2.3). This is an indirect subsidy that obligates suppliers to buy a set percentage of electricity from renewable energy producers. Support for immature technologies that cannot compete in an open market, but fulfil priority policy objectives. The Coalition government (2010-2015), estimated £7.6 billion investment into diffusing onshore wind technology. This accounts for five per cent of the overall electricity production and a 35 per cent share of renewable electricity capacity (DECC, 2015: 36-37).

Social research attitudes' surveys over the last 25 years have shown consistent support for the increase in using wind power in the UK. Renewable UK (RUK) represents the British wind industry. Its survey of British attitudes to wind energy from 1990 to 2002, resulted in, 74 per cent support and seven per cent opposition to increasing wind power in the UK BWEA (2003). The findings of the Department of Trade and Industry (DTI) survey of 2,279 respondents across the UK echoed this in 2003, with 85 per cent in overall support and five per cent in overall opposition DTI (2003). In 2004, a similar survey by the Regen South-West, collated opinion across Devon with 218 respondents, with 85 per cent overall support and 13 per cent overall opposition (Ipsos Mori, 2004).

Table 1, *Public Opinion Polls, Increasing Wind Power in the UK (2005-2010)*, lists the support for increasing the use of wind power in the UK. Response to the question *'To what extent if at all, do you support increasing the use of wind power in the UK?'* (Ipsos Mori, 2004 & Cardiff University 2010; BERR, 2008; DECC, 2009; Bell et al, 2013).

Table 1: Public Opinion Polls, Increasing Wind Power in the UK (2005-2010)

Year	2005	2006	2007	2008	2009	2010
Opinion						
Strongly Support	50	54	54	50	53	49
Tend to Support	31	27	28	30	29	33
Neither Support nor Oppose	9	9	9	10	11	9
Tend to Oppose	5	3	4	4	2	5
Strongly Oppose	2	4	4	3	3	3
Don't Know	2	3	2	3	3	1
TOTAL SUPPORT (%)	81	81	82	80	82	82
TOTAL OPPOSE (%)	7	7	8	7	5	8

Source: Adapted from Ipsos Mori (2005) & (2010); BERR (2008); DECC (2009) and Bell, D. et al (2013).

In 2005 and 2010, Cardiff University polled 1,491 and 1,822 respondents across England, Scotland and Wales (Ipsos Mori, 2005 & 2010). Three sets of data by the Department of Business, Enterprise and Regulatory Reform (BERR) from 2006 to 2008 across Great Britain with 1,949 respondents (BERR, 2009). In 2009, the Department of Energy and Climate (DECC) continued with the fourth set of this survey data (DECC, 2009). In 2011, a large-scale opinion poll commissioned by the Sunday Times newspaper, with 1,696 respondents, but asked a different set of questions: 'Thinking about the country's future energy provision, do you think the government should be looking to use more or less wind power? Do you think the government is right or wrong to subsidise wind farms to encourage more use of wind power? And do you think increased use of wind power is or is not a realistic way of combating climate change?. The overall majority support for more wind power (56%); the government was right to subside wind farms (60%) and that wind power was realistic (47%) (Ipsos Mori, 2011).

By 2012, the Department of Energy and Climate Change (DECC), set up an online data tracker for thirteen quarterly series of public attitudes data across the UK, until financial year end, April 2015. This data adapted in Table 2, *Public Attitudes to Wind Energy (2012-2015)*, shows opinion at the end of each financial year.

Table 2: Public Attitudes to Wind Energy (2012-2015)

Year	Mar	Mar	Mar	Mar
	12	13	14	15
Base wave	1	5	9	13
n. respondents	2121	2051	2040	1981
Opinion				
Strongly Support	26	24	24	22
Tend to Support	41	44	46	42
Neither Support nor	20	19	17	20
Oppose Tend to Oppose	7	7	7	8
Strongly Oppose	5	4	5	5
Don't Know	1	1	2	3
TOTAL SUPPORT (%)	66	68	70	64
TOTAL OPPOSE (%)	12	11	12	13

Source: Adapted from (DECC, 2015)

Tables 1 and 2 outline the high-level of support for wind power in the UK from the start of the industry over a 25-year period; compared with those that oppose the developments. The key change is the decrease in total support from 70 per cent to 64 per cent (below the 2012 approval rating) during the 2014 to 2015 period.

1.2 Research Problem

Data collected from DECC (2011) highlights the number of planning applications across the UK, for developing onshore wind farms. In figure 1, *Planning Status for Onshore Wind Farms, UK (2011)*, the number of planning proposals refused, under construction, in planning, consented and operational; across England, Scotland, Wales and Northern Ireland, pictures the research problem. In 2005, the number of onshore wind farms refused planning permission in England and Wales was at 28 per cent, rising to 33 per cent in 2008 and 48 per cent in 2010 (Banning, 2011). Research has found that local objections to the visual impacts of new farms have had an increasing influence on local planning authority (LPA) decisions. In England, the number of refused applications is more than Scotland, with fewer under construction, within planning or operational. However, more applications have gained permissions and are awaiting construction than in Scotland.

160 Planning Applications 140 120 100 80 60 40 20 o Under In Planning **Operational** Refused Consented Constructi **England** 149 85 92 10 Scotland 17 85 121 127 11 Wales 0 34 26 14 2 Northern 2 45 22 39 3 **Planning Status**

Figure 1: Planning Status for Onshore Windfarms UK (2011):

Source: Adapted from DECC (2011)

■ England

Consecutive governments have committed to meeting carbon reduction targets by supporting a transition to a low carbon economy. By investing in renewable energy, one form of which develops onshore wind farms.

Consistent public attitudes surveys confirm the general support for wind energy, but the refusal rates for applications locally in England is higher than the refusal rate locally in Scotland, Wales and Northern Ireland.

■Scotland **■**Wales **■**Northern Ireland

1.3 Social Impact Assessment

SIA is a management process applied throughout a development life cycle as a method:

'of analysing, monitoring and managing the intended and unintended social consequences, both positive and negative, of planned interventions (policies, programs, plans, projects) and any social change processes invoked by those interventions'. (Vanclay, et al, 2015: 1)

It is a tool to support decision-making, aiming to support communities when there is an imbalance of power, without interference from politics and power, founded on universal principles of human rights. As a planning instrument, it holds no statutory weight within the UK, although many of its methods are used when developing new projects. However, EIA through EU Directive is of material consideration in planning. The research will argue that the socioeconomic technical papers within an EIA has potential to include SIA methods when developing onshore wind farms in England.

1.4 Research Aims

The research project intends to reflect on the impacts of developing onshore wind farms in England by applying the methods and techniques of an SIA to specific case studies. Social acceptance issues associated with developing onshore wind farms, argue for SIA as an extra tool for use within planning. This prevents failed development costs, gains social acceptance, defines a method to support LPAs in the decision-making and offers management tools to support developers and communities in managing the benefits of onshore wind farms.

1.5 Research Hypothesis

The English planning system uses Social Impact Assessment to site onshore wind farms.

1.6 Research Objectives

- To understand the current practice by LPAs, developers and communities for planning onshore wind farms in England, to research the extent to which SIA activity occurs.
- To examine what SIA activity assists communities in supporting or

- objecting to onshore wind farm planning proposals, to strengthen the EIA process.
- To outline which planning theories can support introducing SIA methods into the English planning system, to offer an added decisionmaking tool.

1.7 Research Questions

- i. What is the current policy context for developing onshore wind farms in the UK?
- ii. What planning theories would support SIA as an environmental planning tool in England?
- iii. What is the current practice for planning onshore wind farms in England?
- iv. Why is there local opposition to the siting of onshore wind farms England?
- v. What evidence is there that social impacts (positive and negative) are assessed at a local planning level?
- vi. What EIA and SIA activities support and oppose onshore wind farm proposals in England?
- vii. What SIA methods are specific to: participation, profiling, impact prediction, mitigation, alternatives, capacity building, conflict mediation, management, monitoring and evaluation; for developing onshore wind farms?

1.8 Conclusion

Through the Climate Change Act (2008), the UK has committed itself to a programme of investment and targets for renewable and low carbon technologies to meet the challenges of climate change. Public attitudes surveys over a 25-year period have consistently shown public support for wind energy. Despite policy and public support for wind energy, England (compared to other devolved regions) has seen a steady increase in the number of refusals for onshore wind farms through the LPA consenting

process. The aim of this research is to test whether SIA can be an extra decision-making tool when assessing impacts from developing onshore wind farms in England. The research will evaluate to what extent SIA activity occurs and how this encourages social acceptance and serves local democracy through the planning system. The research questions initially addressed through a literature review in Chapter two, *The UK Context* and Chapter three, *Planning Theories Supporting the Integration of SIA*.

Chapter Two: The UK Context

'Herbert the Dean set up a windmill on Haberdun; and when the Abbot heard this, he grew so hot with anger that he would scarcely eat or speak a single word. On the morrow, after hearing mass, he ordered the Sacrist to send his carpenters thither without delay, pull everything down, and place the timber under safe custody. Hearing this, the Dean came and said that he had the right to do this on his free fief, and that free benefit of the wind ought not to be denied to any man; he said also that he wished to grind his own corn there and not the corn of others, lest perchance he might be thought to do this to the detriment of neighbouring mills. To this the Abbot, still angry, made answer, 'I thank you as I should thank you if you had cut off both my feet. By God's face, I will never eat bread till that building be thrown down.' The Chronical of Jocelin of Brakelond: concerning the acts of Samson, Abbot of the Monastery of Bury St Edmunds (AD 1191).

2. Introduction to Chapter

Chapter two offers a brief description of the history of wind energy in the UK. How wind energy contributes towards a portfolio of renewable energy choices and how those choices are regulated and governed. The development lifecycle of an onshore wind farm proposal, including the use of an EIA framework within the Development Control process. Discussing the political ideology that influences policy approaches during the time of the Coalition government of 2010 to 2015.

2.1 History of Wind Development in UK

There is much discussion about the invention of wind energy, with little agreement on technology type or originating country. In the UK, there is a documented account of building a wind mill, by Dean Herbert in 1191, on his freehold land in Bury St Edmunds. He built it without permission of the monastery and ordered to dismantle it by the Abbot Samson shortly after its construction. This early 'planning objection' seen at the time, as a threat to the control the monastery had over producing flour. Although Herbert argued the wind is a free source of energy which 'should not be denied any man'

(Brakelond, 1191: 69). Developing wind machines to convert kinetic energy to mechanical energy, continued steadily in the UK, until its peak in the mid-1700s at 10,000 mills. It is at this point with arriving coal-fired steam engines that mill development declined (Fleming & Probert, 1984: 166). By the early 20th century, following centralising of the flour milling industry, most windmills fell into disuse and technology development came to a standstill.

Elsewhere in Europe, the Danish developed wind turbines for electricity generation in 1891, to meet the need for electrification in rural areas. In the UK, interest in wind power research did not resurface until after the Second World War, due in part to fuel shortages and rising electricity demands. The Electrical Research Association, set up to develop wind energy from 1945 to 1960, most of its research focused on site selection and wind mapping of the UK (Fleming & Probert, 1984: 167). Several test sites, one of which, on the Isle of Man, claimed to produce economically viable electricity. However, central government abolished the research programme to refocus on a comprehensive nuclear energy development strategy.

By the oil crisis of 1973, increases in fuel prices and a growing understanding of the finite nature of fossil fuels, meant limited research funding for wind energy. It is now, the idea of grouping turbines on a site or farm and offering tax incentives began. During 1970s, the United States (US) invested in the research and development of commercialising the wind turbine industry. This resulted in 16,000 machines in California supplying 1.7 gigawatts (GW) of electricity by 1990. The growth in Europe was slower with the market taking off from 1990 onwards (Kaldellis & Zafirakis 2011: 1887). A wind turbine provides 2-3 Megawatts (MW) of electricity for onshore wind, but this has developed into larger machines that run offshore and new retail market concentrating on small, single or micro wind turbine installation. The latter adapting designs to fit with surrounding landscapes or engineers working in collaboration with artists to design functional public art wind turbines.

The UK's first commercial wind farm, built in 1991, with 4MW installed capacity and government funding in the form of the Non-Fossil Fuel Obligation (NFFO). This seed funded 56 projects across England and Wales to test the commerciality of wind energy (Coles & Taylor, 1993: 205). The NFFO funding had a tight deadline of 6 years for developers to make a return on their investment. This meant developers at the time were selecting the windiest locations, which were also the most visible and concentrated in the west and south-west of England and in west Wales (Coles & Taylor, 1993: 206). This was at the beginning of the wind energy expansion, Coles and Taylor (1993), found that only one per cent of their research sample did not want wind energy with a 52 per cent majority wanting it to increase (1993: 209). The authors reviewed several Environmental Impact Statements, using the Lee and Colley Review (1992) for onshore wind farms. They found variations in the quality of the assessment. Arguing this was because of the infancy of the technology, the lack of policy direction, the importance of gaining social acceptance and the weaknesses in offering alternatives or clear mitigation. They concluded that "windfarm policies in the UK are developing more by default that design" (1993: 219-226).

The Labour government (1997-2010), supported the ambition to meet the Kyoto Protocol (1995) of reducing CO₂ emissions by 20 per cent by 2010, from the 1990 levels. And the renewables share of retail electricity generation would be at 30 per cent by 2020. By 1997, the share of the renewables in energy production was at 3.6 per cent which was to increase to 6.7 per cent by 2008 (Johnson et al, 2010: 1). The United Nations (UN), Århus Convention (1998) came into force in 2001. Adopted by the UK in 2005, aiming to elaborate on Principle 10 (Public Participation) of the Rio Declaration (1992). Offering access to information, the right to engage in environmental decision-making, and the right to challenge the legality of environmental decisions (POST, 2005: 1-4).

By 2006, the UK government commissioned a report undertaken by Nicholas Stern to review the economic cost of climate change Stern (2006). This

influential, although politically contested report, for the first time outlined the economic impact of global climate change. Among the recommendations of the report was the call for an urgent global transition to low carbon economies. By 2007, and again in 2013, the Intergovernmental Panel on Climate Change (IPCC), a scientific committee within the UN undertook systematic reviews of the work of climate scientists from 130 countries. To conclude that global warming is 'unequivocal' (IPCC, 2013: 3) and that 'human influence has been the dominant cause of the observed warming' (IPCC, 2013: 12). The result for UK policymaking was to introduce the Climate Change Act (2008) and set up a government department DECC, to progress policy actions. The UK, committed legally to a programme of transitioning to low carbon and renewable energy development.

2.2 Renewable Energy Regulation

The policy portfolio supporting the development of onshore wind farms starts with the aims of the Climate Change Act (2008). Planning consideration of a proposal for onshore wind farm refers to the National Planning Policy Framework (2012), the National Policy Statement for Energy Infrastructure (2013) and the Planning Practice Guidance for Renewable Energy Developments (2013). Through the Localism Act (2011), Local and Neighbourhood Plans guide new developments. Through the Town and Country Planning Act (2011) planning proposals have the support of EIA as decision making tool. Guidance is offered to Local Authorities (LAs), communities and developers from the Community Engagement for Onshore Wind Developments (2014a); Community Benefits from Onshore Wind Developments (2014b) and the Community Energy Strategy (2014c). However, access to any policy support from DECC and DCLG has been shaped by political ideology of the Conservative, Labour and Liberal Democratic parties from 1990 to 2016. Figure 2, Timeline of the Policy Battle for Onshore Wind Energy (1990-2016) illustrates the key regulation decisions that have had an impact on the deployment of onshore wind technology.

Figure 2: Timeline of the Policy Battle for Onshore Wind Energy (1990-2016)

Privatisation of utilities, but nuclear uncommercial. EU permits subsidy scheme to keep in pubic ownership	Renewable Energy Generators demand same price support as nuclear, Non Fossil Fuel Obligation set up	Non Fossil Fuel Obligation replaced by Renewables Obligation (Labour)	Friends of the Earth campaign for Climate Change Act 2005-2008	Private Members Bill for Climate Change Act passed through Parliament (Labour Minister)	Set up DECC. DECC and DEFRA lead on policy support (Labour)
(Conservative)					
					FN2
Supportive Ministers replaced by opposing Ministers (8 different Energy Ministers in DECC)	Localism Act returns power of veto for farms over 50MW to DECC (Liberal Democrat) and 5-50MW to DCLG (DCLG/Conservative)	EIA Screening reduces from 5 turbines or >5MW to 2 turbines or height over 15 meters (DCLG/Conservative)	Backbench campaign to abolish Renewables Obligation (Conservative)	Pre-application consultation compulsory for onshore wind farms (DCLG/Conservative)	EN3 amended to include local acceptance and Local / Neighbourhood Planning (DCLG/Conservative)
2010-2012	2011	2011		2013	2013
Community Engagement, Benefits and Energy guidance published (DECC/Liberal Democrats)	FCA stop registering Community Energy cooperatives (Treasury/Conservative)	SoS (DCLG) extends call in powers for onshore wind (51 proposals recovered DCLG/Conservative)	Power of veto for projects over 50MW returned to DCLG	ROs abolished year early (Conservative) 2015	DECC loses funding, department closed, remaining functions moved to Dept. Business, Energy & Industrial Strategy (Conservative)
2014					2015-2016

Source: Own design (2016)

The Climate Change Act (2008), legally binds the UK government to reduce emissions in six greenhouse gases by 80 percent in 2050 (*Climate Change Act, 2008* s.1 (1)). DECC and the Department of Environment, Food and Rural Affairs (DEFRA) have the responsibility for policy to meet this target. The Act ensures that successive governments must promote policies to meet carbon budgets to promote renewable and low carbon energy, set in legislation, up to the year 2027. Originally, Friends of the Earth (an environmental NGO) began a three and half year campaign (2005- 2008) to introduce the legislation through a Private Members Bill to Parliament, by Michael Meacher a former Labour Environment Minister, but with cross party support from Lord Deben, John Gummer (Chair of Committee on Climate Change) and Tim Yeo (Chair of the Environment Committee); both Conservatives. The only opposition came from a small group of neo-liberal Conservative MPs known for their denial of climate change¹.

The introduction of the Climate Change Act (2008), establishing DECC, setting decarbonisation targets and the support of subsidies, was overseen by the Labour government of 2007 to 2010 led by Prime Minister Gordon Brown. The Coalition government of 2010 to 2015, led by the Conservative Party with David Cameron as Prime Minister and Nick Clegg of the Liberal Democratic Party as Deputy Prime Minister. Ed Davey from the Liberal Democrats appointed Secretary of State (SoS) for DECC and Eric Pickles from the Conservatives appointed SoS for DCLG. In 2015, the Conservative Party, won the political mandate and returned to power with David Cameron remaining as Prime Minister for one year until replaced by Theresa May in 2016. Ed Davey was replaced by Amber Rudd at DECC, who oversaw the abolition of subsidies for renewables and the closure of the department. Greg Clark replaced Eric Pickles at DCLG, whilst Eric Pickles was knighted for his services as an MP.

During the Coalition government, the approach to energy provision through renewables and specifically onshore wind energy, was dominated by the Conservative Party's neoliberal narrative. A global hegemony that governs by ensuring the primacy of the market. Through globalised production, state

¹ Peter Lilley, Ann Widdicombe, Christopher Chope, Philip Davies and Andrew Tyrie voted against the Bill. Source available at https://www.desmog.uk/2015/09/03/how-peter-lilley-opposed-climate- change-act

deregulation, privatisation of state assets, dismantling of the welfare state, the commodification of nature and the use of fossil fuels (Plaistow, 2010). This is challenged by social movements that call for ecological modernisation or Eco modernism. A promotion of technology as a solution for ecological challenges, such as nuclear power and genetically modified crops. A greening of the neoliberal approach by governing with policies that incentivise green behaviour; such as investment in renewable energy technologies (Roberts, 2014). Neoliberal energy policies are challenged by counter movements urging for the increased call for public and or community ownership models. Using the concepts of energy democracy; the state, formal cooperatives, mutual benefits societies or social enterprises, generating energy from renewable sources (We Own It, 2013), (Sweeney, et al, 2015).

The Cabinet appointments for the Secretary of State for DECC and DEFRA (policy responsibility for climate change) and for DCLG (policy responsibility for planning) and their departments' ministers, have undergone change throughout the time of the Coalition government. This has had an impact on the practice of renewable energy policy and planning permissions for developing onshore wind farms. From 2010 until mid-2012, key positions with responsibility for furthering decarbonisation policy objectives, were led by individuals, that were sympathetic of a transition to a low carbon economy, targets for cuts to greenhouse gas emissions and subsidies for renewable technologies, specifically those for onshore wind farms. The changes in personnel, resulted in appointing leaders of departments who have argued against developing onshore wind farms. The movement of personnel is more prevalent within DECC with the appointment of eight different Energy Ministers, illustratinga Conservative and Liberal Democrat coalition governance of the department. For further explanation see appendix 1, Changes in Ministerial Appointments (2008-2015). In 2013, the World Development Movement published a briefing illustrating a third of UK Government Ministers were involved in the fossil fuel industry, through government functions, finance, directly as serving board members or ex members of staff. For example, Michael Fallon, who took over from John Hayes as Energy Minister for DECC midway through 2013, had been a Director of the inter-dealer broker (intermediary wholesale energy finance) company, Tullett Prebon Plc until 2012. Gregory Barker, Energy Minister at DECC from 2010 to 2014, had previously worked for Anglo-Siberian Oil and Sibneft (Russian Oil producer).²

The Localism Act (2011), devolves decision-making power from central government to communities and individuals. Policy supporting this Act, falls under the remit of DCLG. Through neighbourhood planning the aim is for local communities to decide the spatial planning for their local environment. The Act introduced pre-application consultation for wind energy developments. From 2011 to 2015, the Act, gave the power of veto for all projects greater than 50MW installed capacity, to the Secretary of State for DECC. Any project between 5 and 50 MW determined by LPAs, with power of veto by the Secretary of State for DCLG. In 2015, the decision-making for large-scale projects over 50 MW was returned to LPAs with the power of veto by the Secretary of State for the DCLG (Cabinet Office, 2015).

From the Localism Act (2011), Neighbourhood Planning legislation came into effect in 2012. This charges the local authority (LA) with a duty to produce a Local Plan (LP) that meets the policies of the NPPF. The LP offering a 15-year, collective vision for improvement, development and protection of a local area. Section 106 Agreements, of the Town and Country Planning Act (1990), became the Community Infrastructure Levy (CIL), which offers site specific mitigation payments for the redress of negative impacts. This allows the LA to set and charge fees to developers for planning conditions. The income develops infrastructure within neighbourhoods that local communities have identified in their neighbourhood plan.

Part of this portfolio of neighbourhood legislation includes Neighbourhood Planning, which offers local communities the power to devise Neighbourhood Development Plans. The Neighbourhood Plan in line with the LP allows

² See World Development Movement, Global Justice Now (2013) Fossil Fuel Web of Power Available at http://www.globaljustice.org.uk/fossil-fuel-web-power [last accessed 12/2/16]

communities to decide on the design and location of new projects. To help with neighbourhood planning, communities can approve a Neighbourhood Development Order and grant planning permission, thus removing the need to go through the LPA. They can also approve Community Right to Build orders, granting planning permission for small-scale, site specific developments that are led or owned by the community. Parish, town councils or a neighbourhood forums coordinate this process (DCLG, 2015). The LPA may also have specific planning policy for developing onshore wind farms within their area, as part of their Local Plan.

The National Planning Policy Framework (2012) for England, aims to simplify planning and make it more accessible. The policy has a 'presumption in favour of sustainable development' for plan making and decision-making (DCLG, 2012: 4). One of its core twelve land-use principles states that planning should,

'support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change, and encourage the reuse of existing resources, including conversion of existing buildings, and encourage the use of renewable resources (for example, by the development of renewable energy)' (DCLG, 2012: 5)

The NPPF encourages LPAs to adopt policy which can support communities to contribute towards renewable and low carbon energy generation. To design policies that mitigate negative impacts and assess cumulative landscape and visual impacts. To identify sites for renewable sources. Supporting community-led initiatives, including those in areas not covered by neighbourhood plans. The NPPF does not need applicants to demonstrate the need for renewable or low carbon energy and supports applications if impacts are acceptable (DCLG, 2012: 22-23).

Project assessment is through Environmental Impact Assessment (EIA) derived from EU Directive (85/357/EEC). Before 2011, the rule ordered developers to undertake an EIA if the proposed development was greater than 50 MWs for an onshore wind farm. LAs undertake screening options to evidence the need for an EIA, if the proposed development is 'likely to have

significant effects on the environment by virtue of factors such as its size, nature or location'. Or over 5 turbines in size or with a maximum capacity greater than 5 MW (ODPM, 2000: 54). The EIA results in an Environmental Impact Statement or Environmental Statement (ES) which planners, communities and developers use to influence decision-making. In 2011, this was amended to include any 'development that involves the installation of more than 2 turbines' or 'the hub height of any turbine or height of any other structure exceeds 15 metres' (TCP, 2011: 49). The planning practice guidance EN3 for Renewable and Low Carbon Energy and the National Policy Statement EN1 for Energy Infrastructure came into effect in 2013.

The policies ask planners to consider impacts on: noise; safety; electromagnetic interference; ecology; heritage; shadow and sun flicker; energy capacity factors; cumulative landscape and visual impacts and decommissioning. In 2015, this was amended to include, 'Do local people have the final say on wind farm applications?' And is 'the development site...in an area identified as suitable for wind energy development in a Local or Neighbourhood Plan' (Clark, G. DCLG, 2015).

Community Engagement for Onshore Wind Developments (2014) offers best practice approaches for ensuring effective engagement in the decision-making for developing onshore wind farms in England, with an installed maximum capacity of 5 to 50 MW. Community Benefits from Onshore Wind Developments (2014) is voluntary in England, although usual practice for onshore wind developments greater than 5 MW. The protocol commits developers to offer a benefits package of £5,000 per MW of installed capacity a year (DECC, 2014b: 9). They are separate to any material considerations within planning (giving weight in the planning decision) and are relevant to the needs of the local community (see section: 2.3.3). This guidance offers developers, communities and local authorities, advice on how to collaborate in devising a social management plan for the income from the development. The Community Energy Strategy (2014), encourages and supports community-led and or owned energy generation, use reduction, demand management and energy buying. It

outlines issues around access to investment, the reliability of the income for the electricity produced, supplying consumers directly, connecting to the national grid and navigating planning (DECC, 2014: 62) (see section 2.3.4). This planning guidance was introduced by DECC under the leadership of Ed Davey, the Secretary of State for DECC and a Liberal Democratic minister for the Coalition government (2010-2015).

The Cooperative and Community Benefits Society Act (2014) sets out the requirements of the regulator, the Financial Conduct Authority (FCA). The FCA is a Treasury quango, which registers new cooperatives. In 2014, the FCA dictated that renewable energy cooperatives were not legitimate as they did not directly trade with their members. In the UK, electricity is exported to the National Grid, by selling to a utility company and then profits redistributed to the generator by a broker. In 2014, the FCA put the draft guidance out for consultation and began to reject applications for new registrations.

2.3 Local Planning Authorities

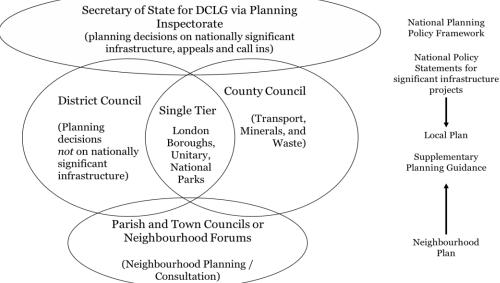
This section examines the current planning practice for onshore wind developments in England. Since 2010, this has been subjected to policy change. Outlined is the development control process of LPA systems, each stage is described in parallel with the stages of a development programme and the stages of the EIA process for onshore wind farms less than 50MW in size. The stages discussed include: feasibility and business planning; EIA screening; pre-application consultation; statutory and non-statutory consultees; EIA scoping, impact identification, predication, mitigation and monitoring. A focus on potential strategic mitigation measures for onshore wind farms; validation, consideration and application management in the planning process; planning decisions, the right of appeal and approvals. Section 2.5, examines the material planning considerations specific to onshore wind farms which include: noise; safety; defence; the strategic road network; shadow and sun flicker; ecology; heritage; cumulative landscape and visual impacts; energy efficiency and

decommissioning. An examination of the other planning considerations assessed by the EIA process such as socio-economic and health and wellbeing impacts of onshore wind farms.

In England, there are three tiers of local authority planning illustrated in figure 3, *The Three Tiers of Local Authority Planning*. Central government through the DCLG grants the Secretary of State via the Planning Inspectorate the power to decide upon applications of national significance. County councils have the duty to plan for countywide develops such as minerals, waste and transport. District councils make planning determinations on applications that are not of national importance. Single tier planning authorities, like national park authorities, determine applications covered by both district and county councils. Parish councils are responsible for neighbourhood planning which informs the Neighbourhood Plan for the area. The planning authorities are guided by national planning policy, the local plan, any supplementary planning guidance and the neighbourhood plan.

Secretary of State for DCLG via Planning

Figure 3: The Three Tiers of Planning Authorities



Consultation)

Source: Adapted from (DCLG, 2015)

In 2013, the then Secretary of State for DCLG, Eric Pickles, sent a letter to local authorities setting out his intention for onshore wind farms,

- 'the need for renewable energy does not automatically override environmental protections and the planning concerns of local communities;
- decisions should take into account the cumulative impact of wind turbines and properly reflect the increasing impact on (a) the landscape and (b) local amenity as the number of turbines in the area increases;
- local topography should be a factor in assessing whether wind turbines
 have a damaging impact on the landscape (i.e. recognise that the impact
 on predominantly flat landscapes can be as great or greater than as on
 hilly or mountainous ones); and
- great care should be taken to ensure heritage assets are conserved in a manner appropriate to their significance, including the impact of proposals on views important to their setting' Eric Pickles, Secretary of State for DCLG (DCLG, 2013).

In June 2015, the Secretary of State for DCLG, Greg Clarke, made an amendment to the guidance on renewable and low carbon energy in a House of Commons written statement:

'When determining planning applications for wind energy development involving one or more wind turbines, local planning authorities should only grant planning permission if:

- the development site is in an area identified as suitable for wind energy development in a Local or Neighbourhood Plan; and
- following consultation, it can be demonstrated that the planning impacts identified by affected local communities have been fully addressed and therefore the proposal has their backing.'
 Greg Clarke, Secretary of State for DCLG (DCLG, 2015b)

No guidance has been provided by the government as to how local community backing can be demonstrated or how the local community are going to identify impacts, and is left for the judgement of the LPA.

2.4 Development Control

Development control is the LPA consenting system for development projects. It can be viewed as space to implement planning policy through the development plan (Local Plan) to be enacted and / or illegal development prevented (Groves, in Allemendinger et al, 2000). EIA is a regulatory framework that supports this aim by managing development in addressing the impacts of a potential development. The EIA process produces an Environmental Statement (ES) to support the planning application. The LPA is given an extended period from 8 weeks to 16 weeks (in England) to consider the proposal and consult with statutory and non-statutory consultees amongst whom the ES will be distributed. From the ES the applicant will produce a Non-Technical Summary (NTS) for distribution to the general public for consideration. The ES is classed as of 'material consideration' which must be taken into account in the LPA decision making along with the Neighbourhood Plan, Local Plan and NPPF. Developers use the EIA process to evaluate the impacts of their potential development activity and offer measures for mitigation, and planners use the ES to check, monitor, negotiate and decide. In figure 4, Development Control Process for Wind Energy Planning Applications, the development life cycle, planning process and EIA process are linked together to illustrate the systems involved in developing an onshore wind farm in England. Each stage in the diagram is discussed in the following sections.

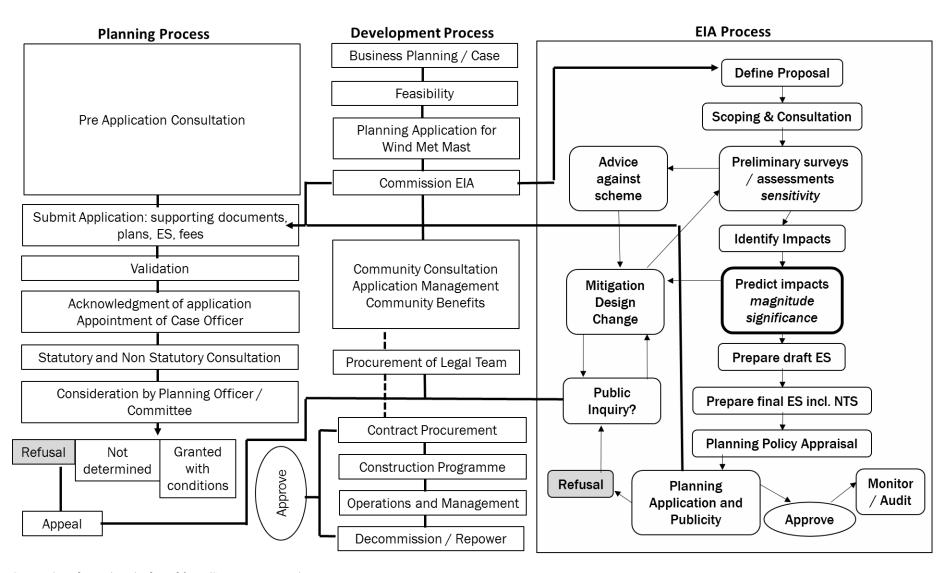
2.4.1 Feasibility (Development process)

In putting forward a proposal for an onshore wind farm, a business case will be required to evidence need for the development. The business plan will typically include: a background to the project and the project objectives; a market analysis; a description of the materials and supplies required and an explanation of the engineering and technology that will be used; a description of the location, the environment and the site; an analysis of the organisational resources required and a project implementation plan with timescales. The key part of the business plan will be the financial information including: financial analysis and

investment appraisal; projected financial statements and income statements. Much of the business plan will include information from other feasibility reports such as the wind power feasibility report, any marketing or consultation strategies, a cost benefit analysis and a SWOT analysis. This document will be used to gain investment and or approvals from funders and organisational leaders. This is a closed process, to host community members, usually involving only the developer and funder unless the development is a community led scheme.

Prior to any onshore wind farm development, a planning application for the installation of a meteorological wind mast (for the life span of 1 to 3 years) to assess the viability of the wind resource at the identified site is required. Recently the UK's Meteorological Office designed improvements to their virtual met mast technological capabilities, with improved accuracy and lower costs, has meant time and resource efficiencies for both the developer and the LPA. A best practice wind power feasibility report will typically include: wind site assessment to check the viability of a location for the positioning of the wind turbines; physical turbine constraints on the site; the planning constraints; turbine selection and positioning; initial telecommunications assessment; planning sensitivity assessment (key issues on ecology, landscape and cultural heritage); virtual or physical met mast wind speed assessment; grid connection application; initial access assessment i.e. the route taken to deliver the turbine/s; planning review, desktop research to examine nearest similar developments and their planning consultation documents; energy production and financial modelling assessment; site survey; EIA screening opinion and a start to the key statutory consultations (Renewables First, 2015).

Figure 4: Development Control Process for Wind Energy Planning Applications



Source: Own design (2015) adapted from (Stevenson, 2010:3)

2.4.2 EIA Screening opinion (EIA process)

If the EIA screening opinion and key statutory consultations have not occurred as part of the wind mast application, then this will happen during the pre-application consultation stage of the planning system. Weston's (2011) work identified a 'culture of resistance' (2011: 96) towards screening for EIA, due to time and resource implications but also because of a perception from planners, that the consideration of environmental impacts is already undertaken by planners as part of the planning process, so EIA is an 'additional bureaucratic burden' (2011: 91). In the case of onshore wind farms EIA process has been enforced at a smaller level of development, from developments over 5MW requiring an EIA to the latest ministerial statement proclaiming any development of one to two turbines, will require the planning impacts on local communities to be assessed. In EIA, this is defined as two turbines or any turbine over 15 meters in height.

Smart, et al (2014) undertook a review of 35 ES and the associated NTS in Scotland to evaluate the influence of the EIA process within wind farm planning debates. The authors follow on from Ellis et al. (2009) and Toke et al. (2008) by suggesting that social acceptability is only part of the planning problem for the development of onshore wind farms. The other interconnected perceptions, which consolidate existing tensions include: the extension to timeframes for determination, the increases in technical data resulting in stakeholder 'information overload' which leads to a restriction of public access; a lack of clarity in agreeing the purpose of the process; an absence of impartiality and transparency in the outcome (as the process is funded by the developer); and a weakness in the analysis of cumulative impacts with mitigation efforts; inadequate resources; the lack of experience within planning authorities; poor consideration of alternatives and inadequate measures for decommissioning (Smart et al 2014: 15-19).

However, Smart et al. (2014) did find in their results that a large majority of their respondents considered the EIA to be highly important for windfarm planning applications, raising the significance of environmental issues and

the avenues for detailed public scrutiny; that environmental impacts were effectively mitigated and monitored. In Phylip-Jones and Fischer (2013) research into the quality of ES for 20 large scale (greater than 50MW) onshore and offshore developments in the UK and Germany using the Lee and Colley Review Package (1992), that 90 percent of the ES were found to be of satisfactory quality, which would make the quality of wind farm ES high compared to other ES in the sector (2013: 16-17). For small to medium scale developments, less than 50MW, Smart, et al (2014) found in their results that 33 percent of respondents perceived that the EIA process, through offering alternatives to the debate contributed to the contentiousness of wind farms, but 40 percent of respondents believed that the contentiousness was related to other issues such as 'site location, development size and general antiwind sentiments' as well as the perceived complexity of EIA contributing towards an inaccessibility for host communities to participate (2014: 16-20). They argue that to counter this, the EIA should follow a participatory approach to resolve local misunderstandings, countering the claim by Walker (2010) that 'a high level of developer-community interaction may serve only to antagonise objectors and strengthen the quality of their objections' (Smart, et al. 2014: 20).

2.4.3 Pre-application consultation stage (Planning process)

The pre-application consultation stage for planning applications was introduced by the Planning Act (2008) for major infrastructure projects. It ensures that the Secretary of State is notified of the proposal and the submission of an ES or an application for an EIA screening opinion. Developers are also required to produce a Statement of Community Consultation/Involvement which is publicly accessible and includes feedback from consultees. The Secretary of State then has 28 days to respond. The Localism Act (2011) extended the concept of compulsory pre-application consultation to other types of applications. In 2013, pre-application consultation became compulsory for applications of onshore wind farms made to LPAs through the Town and Country Planning (Development

Management Procedure and Section 62A Applications) (England) (Amendment) Order 2013. This order, is only applicable in England and will cease in 2018 (Maile and Davies, 2014). If developers have not undertaken this stage they will not receive validation from the LPA, or if the consultation is of a poor quality, could be subject to later disputes and legal challenges.

This pre-application consultation must consider the following:

- that the developer (or appointed agent) is responsible for consultation with the local community
- consultation at a minimum means: the applicant should advertise the
 proposal to the majority of the host community; offer channels of
 communication with the developer and community with appropriate
 timescales for comment and feedback; that this feedback has been
 included in the design of the project and overall planning application
 and to evidence this consultation when submitting the application
- consultation techniques should be devised specific to the project and proportionate to the scale of the proposal and local context, stakeholder mapping should begin early in the process and in liaison with the LPA
- the LPA is encouraged to work with the applicant when they undertake consultation exercises
- if these minimum requirements are not met by the applicant the LPA will not validate the application until they have complied.

The introduction of pre-application consultation has been a response to the social acceptability discourse regarding onshore wind farms in England. Yet, the issues of social acceptance discourse and the lack of planning approvals, at a smaller scale of development, regardless of the robustness of participation techniques and how responses have been considered in high quality ES; means that further analysis of participation processes is required. Glucker et al. (2013) in their review of the literature on public participation in EIA found confusion over the definitions of consultation and participation, with the terms being used interchangeably. They could not identify a consensus on what participation in EIA means and involves. The terms

citizen, host/local community, public, stakeholders, consultees are used to denote a homogenised group. Rather than recognise that different members within the group may have different priorities and expectations of participation through the EIA process (2013: 109). This is discussed further in chapter four.

2.4.4 Statutory and Non-Statutory Consultees

It is a legal duty for statutory consultees to comment and respond to potential developments through the planning system. Non-statutory consultees may also be required to comment on applications depending on the site, the proposal and any interest in the project the consultee may have. Statutory and non-statutory consultees have the power to recommend planning refusal to LPAs. Although they are not able to directly refuse a planning application. However, if a consultee has not withdrawn their objection and a LPA is considering approval, then the LPA is advised to refer to the Secretary of State for determination. This would be on applications for developments that would have impacts for example, on a World Heritage Sites, public health, flood risk area, green belt or the strategic road network.

2.4.5 EIA Scoping stage (EIA process)

The planning system's guidance on renewable and low carbon energy outlines the main areas for planning consideration for wind turbines, which is used as a basis to define the scope of the EIA for a project site. The scope (in best practice terms) should be discussed and agreed by the developer, LPA and community and statutory consultees. An identification of the alternatives to the proposed project should also be provided along with a baseline profiling, surveys of the area and a consultation and communication strategy. In Smart, et al (2014) they found that the consideration of alternatives was problematic for onshore wind farms because of land ownership issues (or location specific wind speeds) in sourcing alternative sites or sectoral alternatives (for example, solar farms) being appropriate alternatives (2014: 22).

2.4.6 Identification, Prediction and Mitigation (EIA process)

The baseline survey and impact identification stages of the EIA, includes numerous surveys and assessments to assist in fully understanding the area under planning consideration. The EIA identifies any impacts (direct and indirect) on 'human beings, fauna and flora, soil, water, air, climate and the landscape, material assets, and the cultural heritage' and any interaction between these factors (Directive 2011/92/EU). The EIA then predicts the sensitivity, significance and magnitude of those impacts. If the area under evaluation is in a sensitive area this may also trigger other legal obligations such as Birds and Habitats directives or Sites of Special Scientific Interest (SSSI).

This leads to establishing mitigation measures, which is an iterative process that may trigger design changes for consultation and feedback from stakeholders. Each survey or assessment is undertaken by experts in those fields, the information is consolidated with a planning policy appraisal into an Environmental Statement (ES) with accompanying Non-Technical Summary (NTS) which is then submitted to the LPA as part of the planning application. A typical ES will include a description of the project, the affected environment, a description of the likely significant effects of the proposal and the measures for mitigation. The ES will also include the planning application form, and a schedule of all the plans, drawings, figures, maps and photomontages. The individual surveys, assessments and other technical data. The NTS is a summary of the ES for distribution to interested parties, the ES for consideration within the planning system. Following feedback from the consultees and findings from the identification, predication surveys and assessment, further work will be undertaken to incorporate, amend or redesign the proposal. In Phylip-Jones and Fischer (2013) findings, 60% of the ES reviewed did give an accurate assessment of impacts, however, the remaining 40% were weak in the analysis of noise and visual impact for onshore wind farms with findings supporting a lack of consideration for cumulative impacts, an over emphasis given to positive impacts, an

underplaying of negative impacts and poor monitoring mechanisms (2013: 20). If significant impacts cannot be removed or mitigated to an approved level, then, the ES has the power to advise against the scheme. In England, the latest ministerial statement seems to emphasise, the ability, to invoke this response using the EIA.

2.4.7 Strategic Mitigation Measures

The EIA mitigation process relates to the hierarchy of mitigation measures, a preference for 'avoidance' of impacts, followed by 'minimisation' of impacts and as a last resort, 'compensation' for the impacts. The avoidance mitigation principle could include the no development option, avoiding areas of environmental sensitivity and applying preventative measures. The minimisation principle, attempts to limit the magnitude, frequency or duration of an impact and can be achieved by redesigning project elements through rescaling, relocation or applying addition mitigation management. The compensation principle, remedies unavoidable negative impacts through rehabilitation, restoration or replacement of the same features of a site (UNEP, 2002). The principles of mitigation efforts are site specific, but some generalisations can be made for onshore wind farms. Mitigation efforts for project level impacts from onshore wind farms are discussed in more detail in section 2.5.

There have been strategic mitigation ideas against the adverse impacts of onshore wind farms: a national and centralised policy approach; use of the soft estate, technology design changes and a reconceptualization of landscape aesthetics. There have been many calls by the UK wind industry for a national policy, plan or programme for on onshore wind farms to be linked to a Strategic Environmental Assessment (SEA). The SEA, would follow a similar process to the EIA, but instead of a project level assessment this would be applied to the policy, plan or program level. The SEA analysis could include an assessment of the national wind resource and a mapping and selection of areas to be protected or opened for potential development. The SEA approach ensures statutory and public consultation and mitigation, it also

gives space to assessing alternatives and the need to justify the policy direction. Ideally this would be determined centrally in liaison with local authorities, but could also occur at a regional or local policy level. This to date has not occurred in the UK.

2.4.8 Validation stage (planning process)

The application received by the LPA contains: plans and documents (including the ES), which are checked for completeness. Planning fees are paid, a letter is sent to the applicant and the application is registered. A case officer is appointed and a decision made as to whether it is a delegated (decided by officers) or a committee (decided by elected members) application. The neighbours and consultees are notified and the application is publicised.

2.4.9 Consideration (planning process)

The time given to consider the application is extended from 8 weeks to 16 weeks due to EIA and the requirement for committee approval rather than delegated authority. Consultees are notified of the production of an ES, which will be distributed and used for consideration. Following this, site visits will be made by officers and committee members. Officers will undertake baseline profiling of the area including any planning history, advertise the proposal at the site through press notices and acknowledge receipt of written responses from consultees. There is an analysis of the application against: policy and strategic fit; constraints; consultation responses; other planning considerations. The feedback and revisions are made to the applicant and further consideration is given following those revisions. The LPA during its consideration stage may opt to employ a third-party review or in-house review of the ES to ensure its quality for decision making.

The influence of EIA on decision-making is argued to be about either informing or influencing decision making Weston, (2011); Smart et al, (2014). For Phylip-Jones and Fischer (2013) their results evidence that ten

respondents felt it had a major influence, seven, a moderate influence and only three perceived the EIA as having a minor influence over their decision-making and that this response was directly related to the quality of the EIA information. Which resulted in the EIA being central to the approvals process for wind farm applications (2013: 23-24).

2.4.10 Application Management (EIA and development process)

Once the application is under consideration, questions and requirements for further clarification or information may be requested by any of the stakeholders. The channels of communication with the LPA and stakeholders should remain live and interactive. The methods of consultation and participation with host communities may be tested at this stage of the planning process especially if the potential development is considered contentious locally.

2.4.11 Recommendation and Decision (planning process)

A planning officer's report is produced by the case officer, with a recommendation for refusal, approval or non-determination (beyond its 16-week timescale for a decision), which is then referred to the planning committee. The recommendations are circulated to all stakeholders, unless the application is referred to committee. The committee may request further information which defers the application, until further documentation is received then returned to Committee for decision. If consent is gained the developer meets any planning conditions set out in the approval report before the construction programme can commence. If the application is likely to be refused, an applicant can withdraw the application at this stage. This has the benefit of the applicant reapplying, depending on timescales, without further planning submission fees and crucially for not setting a precedent for refusal at the site and for the type of development.

2.4.12 The Right of Appeal (planning process)

If a LPA refuses, attaches conditions to approval for an application or is unable to offer a decision within the stated timeframe; the applicant has the right to appeal to the Secretary of State via the Planning Inspectorate. An independent planning inspector is appointed to review the application in line with the local plan and any material considerations. The inspector can request written statements from both parties and undertake a site visit, call for a public hearing or lastly call for a public inquiry. As projects involving EIAs are complex an inspector will usually opt for a public inquiry (RICS, 2013). The outcome may follow the LPA decision, apply further conditions or overturn the original decision based on how different planning conditions have been weighted.

An appeal with the Planning Inspectorate can be 'recovered' by the Secretary of State for applications considered appropriate for ministerial decision making, the application will be determined by the Secretary of State following a report with recommendations by the planning inspector. The Secretary of State can also 'call in' a planning application from a LPA for determination. Call ins occur on applications for projects:

- 'that may conflict with national planning policy on important matters;
- that could have wide effects beyond its immediate locality;
- that raise significant architectural and urban design issues;
- where the interests of national security are involved, or the interest of foreign governments; and
- where there is significant regional or national controversy'
 (RICS, 2013: 11.6.1)

An inspector will undertake an inquiry, where representations are given by both parties to the inspector through expert witnesses, each side is represented by a barrister with the ES offering the base of negotiation. The inspector will then report their recommendation to the Secretary of State, who will make the decision on the application. 'The Secretary of State uses these powers very sparingly, usually where planning issues of more than local importance are involved.' (DCLG, 2015: 17). The final decision can still be challenged by the appellant by seeking a 'statutory review' in the High Court because the decision was 'not within powers of the Act' or 'procedural requirements were not met' (Collingworth and Nadin, 2006: 151). If the High Court rules in favour of the appellant, then the decision is quashed or returned to the inspector for re-determination Sayers (2013).

2.4.13 Approval to Develop

If the LPA grants permission to develop, the applicant will be notified in writing. Usually the permission is granted for a period of three years, if the project is not developed within this timescale then a new planning application is required. If the application is subject to planning conditions, it is at this stage that they should be discharged prior to the start of the development. The Community Infrastructure Levy formally known as Section 106 Agreements are legally binding planning obligations for site specific mitigation (new or upgraded public facilities and infrastructure, that would be required because of the local impact of the development), which can be paid for in cash or in kind. This is a matter of negotiation between the developer and LPA. It is at this stage of the development that the start-up of any community benefit protocol (any goodwill payments or the implementation of a community fund), which has been agreed outside of the planning system, will begin.

2.5 Material planning considerations

All local planning decisions for onshore wind developments must be made in accordance with the NPPF (2012), the National Policy Statement for Renewable Energy, EN1 (2011) this is specific to developments greater than 50MW, the local plan, the Renewable and Low Carbon Energy Planning Practice Guidance (EN3) (2013), any emerging plans, government or regulator guidance, statutory consultee guidance, the pre-application

consultation, any principles of case law and previous appeal cases, ministerial statements and any other material planning considerations (for the purpose of planning the development and use of land). The renewables EN3 also includes specific planning considerations for wind turbine applications, this covers: local acceptance; noise; safety; electromagnetic interference; ecology; heritage; shadow flicker; energy output; cumulative landscape and visual impacts and decommissioning. Material consideration is a matter of law, but the weight given to each material planning consideration is at the discretion of individual decision makers (LPA / planning inspector), who are required to evidence that all relevant matters are have been considered and that greater weight is given to a planning policy supported with evidence.

The RTPI (2015) summarises that the following are not of material planning consideration: matters controlled under building regulations; private matters between neighbours (e.g. boundary disputes); problems arising from the construction programme; opposition to the principle of development; the applicant's personal circumstances; previous objections / representations for other applications / sites; factual misrepresentation of the proposal; opposition to business competition; loss of property value and loss of view (at a household level). The volume of written representations, objecting or supporting an application, is not of material consideration, unless the objection is specific to planning matters. However, a developer does have to evidence the proposal has local backing.

2.5.1 Noise Impacts

LPAs must evaluate noise rating and assessment using the best practice framework designed by the Institute of Acoustics (IoA), *The Assessment and Rating of Noise from Windfarms ETSU-R-97* (1996). The noise limits recommended by the IoA have been based on existing standards on noise emissions; the need for renewable energy and the ability of manufacturers to meet the standards (1996: iii). The assessment framework recommends testing at the location of the nearest noise sensitive property to the project site; noise limits monitoring, are tested externally in areas that are used for relaxation or

quiet activities; limits should be set relative to the local background noise; measurement of background noise should be taken over a range of wind speeds up to 12m/s when measured at 10m height on the site; separate noise limits should be applied for day and night times; limits should relate to cumulative noise impacts and measurement should be taken over a period of time (2006: v-iv).

In 2011, the government commissioned an independent review of the framework, the outcome to update the best practice guidance in terms of measurement and prediction of noise impacts, published in 2013. The government commissioned a review of the evidence on Amplitude Modulation (AM) and how limit thresholds may be set in planning terms. Noise impacts and mitigation measures are strictly regulated in the UK. Turbine technology continually evolves in countering noise emissions, if noise does occur, it is due to aerodynamic noise from the rotation of the blades rather than the associated mechanical equipment. As such the speed of the blades can be lowered to reduce any noise impacts. More difficult to assess and mitigate against is the link between visual impact and noise annoyance, which is discussed further in section 2.6.2.

2.5.2 Safety Impacts

Safety impacts of wind farm turbines are considered in terms of buildings, power lines, air traffic, defence, radar and strategic road networks. The safe separation distance of turbines to buildings is calculated by the height of the turbine to the tip, plus ten percent. For power lines, the distance is sufficient where, if a turbine topples over it will not hit a power line and at a suitable distance that the turbine cannot cause damage to the power line due to 'downward wake effects' (ENA, 2012: 5). That is, turbine rotation aerodynamically causing movement in the power line.

Air traffic safety may be at risk from low flying aircraft collision with turbines, interference with radar and landing systems technology, as well as impacts on meteorological radar systems. The Civil Aviation Authority (CAA), the aviation regulator, published its *Policy and Guidelines on Wind Turbines* in 2013. Issues in terms of air safety, will be on a case by case basis, but may include impacts on surveillance systems and radar equipment (blade flash effect, increased clutter on radar display systems, increases in false aircraft tracks), physical obstructions (shadowing beyond the wind farm or the height of the turbine can cause aircraft to go undetected) and turbulence (from turbine wake) (CAA, 2013: 24-34). The CCA also state that economic impacts should be considered if a wind farm is to impact upon the current operations or future expansion of an aerodrome. The National Air Traffic Control Services (NATS), who are a statutory consultee, offer wind developers, preplanning packages for a cost, to assess any technical and operational impacts on their own or air operator assets.

2.5.3 Electromagnetic Interference Impacts

There is a potential for impacts on telecommunication systems, where a farm can affect the performance of electronic equipment, which creates a risk to communication networks, electrified railway networks, computer networks and navigation and radar systems EWEA (2009). The regulator Ofcom, recommends a '100m clearance either side of a line of sight link from the swept area of turbine blades' (DCLG, 2013: 10). Any risks are site specific, but generally depend upon the distance between a turbine and the transmitter or receiver; type of blades, signal frequency and radio wave propagation in the area EWEA (2009). Measures to mitigate against these risks include: installation of higher quality or directional antenna; use of a different broadcast transmitter and installation of an amplifier, satellite or cable televisions and construction of new repeater stations EWEA (2009).

2.5.4 Defence Impacts

The planning guidance lists potential impacts on Ministry of Defence (MOD) operations such as surveillance and communications systems, seismological recording equipment and naval and air functions. LPAs and wind developers must consult with the MOD if a 'turbine is 11m to blade tip or taller and / or

has a rotor diameter of 2m or more' (DCLG, 2013: 11). In 1985, the average rotor diameter was 15 meters, by 2012, the average had increased to 100 meters (EWEA, 2013). The assumption can be made that most onshore wind applications will need to approval from the MOD. The MOD is a non-statutory consultee and guidance *Wind Farms: MOD Safeguarding* published in 2014. If necessary the MOD will engage technical, operational, legal and policy experts to assist in negotiating the most appropriate mitigation efforts with the developer (MOD, 2014: 7)

2.5.5 Strategic Road Network Impacts

The Department for Transport published advice for safe siting of wind turbines in relation to the road network, The Strategic Road Network and the Delivery of Sustainable Development (2013). The Highways Agency advise consideration of the impacts on location, 'icing', visual distraction, dazzle and access (DTI, 2013: 18-19). In terms of location, the agency recommends that turbines are set back from the road from a distance of their height plus fifty meters. The agency recommends that icing and de-icing technology solutions be used on the turbines to prevent power shortages, safety risks and mechanical failures. Visual distraction, should be minimised by 'provision of a clear, continuous view of the wind turbine(s) that develops over the maximum possible length of approach carriageway' (DTI, 2013: 18). Turbines should not be placed at junctions, unexpected bends in the road or by pedestrian and cycle crossings. Analysis undertaken on road accident levels and types, by the turbine site: if a history of 'rear end shunt accidents' exists then these locations must be treated with caution (DTI, 2003:18). Ensure turbine model used, include materials that reduce dazzle from the turbine blades (DTI, 2003: 19). In access to the site, the developer must provide a 'swept path analysis' to evaluate the abnormal load deliveries to the site and ensure the site is linked by the local road network and not a direct link to the strategic road network (DTI, 2013: 19).

2.5.6 Shadow and Sun Flicker Impacts

In UK latitudes, blade rotation can create sun or shadow flicker (casting shadows or flashes of refracted light) on properties that are '130 degrees either side of north, relative to the turbine' (DCLG, 2013: 11-12). It is expected that the developer will assess and mitigate the impact by careful site design. However, a 'turbine shut down strategy', where remotely controlling the rotation of a blade during the times of the year that this occurs can also be implemented (DECC, 2011: 52). In addition to this, mitigation efforts could include: landscape vegetation and planting to screen turbines; installation of blinds on affected properties and a review of the size of windows and the uses of the rooms effected (DECC, 2011: 55).

2.5.7 Ecology Impacts

A developer must assess the risk to bird and bat populations in proximity to the site, in terms of collision with moving blades, displacement of habitats and any reductions in air pressure. Bird or bat surveys will be undertaken to identify which, when and how, wild bird and bat species use the location. For example, nesting /roosting and feeding habits, distances from potential turbines, flight paths, weather conditions, day and nocturnal activities and collision risks. As bats are a European protected species; Natural England (NE) offer technical advice in *Bats and onshore wind turbines: interim advice* (2014) to maintain and restore bat habitats.

NE, is the statutory consultee on impacts that effect: Sites of Special Scientific Importance (SSSIs); Ramsarsites; protected species; National Parks; Areas of Outstanding Natural Beauty (AONBs); important agricultural land; marine protected areas; green infrastructure and ancient woodland. For a cost, NE will also advise on methods of mitigation and restoration and aftercare schemes (DCLG, 2013: 11). NE produced their advice on wind farms in *Making Space for Renewable Energy: Assessing Onshore Wind Development* in 2010. NE advise developers to contact them during the

location selection process of the development, but their judgement will be based upon the ES, European (for example, EU Birds and Habitats Directives), national and local policy and any other locally specific assessments. NE will make their judgement based on factors that impact on: ecology and geology, enjoyment of the natural environment and landscape and visual factors (EN, 2010: 9).

At the European level, the Birds Directive (2009) and the Habitats Directive (1992) provide the basis for European conservation policy. Taken together they establish the Natura 2000, a European wide ecological network of protected areas, which includes Special Protection Areas (SPAs), where at risk species and habitats have been protected. The Birds Directive (2009) has identified 500 species found in Europe, 194 species are protected through SPAs (Directive 2009/147/EC). The Habitats Directive (1992), protects habitats and species of flora and fauna across Europe. It has identified 200 habitat types and over 1000 animal and plant species. Of those, 400 species are subject to strict protection regimes (Directive 92/43/EEC).

The judgement criteria for ecology and geology factors on statutory protected sites, include: the potential threat to habitat and species disturbance or loss; the risk of bat and bird collision; any loss of geological exposures; damage or disruption to geomorphological processes and any impacts on soils (EN, 2010: 10). On non-statutory wildlife and geo-diversity sites: the potential threat to Biodiversity Action Plan (BAP) habitats, local wildlife sites and local geological sites for the same reasons above. Where there is a presence of protected and priority BAP species: some species such as raptors are specifically sensitive to collision risk especially if the turbine blocks a regular flight path (EN, 2010: 10).

The impacts on birds is dependent on the site location, topography, farm layout, season, climate and the local and migratory species in the area. However, wind farms do present a risk to birds from collision, habitat displacement or loss and changes to flight paths. Some commonalities can be

found: avoid conservation areas and sensitive habitats; design farms with groups of turbines, avoid flight paths and provide corridors between clusters; increase visibility of blades and any overhead cabling; control rotation speeds and remotely switch off operations at sensitive flight / breeding times and implement habitat enhancement schemes.

For land use impacts, increasingly concern has been raised towards onshore wind farms being sited on peatlands. In the UK, this would likely be opposed by the statutory consultee NE. However, the EWEA (2009) offer mitigation measures such as: immediate restoration of the peat; use of deeper foundations; use of floating roads, good track design and improving habitats with drain blocking and re-wetting EWEA (2009).

The enjoyment and promotion of the understanding of the natural environment, is part of the purpose for the designation of national parks, trails and open access land. The landscape and visual factors on statutory protected sites of a wind energy development is likely to compromise the specific characteristics of an area for which it was designated. The landscape character is the combination of 'geology, landform, ecology, the historic environment, cultural heritage and recent developments, as well as aesthetic factors and people's perceptions' (EN, 2010: 11). It includes the landscape: scale; topography; pattern and complexity; settlement and human influence; inter-visibility (zone of theoretical visibility (ZTV) with other sensitive landmarks); skyline characteristics and access to areas of tranquillity (EN, 2010: 11).

The historic environment and cultural heritage of an area, specifically the historic landscape character will be judged by EN in collaboration with English Heritage (EH), the statutory consultee for the historic environment, following their guidance on wind energy and the historic environment.

2.5.8 Heritage and Culture Impacts

EH guidance on wind energy, *Wind Energy and the Historic Environment* (2005), advises developers and LPAs to assess the impacts of the wind farm development on the historic environment. Direct physical impacts include the concrete foundations for each turbine, associated substations, cabling infrastructure, grid connection and access routes (which may have an impact on any archaeological remains at the site). Indirect impacts of turbines may include those on the setting of an historic site and the visual amenity of the wider landscape, should be assessed using a turbine ZTV (EH, 2005: 7). EH advise avoiding locating wind farms within nationally important historic sites (including World Heritage Sites) and significant but undesignated historic sites.

The landscape setting and visual amenity must be assessed for the impact of visual dominance, that is, a turbine cannot be the dominant visual feature in an historic setting in place of the hilltop, church spire or historic monument, for example. Consideration must be given to the scale, density and positioning of the turbines. Turbine siting (and its associated infrastructure) must respect the inter-visibility of other historic sites. Designated sites have vistas, panoramas and site lines which should not be interrupted. Turbines must not impact on the historic setting in terms of noise and shadow or sun flicker, so adequate distance must be maintained. Development of wind farms near unaltered settings that is; rare, vulnerable and ancient sites, that have experienced no or little change in the past, must be avoided (EN, 2005).

2.5.9 Cumulative Landscape and Visual Impacts

The renewable and low carbon guidance specific to onshore wind farms advises to assess cumulative landscape impacts separately from cumulative visual impacts. The landscape impacts include those on the 'fabric, character and quality of the landscape' and to what extent a wind farm will become a significant characteristic of the landscape (DCLG, 2013: 12). The visual

impact is the degree to which the farm will become a feature in the view or sequence of views and the impact this has on people. Cumulative visual impacts are when two or more farms become visible from the same position or will be visible along the same journey (DCLG, 2013:12).

Impacts on the landscape include: direct and indirect, cumulative, temporary and permanent impacts that should be assessed in terms of the significance and magnitude of the predicted change on the landscape. Impacts on the visual amenity include: the distance of the visibility of the farm, key viewpoints, and the people who experience the views and their opinions on the views. A landscape and visual impact assessment must be carried out as part of the planning application or EIA, which will typically include: a base plan of all operation windfarms and the planning status of applications within the local planning system, in relation to the project location; the cumulative ZTV should be illustrated to show the theoretical visual radius, of the project and the existing or planned wind farms; the maps must reflect the local context in terms of topography and various weather conditions. Visibility is tested 'simultaneously', where two or more farms are visible from a fixed point; 'repetitively', where two or more farms can be seen only when the viewer turns around and 'sequentially', where two or more farms can be seen when the viewer moves through the landscape via roads, pathways and cycle routes. The planning guidance is to supply photomontages to illustrate these potential visual and landscape viewpoints. Photomontages can include annotations on turbine dimensions, distances to different schemes and the panoramic views (DCLG, 2013: 13). Photomontages have become a key part of the consultation process, with both supporters and opposition groups using them to support their arguments.

In Smart et al (2014) they found that there was a perceived lack of guidance on how cumulative visual impact assessment can be undertaken at a time when there is a rapid growth in the sector. The advice to illustrate the ZTV of operational farms and any applications consented or within the local planning system will change during the period from project inception to

consideration of the ES (Smart et al, 2014: 21). This will mean cumulative visual impact assessments will date quickly and will require review and amendment during the planning process.

The visual characteristics of an onshore wind farm include the 'size, height, number, material and colour' of the turbine EWEA (2009). Coles and Taylor (1993) consider that sparse groupings have less dominance than dense ones, that blade rotation if below 45 revolutions per minute (rpm) and blades rotating in one direction can be 'more restful to the eye', whilst blue, brown and grey colour is 'more recessive' than white turbine colours (1993, p.209). Or the use of the same make and size of turbines on a farm or in a landscape, limit the turbines to three blades, flat landscapes fit better with rows of turbines, design the farm to the peculiarities and sensitivities of the site, meet proximity distance limits for buildings, use of anti-reflective paint, add lighting to warn against aircraft collision, and lay cables underground EWEA (2009). Visual impacts can also occur from associated infrastructure such as: substations, grid connection, access tracks, transmission lines and maintenance and security compounds.

2.5.10 Energy Efficiency Impacts

The planning guidance takes under consideration the energy efficiency of the wind farm by requesting developers to express the 'capacity factor' of the farm,

'This can be useful information in considering the energy contribution to be made by a proposal, particularly when a decision is finely balanced' (DCLG, 2013: 12)

The capacity factor is the average power generated divided by the rated peak power over a year. For example, a 5MW turbine producing power at an average of 2MWs (2/5 = 0.40), will have a capacity factor of 40% (Energy Numbers, 2014). Capacity factors depend on several variables; weather conditions, wind speeds, technology type, time of the year, grid connection stability, degradation of technology, safety shut downs and life span of the

technology. As such the capacity factor is a key element in a project's cost benefit analysis and design specification. In the UK, average capacity factors are between 25-30 percent, with some more than 40 percent due to availability of wind supply (Partnership for Renewables, 2014). In planning terms, it is difficult to understand the rationale for including capacity factor within planning judgement. It is unlikely that a developer would commit funding for a development on a site with limited wind resource, which would not make a profitable return. This would be evident in the business planning and feasibility stages of development, prior to any planning application and pre-application consultation and can be directly linked to profit margins, which is not a planning matter. It is too early, since the amendments to onshore wind policy, to evidence to what extent capacity factor has an influence over final planning decisions. If capacity factor is used when 'a decision is finally balanced', then this may be open to future legal challenge.

2.5.11 Decommissioning Impacts

The guidance advices LPAs to use planning conditions (necessary, relevant to planning, relevant to the development, enforceable, precise and reasonable, DCLG (1995)), to ensure efficient decommissioning of the site. EH call this 'reversibility', where legal agreements are set to enforce 'mediation and restoration of wind farm sites and their infrastructure when they are decommissioned' (EH, 2005: 9). Missing from the advice on decommissioning is the option for repowering (upgrading technology on an existing site). Repowering of a site would be subject to a new full planning application, but proposals may already have local acceptance and could result in farms with a smaller (density and height) number of turbines due to the efficiency improvements in wind turbine technology.

Welstead et al (2013), undertook a commission for Scottish National Heritage (SNH) to offer guidance on the restoration and decommission of onshore wind farms. They recommend that decommissioning can offer a lessons learned approach towards better wind farm design. The EIA needs to be improved for this stage so that the impacts of decommission are integral to

the planning considerations. This has instead been covered by land lease and rental contracts between landowner and developer which is subject to commercial sensitivity and so difficult to evaluate (2013: 13). Welstead et al, list the key elements for removal as the turbine, turbine base, transformer, crane pad, tracks, buildings, substation and cables (2013: 18-19). The impacts of removal are considered in terms of hydrology, ecology, landscape and visual considerations and salvage (reuse and recycling) and waste minimisation.

As wind energy developments are a relative young industry, the issues of decommissioning are becoming more apparent, as the farms sited in the 1990s end their life cycle. The average 25-year life span of an onshore wind farm, although a generation, does highlight that wind farms are temporary structures; in terms of social acceptance this is often overlooked. Initially the technology was considered to expire or reduce its generating capacity at ten years of operation, which for developers meant a potential upgrade of technology midterm and an increase in costs. However, this has not occurred in the UK and the technology has performed beyond what was originally predicted. This has led to a reappraisal of wind farms as long-term investments rather than temporary structures and an improvement to monitoring mechanisms within the EIA process Staffell and Green (2014).

2.5.12 Monitoring (EIA process)

Symbiotic to the mitigation process, is the monitoring measures implemented to mitigate impacts. The monitoring arrangements or plan, is part of the ES and should cover both the construction period and operations. In terms of onshore wind farms this should be extended to include the impacts of decommissioning. The monitoring arrangements may also be planning conditions, such CILs, as part of planning approvals Boyden (2013). For onshore wind farms, many of the technical papers from the EIA will have set out monitoring regimes for the specific impacts for example, noise, ecology and landscape.

The impacts on birds are one of the greatest concerns to communities, yet very little large scale, longitudinal evidence exists to analyse long term impacts, their monitoring regimes and how lessons learned flow back into project design for onshore wind farms. A key ornithological study by Pearce- Higgens et al (2009), analysed the impacts of operational wind farms on 'unenclosed upland habitats (blanket bog, moorland and rough grassland) with more than five turbines' on 15 sites in the UK (2009: 387). The research tested the impacts post ante, of the habitats of certain species (red grouse, snipe, curlew, skylark and stonechat) and their breeding rates. The population of red grouse, snipe and curlew all decreased significantly during construction of farms, although red grouse numbers did recover post construction. At the same time, they also found that the numbers of skylark and stonechat, increased during construction. The researchers concluded, that their findings suggest 'for the first time, that wind farm construction can have greater impacts upon birds that wind farm operation' (2009: 390). They found little evidence of the capacity factor, density or number of turbines in a farm, having a detrimental effect on bird species. This they highlight as being important in terms of repowering of schemes. As the outcomes of monitoring during operations, can have a great effect on project design, and project mitigation solutions.

2.6 Other Planning Considerations in EIA

In terms of the NPPF, socio-economic and health and quality of life or wellbeing considerations would sit within the policy objectives guiding sustainable development on building a strong competitive economy (creating jobs, transitioning to a low carbon economy, supporting local investment and identifying strategic development sites), supporting a prosperous rural economy (creating jobs, promoting the diversification of agricultural and land base industries, promote the retention and development of community facilities and services) and promoting healthy communities (delivering social, cultural and recreational services, bring forward developments enacted by the Community Right to Build Order and ensuring access to quality open spaces).

The supplementary planning guidance does not offer advice on the assessment of the socio-economic or health and wellbeing considerations of a wind farm development. The guidance on community benefits (the funds from which, support NPPF outcomes for prosperous rural economy and promoting healthy communities) specifically state that community benefits are not of material planning consideration and should be dealt with separately to the planning application (DECC, 2014a). Socio-economic and health and wellbeing considerations in relation to wind energy developments may also be part of a local plan or local supplementary planning guidance.

However, within the scope of an EIA, the socio-economic and health and wellbeing impacts of a wind development can be assessed to offer the LPA a robust analysis of the likely negative and positive impacts (significance, and magnitude) and methods of mitigation of those impacts for a host community. Best practice EIA socio-economic technical papers can offer an assessment of the impacts on a local community, its services, facilities and place identity, the job requirements for a new development and ensure public participation processes. Yet, government guidance on this is limited, lacks definition, consistency and often is over focused on the economic impacts. A typical EIA socio-economic technical paper would include: consultation; baseline profiling (socio-economic demographics); consideration of alternatives; environmental impacts; mitigation proposals; residual and cumulative impacts and how these impacts interact. The consideration of alternatives will often include the 'no development' option, that is, what would the impact be if the development did not go forward? It is here that community benefits and their contribution to the local economy, facilities and services could be discussed. On the other hand, the no development option is also the power of veto for a community, to prevent a development through a fair and just procedure Pepermans and Loots, (2013).

2.6.1 Economic Impacts

Emphasising the positive economic impacts is commonly thought of to gain decision making approvals and community support for a development. Not

having a UK manufacturing base is a common concern for opposition campaign groups. The governments DECC (2012) Onshore Wind: Direct and Wider Economic Impacts, updated in 2015, into the economic impacts of onshore wind farms in the UK. The paper outlines the economic impacts for the four main stages of the development life cycle of a wind farm: development; construction; operations and maintenance and decommissioning or repowering. Each offering a diverse range of opportunities for supply chain employment. The research, found that '98% of development expenditure, 45% of construction expenditure and 90% of operation and maintenance expenditure currently occurs in the UK' (DECC, 2012: 6). Most of the manufacturing base for turbines is imported although the UK manufacturing base had increased to 47 percent by 2014 (DECC, 2015: 4). In addition to the job opportunities created, the Gross Value Added (GVA) spend contribution of wind energy employees to the UK, and the contribution of 'around £198 million tax each year to the UK exchequer (excluding taxes associated with the distribution and sale of electricity produced' (DECC, 2012: 9)), the report also evaluates the wider economic impacts.

Although the majority of turbine manufacturing occurs overseas, the UK does have two manufacturers, Mabey Bridge and Wind Towers Ltd, of large scale turbines towers for the offshore wind energy market both domestic and for export. Other manufacturing activity involves the supply of internal tower components, hub control and convertors as well as raw materials supply (for balance of plant contractors) and transport and logistics. Local employment opportunities include: construction labour contracts; grid connection contracts; equipment hire; raw material supply; tree felling and site clearance; site security, traffic management; scaffolders and rope access; fencing; maintenance technicians for both turbine and site and recruitment agencies (DECC, 2012: 13-18).

Across the UK, the wider economic impacts include: the impacts on land owners, adapting use of land through diversification, thus supporting the continuation of existing business activities; community ownership and community benefits, offering local communities economic and social development, control of and funding for local services and facilities and social cohesion; business and tourism effects, employees spending in local accommodation, retail and leisure services, especially during the construction period; widening the tourist offer, as wind farms have associated visitor and education centres; wildlife and habitat management, through community benefits and mitigation efforts and lastly investment in local infrastructure, through community benefits, mitigation efforts or CILs (funding for site specific mitigation for example, road resurfacing).

Impacts on tourism continues to be raised as an area of concern. Initially little evidence could be found that supported the view that the existence of wind turbines at a destination affected visitor choices. The Scottish government undertook a review into the impacts of wind turbines on the Scottish tourist industry in 2012, to find most visitor respondents declaring it had no effect on their decisions on where to visit or stay (Dinnie, 2012). However, by 2014, the Mountaineering Council of Scotland undertook research, following growing discontent from their members towards the increase proliferation of farms in Scotland. In this survey, most respondents felt that wind farms had a negative impact on the mountain assets and this would prevent them from visiting (Gordon, 2014). Yet it must be noted that this is a niche tourist market, which is specifically geared towards members climbing mountains rather than viewing them from a distance.

2.6.2 Health and Wellbeing Impacts

In 2013, the Scottish government commissioned a peer review of the literature on the impact of wind turbines on human health. This was in response to the growing concerns that there is a causal relationship between turbine noise and health. The concerns that the new generation of turbine technology were shifting noise impacts to a lower frequency, that low frequency and infrasound (LFIS) impacts were higher near to turbines and resulting in symptoms causing 'wind turbine syndrome'. The term 'wind

turbine syndrome' was defined by Pierpoint (2009) in her book 'Wind Turbine Syndrome: a report on a natural experiment', which presents clinical case studies of patients living within 2 km of a wind farm, who experience the impact of LFIS through combination of symptoms such as: sleep disturbance; high blood pressure; tinnitus; cardiovascular disease; diabetes; hearing impairments; stress and headaches. In addition to this are concerns that turbines are causing Enhanced Amplitude Modulation (EAM), where the swish or thumping noise of a rotating turbine causes variations in noise levels, leading to noise annoyance. This triggered research, commissioned by the UK wind energy advocate, Renewable UK and undertaken by the National Aerospace Laboratory in Netherlands (Oerlemans, 2013: 3).

The peer review of literature from the Acoustics Research Centre at Salford university into the health impacts of LFIS, found that 'health effects are increasingly being reported in the presence of wind turbine but the reviewed literature does not provide firm scientific evidence of a causal relationship with turbines or even more specifically wind turbine noise' (von Hünerbein, et al. 2013: 3). Instead, the review of studies shows 'correlations between annoyance and visual impacts, economic benefit and attitude related to wind turbines' (von Hünerbein, et al. 2013: 3). The research found that large turbines do produce sound variations due to the swish of blades (AM) and that in some cases, periods of increased or enhanced AM did occur, but were the result of a set of specific conditions, concerning wind shear (difference in wind direction and direction over a short difference) and local stall (angle that wind hits the blade) (Oerlemans, 2013: 22). In response to both these research findings, DECC (2015), commissioned a review of evidence on the effects of AM with recommendations of how any excesses can be controlled through planning conditions.

In 2014, the National Health and Medical Research Council (NHMRC) of Australia, undertook a systematic literature review of scientific evidence, into whether living near to wind turbines sites had impacts on health conditions.

They concluded that 'there is no reliable or consistent evidence that wind farms directly cause adverse health effects in humans' (NHMCR, 2014:10). Part of the research recommendations were to investigate the social and environmental circumstances that influence health effects, annoyance, sleep disturbance and quality of life for some residents that live near wind farms. That psychosocial research should be undertaken to understand the relationship between health impacts and

'a person's expectations of peace, perceived loss of control, aesthetics and impacts on visual landscape, impacts on land values, uneven distribution of financial benefits and exposure to other noise sources (e.g. road traffic and wind noise)' (NHMRC, 2014: 21).

Songsore and Buzzelli (2014) undertook research to understand the psychosocial health impacts of wind turbines on people in Ontario, Canada. By examining the links between health, public perceptions of risk and media influence. They used a risk society framework to group social response to perceived risks: 'radical engagement', where individuals challenge institutions thought responsible for the risks; 'sustained optimism', where trust is maintained in science and technology for finding long term solutions; 'pragmatic acceptance', where risks are endured and 'cynical pessimism', which is the use of humour to deflect concerns (2014: 286).

Their findings on 'radical engagement', included joining social movements and other forms of collective action, vocal opposition, law cases, letter writing and protests. The arguments were based on requiring safer guidelines for the siting of wind farms, shadow flicker, noise and set back distances. The arguments linked to 'sustained optimism', requested further scientific study, assessment and research into new turbine technology, including the falsification of existing scientific studies, inclusion of testimony from people living in proximity to farms and precedence being set by other countries undertaking this type of scientific research. For 'pragmatic acceptance', the arguments were based on the perception of powerlessness against the corporate objectives of a developer, on an understanding that the negative health impacts from wind turbines are preferential to those from fossil fuels

or nuclear power and the trade-off between perceived health impacts and the receipt of community benefits. The arguments found under the category 'cynical pessimism', included humour and sarcasm to dampen the anxieties associated with perceived health impacts of wind turbines (Songmore and Buzzelli, 2014: 289-291). The researchers concluded that the health risk perceptions of wind turbines 'are playing a major role in fuelling resistance to wind energy development in Ontario' (2014: 21). They recommend an urgent need for community engagement in wind energy planning, to offer comparisons of health impacts from other energy generating technologies (2014: 293).

In terms of health and safety at work, the Health and Safety Executive (HSE) in the UK, provide guidelines regarding methodological approaches for assessing specific risks to health and safety when building or operating wind farms, which are increased when working offshore. Hazards include: risk of tower collapse, fire, blade malfunction; tower collision, lightning strikes, over speeding, blade or ice throw, harm from electricity transmission and risks associated with working at sea such as transitioning from boat to turbine, diving and potential impacts of large waves (HSE, 2013).

2.7 Conclusion

The commercialisation of onshore wind energy in the UK began in the 1990s, through ad hoc policy decisions. Arguably, the NFFO regime was adopted with EU support to fund the nuclear industry. A side effect for the Conservative government, being subsidies for renewable energy deployment following lobbying by the renewable energy generators. As low carbon technologies, wind and nuclear energy become linked through a levy on electricity consumers Agnolucci (2005). Following a further campaign, this time by the NGO, Friends of the Earth, the Labour government, with crossparty support, introduce the pioneering Climate Change Act (2008). These key policy approaches set the foundation for a policy battle between ecomodernism (using impact science and technology to strengthen resilient and

sustainable economies) of the Labour and Liberal Democrats. And neo-liberalism (rejection of impact science and technology to promote climate change denial for unregulated economic growth) of the Conservatives Dunlap and McCright in Dunlap & Brulle (2015). A policy battle based on the *fairness* of a renewables subsidy regime and the representation of government ministers within the fossil fuel industry.

The fight over climate change regulation culminates during the period of the Coalition government. The Liberal Democratic led DECC, in a civil war with the Conservative led DCLG. This is expressed through planning guidance from DECC supporting community benefits, community engagement and community energy for onshore wind. As well as establishing renewable energy data trackers, commissioning public attitudes surveys and research, and supporting renewable energy networks. Whereas, in DCLG, an overhaul of national planning guidance through the NPPF, constrains onshore wind technology diffusion by stipulating the need for social acceptance and site location within Local Plans, of any wind farm proposal. As well as making pre-application consultation compulsory for onshore wind farms in England, increasing the number of recovered appeals for determination by the Secretary of State, invoking the need for an EIA at a smaller level of development and campaigning to remove subsidies.

The civil war at a national level is played out locally through the planning system. The key tool to assist planners and communities in fighting a battle of this war, being the EIA process. Often before the EIA process begins, a site has been identified, based on wind supply and land designation constraints. This limits the consideration of alternatives within EIA, based on location. However, at the same time it offers communities the power to veto a proposal (the negative impacts) based on fair procedure, but should also offer an understanding of what would be lost to a community (the positive benefits) if the development did not go ahead. Pre-application consultation and social acceptance have been added to planning requirements without much guidance on how this is evidenced. The EIA attempts to bridge this vacuum

through its participatory approach to consultation and its socio-economic technical assessment.

During the process of this research, the Coalition government and the change to a Conservative government have implemented several changes that have had an impact on the development of onshore wind farms in England:

- The need for an EIA at a smaller scale of development, for two turbines
- The expansion of pre-application consultation to include applications for onshore wind farms in England
- The Localism agenda, predetermining the potential development sites within a neighbourhood/local plan
- Evidencing that impacts have been mitigated and that this has local community backing
- Removal of RO subsidies
- Non-registration of energy cooperatives
- Extension of Secretary of State for DCLG, call in powers and increase in centrally determined planning rejections
- Selling the Green Investment Bank and
- Reduction in departmental budget, downsizing of staff and eventual closure of DECC.

The expansion of the requirement for a developer to undertake preapplication consultation, appears to support the aim for early and continuous consultation with host communities, which is considered the weakness of planning for onshore wind farms. The government guidance on this is generalised, with very little advice given as to how this is to be evidenced. The condition for a pre-application consultation regime (which is only specific to England and onshore developments); will cease in 2018, without any explanation from the government as to why there is this rationale? Good practice would indicate that the earlier the consultation and involvement with

the planning system, the better the decision making. It can be argued that community participation should occur during the business planning and feasibility stage of the development as this is the first time a project will become visible through for example, the planning applications for met masts. Crucially the business planning stage identifies need and opportunities and who better to determine this than the local community?

The requirement of EIA for a smaller scale of development: the expense, timescales, and skills capacity to undertake a complex process, creates a 'sense of bureaucratic burden' (Wolsink, 2007). If this has been the intention of the government, it serves to exclude community led developments rather than private sector ones. If a participatory approach to EIA is undertaken, and the normative, substantive and instrumental rationales for participation in EIA are followed then why introduce pre-application consultation, is this not what an EIA should be achieving through its scoping stage? The options appraisals for alternatives to the development should be undertaken in liaison with the local authority, especially in terms of site selection. However, for onshore wind farms, this is limited by: wind supply at location, areas of protected landscapes and habitats, ownership of land, cumulative impacts, business sensitivity of the developer and the ability of a business plan and developer to adapt the type of renewable technology. Added to these constraints is the amendment to only develop on sites determined within the neighbourhood or local plan. The government amendments focus on mitigation of significant impacts, if this cannot be achieved through the EIA process, then the EIA has the power to advise planners against the scheme. But if the socio-economic technical papers have not been undertaken by relevant experts in social research how robust can this advice be? If community benefits are not of material consideration at what stage of the EIA process can the specific and wider positive social benefits be incorporated into planning decisions? It can be argued that a decision maker has the obligation to ensure the effectiveness of the Directive, by including everything in the scope of the EIA, as material consideration (Harwood, et al. 2005: 24). At a time when more operational farms are coming to the end of their life

span, what lessons are being learned for wind farm siting and design through decommissioning or repowering stages of the EIA, that could be integrated into the planning system to ensure better siting decisions from the start of the process?

Any strategic measures such as the use of a SEA, unused publicly ownedland, a reimagining of landscape or technology redesigns have been discarded in favour of focusing on perceived controversies of social acceptance. By fulfilling the localism agenda, onshore wind farms could be strategically planned, with use of a SEA at a local planning level, but what are the implications for neighbouring authorities, for example in terms of cumulative impacts or when a development crosses administrative boundaries? Any strategic objectives have been to limit development, which is evidenced by the micro management of planning applications by the Secretary of State. Callins are designed to be exercised when a development is likely to be significant or cause national controversy and should be used sparingly. What impact has the threat of likely call in for an application had on applications being withdrawn prior to any planning decision? The pragmatic solution, considering the timescales and costs taken to get an application to this stage of the development process, would be to withdraw an application and wait for a policy regime change.

3.0 Introduction to Chapter

The adapting governance of renewable energy is influenced by issues of social acceptability for wind energy, specifically onshore wind energy in England. Social acceptability responds to held values about landscape, values communicated through local planning authorities (LPAs) tasked with ensuring local democracy in decision making. The intent of this chapter is to examine through a literature review the context for using SIA methodology as a tool for decision making, during project level assessment of wind farm planning proposals in England. The literature on social acceptance discourse for onshore wind energy in relation to the issues surrounding: the social gap and the myth of NIMBYism; the discourse of objection and support; the influence of local values towards landscape and the power of intermediary landscape pressure groups like the Campaign for the Protection of Rural England (CPRE) over planning decisions. This chapter offers an analysis of the literature on how to encourage participation in the planning system in the face of local community opposition. It offers an outline of the key issues surrounding community benefits and community ownership models of wind farm developments. The chapter ends with a discussion of Social Impact Assessment, its procedural framework, tasks and activities, the role of participation in SIA, identification of social impacts and SIA in onshore wind farm planning.

3.1 Social Acceptance

The social gap between public support and the opposition to local onshore wind farms is discussed through the deconstruction of the Not In My Back Yard (NIMBY) concept. There has been a great deal of empirical evidence contributing towards the social acceptance literature over the last ten years with commentators debunking the NIMBY myth. The concept has been reimagined by research findings and used to describe local power relations.

The polarised discourse between opposition and support is examined, with reference to social attitudes and opinions and how they are expressed through common concerns. The most prevalent concern on landscape and visual impacts, are discussed in terms of the subjectivity of landscape values, those that organise to protect those values and how those values are framed. Consideration is given to how opposition voices can participate with the planning system and to what extent opposition groups have power. To what extent power remains within institutions, such as those within financial and planning systems. An examination of the rationale for social acceptance through community benefits by offering views on the definitions of recipient community and governance of funds. The threats to positive outcomes of community benefits is reviewed with an appraisal of the compensation narrative. Finally, the rationale for social acceptance as community ownership is evaluated. A definition is offered along with a description of the current UK market structure and a brief history of the concept of community ownership in the UK. The impacts of a lack of policy coherence on the development of cooperatively owned wind farms in England is outlined, specifically with reference to the funding constraints. A comparison of community cooperatives in Germany and Denmark is offered with a discussion of a nascent UK insurgency, through grassroots activism.

3.1.1 Social Gap and the NIMBY myth

Initially commentators (developers, politicians, media, and academics) associated the social gap with the NIMBY concept. Bell, Gray and Haggert (2005) were among the first to challenge this oversimplification. They describe the reasons for the social gap are due to a 'democratic deficit' 'qualified support' and or 'self-interested' explanation (Bell, et al. 2005: 462). The 'democratic deficit', is when a vocal minority take control of the planning decision making, because only those that object rather than support a proposal will engage with the planning system. Involvement through objection is based on perceptions of significantly protecting local environments whereas support for a local development can only make a small contribution towards global goals. The 'qualified support' explanation means

that supporters offer their approval for the project based on appropriate assessment of impacts and conformity to policy and guidance. Their last explanation for the existence of a social gap is 'self-interest', where an individual will support the development of wind energy but not within their environment; the traditional view of NIMBYism Bell, et al. (2005).

In Warren et al (2005) the concept of NIMBY was challenged because of findings that people who live in near proximity to a farm, are supportive of the development and do not perceive them as having a negative impact on the landscape. This support for the development is affected by the experience of participation in the planning process. For Warren et al's (2005) investigation into public perceptions in Ireland and Scotland they found an 'inverse NIMBY', where farms in people's back yards were highly supported. They argue that the definition of NIMBY is really NIABY, not in anybody's back yard (2005: 865). Wolsink (2005) in explaining the social gap between wind power and wind farms and the importance of that distinction calls inverse NIMBY, the 'U-shaped curve of the development of attitudes' (2005: 1197). This is the where attitudes are broadly supportive prior to development, become more critical at the announcement of the proposal and then supportive again, once the development is in operations. So any objection to the development is not static and takes on four forms: a positive attitude to wind power with the intention to oppose any development in the local environment (NIMBY); the opposition to any wind development because of a rejection of the technology and impacts on landscape (NIABY); any support for wind farms changes to opposition, because of the decision making processes within the planning system (perceptions of fairness and equity) and opposition because of the inadequate planning application supporting information (Wolsink, 2005: 2001).

Kontogianni et al (2014) suggest that to fully understand the issues of social acceptance, more research is required, not at the planning stage of development but at operations, so that comparisons can be made on public perceptions between ex ante and post ante wind farm development (2014:

171). Their research in Greece, found communities lacked trust with the decision-making authorities, insufficient documentation and demands for participation. In most of the case studies, they found visual impacts and the involvement of the community in the assessment of these impacts increased social acceptability. However, noise impacts invoked an element of NIMBYism, resulting in a counter argument to the 'u shaped development curve', as social acceptance decreased because survey respondents living within the proximity of a wind farm. They coin the term 'NIMFY syndrome' or not in my front yard, to explain this. By linking 'visibility' (noise annoyance and visual impact equating to visual intrusion) to proximity and questioning if this is specific to sites with operational farms. That is, an individual is supportive of onshore wind farms as they live in proximity to one, would approve a new development in their area but not in their proximity (2014: 175-176).

Although commentators have deconstructed the term NIMBY, they all have identified an element of fluid, self-interest NIMBYism. Van der Horst (2007), explores the reasons behind why people express concerns as: the relevance of the proximity and location; at what point in the timescale of a development objection is raised; a typology of values that are applied to the environment such as the economic value of use or non-use of an area; the extent to which opposing voices will actively dismiss the term NIMBY and environmental justice, that is, opposing a development because of concerns that it sets a planning precedent (2007: 2709-2712). Jones and Eiser (2009) add the lack of early and continued participation in the process and linked this to this the level of local community opposition from neighbours or the social influence affecting levels of self-interest NIMBYism. The total numbers of people affected especially regarding visual impacts as well as the fear of change; level of uncertainty for the future of an area and a distrust of the developer (2009: 24-27).

Feldman and Turner (2010), go further by suggesting the self-interest NIMBY position claims a hierarchical preference: first choice, for 'the wind farm to go in someone else's back yard, who consents'; second choice, 'the

wind farm to go in someone else's back yard, who does not consent'; the third choice, wind farm does not go ahead and third choice 'the wind farm goes in my backyard' (2010: 255). This categorisation leads Feldman and Turner (2010) to question if the NIMBY claims are 'viciously self-serving?' (2010: 256). That is how much of the self-interest, is in fact caught up in beliefs and values of sense of place and partiality and concern towards that place? From this they attempt to distinguish ethically 'good' NIMBY and 'bad' NIMBY, by defining NIMBY based on sense of place (good) or NIMBY based on self-interest economics (bad). However, they conclude that most NIMBY claimants will express a mixture of intent and as such a re-examination of NIMBY as ethically selfish needs to be reviewed (Feldman and Turner, 2010: 259).

Following academic critique Bell et al (2013) reconsidered their explanation of the social gap in terms of democratic deficit, qualified support and selfinterest to include; the issue of mutual exclusivity of explanations, the interaction with policy and the influence of local context. Following on from Feldman and Turner (2010) they added 'place protector' to their typography, who is not NIMBY because they do not oppose for self-interested reasons, but instead oppose because of the perceived value of the development site over alternative sites (2013: 6). The authors re-examined the relations of power in local politics within their 'democratic deficit' explanation. Their conclusions argue that local community members do delay or block planning applications for onshore wind farms, that some local community members are likely to be more successful than others in blocking developments, that local community members are not the only local stakeholders that block developments (for example, CPRE or other local landscape and nature conservationists), and finally that the relations of power are significantly altered when there is support for a community owned or led wind energy scheme (Bell, et al. 2013: 12).

Decision makers use NIMBY to delegitimise opposing arguments, those arguments are then not assessed resulting in further perceptions of unfair

decision making and resulting in a lack of social acceptance. 'Accusing someone of NIMBYism is a direct insult, and to later solicit support from the same community seems irrational...[this] contribute[s] to undermining trust instead of providing a valid diagnosis' (Wolsink, 2012: 86). Which ultimately denies the influence of people attempting to exercise their democratic rights. Instead Wolsink (2007) argues for an understanding of the baseline conditions of 'social identity' within the host area to fully understand not the level of opposition but level of support (2007: 2700-2702).

Aitken (2010a) calls for a rigorous analysis of public opinion poll data, to critically reflect on the assumption that most of the public supports wind power the basis of the argument for why there is a social gap (see chapter 1). She questions the assumption that opposition to wind power is illegitimate and argues for public attitudes to be examined not as a method to avoid future opposition, but to understand the social context of wind and renewable energy. To move towards building trust and away from methods to undermining opposition (Aitken, 2010a: 1840). She reiterates Wolsink (2000), in stating that social acceptance will only be gained if any environmental impacts have been dealt with appropriately. This emphasises the need for continual community liaison, application management, robust operational monitoring and approved decommission plans as part of the EIA process.

Aitken (2010a) continues by proposing that there is an assumption amongst the literature that those who oppose are 'wrong or deviant' misses any legitimate reasons for objection. So instead of focusing how to overcome opposition, researchers must instead uncover the effects of planning processes on people and the 'social context of renewable energy' (Aitken, 2010a: 1839). Her review of the literature queries the conclusion that building trust between agents and communities to enable participation in the planning system, results in social acceptance. Here she suggests that communities may become vocal opponents as a reaction to not having opportunities for participation and in her research found initially key

objectors had not opposed the wind farm development proposal but did so as a response to negative experiences with the planning system (2010a: 1839).

3.1.2 Discourse of Objection and Support

The challenge to the NIMBY stereotype was investigated from a position that 'peoples' values, rather than their opinions or attitudes, are the driving force behind environmental behaviour' (Ellis et al 2006: 2). Ellis et al (2006) investigated the social attitudes towards an offshore development in Ireland. They used Q-Methodology to analyse peoples' subjective reasons for supporting or objecting towards the development. They grouped the discourse themes by objector and supporter. The supporters discourse includes themes on the: assumption of consensus; rational knowledge based, and scientific; overcoming opposition; urgency threat of climate change and low carbon transition and ecological modernisation. The opposition discourse themes include: sacrifice and disempowerment; lack of trust in government, regulatory and windfarm developers; language of war, conflict and defence; foreignness, aliens and anti-colonial rhetoric; industrialisation and commercialisation of the environment and the NIMBY rebuttal. In additional to these themes, Ellis et al (2006) also found evidence of rhetorical devises used to strengthen these opposing or supporting arguments. Both used 'strategic silences': saving the planet, concern for the future, opposed with acceptance of economic viability or renewables being positive invention; contested use of 'naturalness': wind farms as natural and green opposed by rural industrialisation and commercialisation of nature; 'visible and invisible threats': impacts of climate change on landscape should be taken into account opposed by visible harm to landscape, tourism and noise; both sides appeal to experts for scientific evidence to support claims; 'linking renewables to nuclear power', those supporting wind power are antinuclear those who oppose are pro nuclear; both sides used 'exaggeration' to bolster their arguments for example converting height of turbines from meters to feet to imply increased heights or minimising opposition as a 'vocal minority' and both opposition and supportive discourses include the use of 'photomontages' to emphasise either dominance of out of scale turbines

towering over a village or the turbines in a natural setting, backlit with a setting sun (2006: 9-10).

3.1.3 Landscape Values

Established in research, is that aesthetic perceptions affect landscape values which are subjective, diverse and linked to national attitudes of landscape protection, place identity and heritage. As discussed in section 2.2, government ministers have described wind turbines as both *beautiful* and *as monstrous concrete structures*. The subjective nature of wind turbines, that is the personal feelings, tastes and beliefs towards wind turbines in an area, that informs judgements on truth and reality, will naturally be a diverse and changing response. This is extrapolated when assessing cumulative impacts on the landscape. When is a landscape at full capacity? (Warren et al, 2005: 870)

'The landscape impacts of windfarms are exacerbated by the fact that the locations with the highest wind resource are often precisely those exposed upland areas which are valued for their scenic qualities and which are often ecologically sensitive.' (Warren et al. 2005: 857).

Opposition has stemmed from a lack of strategic planning and responds to the rush of development 'the speed, scale and uncoordinated nature of the windfarm 'gold rush' which raises the spectre of a rapid industrialization of large swathes of wild land' (Warren et al, 2005: 872); (Warren and Birnie 2009: 110). This has been intensified by the technological development of turbines, with improvements to energy output actioned through ever larger turbine sizes Warren and Birnie (2009: 110).

Jones et al (2011), undertook a survey, with 709 respondents from community members living in Humberhead levels (a flat, windy and lowlying agricultural landscape), a cross boundary region in South Yorkshire and North Lincolnshire. The area was simultaneously subject to nine onshore wind farm proposals in 2008, which the researchers wanted to use as a case to test local tolerances for cumulative impacts (2011: 4564). At the time of the

proposals there were no other visible wind farms in the area. The nine proposals, if approved would have installed 138 turbines on a flat landscape, by multiple developers and of multiple designs (2011, 4565). Although the area did not have existing large-scale wind farms, it was the location of other electricity generation plants, which raised concerns of environmental justice. Their findings on social acceptance, were not that people were opposed to wind farm development, but they were opposed to development at this scale and speed. Respondents opted for regional development of 1-25 turbines rather than 138 turbines (2011, 4565). The 'perceived fairness over local wind-prospecting', the issues of environmental justice and the subjectivity of cumulative landscape impacts, (that is, when is a landscape at full capacity?) were the reasons why communities were objecting to the proposals (2011, 4566). This is an example of the: wind rush, proliferation, wind dash, wind prospecting, narrative that supports the opposition arguments, to wind energy development. It also explains the rationale behind Eric Pickles, letter to LPAs (2013), when he specifically, advised LPAs to consider cumulative landscape impacts and the context of local topography i.e. flat landscapes (see section 2.5.9). The legacy of the developers getting it wrong in 2008, has had far reaching consequences for the planning of onshore wind farms in England, the irony being not for reasons of social acceptance, but of environmental justice.

There is also the neutral view of the visual impact, in that it is what they represent in terms of transitioning to a low carbon economy so communities accept the trade off against the impact on the landscape (Warren and Birnie, 2009: 113-114). The argument has been made that landscapes have continually changed over the centuries, with industrialisation came canals, rail networks, commercial fishing and forestry, changes to agricultural crops but these developments have been slow in comparison to wind farm installations. It is the pace of change that people oppose. Now curiously the post-industrial landscape, previously managed to adapt to rapid industrialisation is the source of campaigns for its protection. (2009: 113-114).

The Campaign for the Protection of Rural England (CPRE) is an environmental charity established in 1926, as a government planning initiative to provide a coordinator for those interested in protecting English landscapes. It operates through a network of local branches or local preservation societies, some of which are established charities, with over 60,000 members. In Lowe et al (2001), they quote Marsden (1993) in identifying a 'differentiated countryside' an ideal typology of the different rural groups active in opposing rural development: the 'preserved', a long history of counterurbanism, with an entrenched middle class adept at promoting anti-development attitudes in the local political arena through the planning system; the 'contested', where local farming and development interests predominate but in opposition from new 'incomers' to the area, a conflictual approach to gaining political decision making power and the 'paternalistic, where large landowners and farmers, lead on development decision making and dominate a settled political scene, with little opposition (Lowe, et al. 2001: 80).

In the beginning, the CPRE was an organisation to represent the landed aristocracy which became influential in shaping national and local planning policy. The demographics of the membership aided its 'insider status' and subsequent success in rural planning, for example, the designation of national parks (Lowe, et al. 2001: 8). By the 1960s, it had widened its appeal by using the language of environmentalism, becoming a protector of the environment rather than the countryside Lowe, et al. (2001). The CPRE are not statutory or non-statutory consultee, but their history of high profile planning campaigns, experience of working with successive governments and local membership structure has widened their influence over rural development. A key objective is to support members in organising opposition, how to influence neighbourhood and local plan making, how to comment on planning applications, writing letters of representation / objection, undertaking appeals or judicial reviews for planning approvals and how to network with other local groups, on developments they argue are detrimental to their aims of protecting the environment (CPRE, 2012b).

In 2012, the CPRE published its policy on wind energy, *Generating Light on Landscape Impacts: How to Accommodate Onshore Wind while Protecting the Countryside*.

The CPRE views the developer as the source of conflict, who express dismissive attitudes towards local opinion and an increased development speculation of inappropriate locations (CPRE, 2012a: 5). To resolve this, they recommend a 'move away from the notion of community benefit towards community ownership' models of development (CPRE, 2012a: 8). The coalition government (2010-2015), did incorporate CPRE views within its policy and guidelines, stopping short of establishing a national strategic plan led approach for wind farms and the promotion of community ownership over community benefits. Instead placing the focus on local planning and promoting both community benefits and community ownership.

The conceptual development on perspectives of landscape and the siting of wind energy developments has reimagined landscapes so that turbines become iconic structures and symbols of sustainability. Short, in Pasqualetti et al (2002) in their book Sustainable World: Wind Power in View: Energy Landscapes in a Crowded World, address wind power and English landscape identity. Short, contends that wind developers have neglected to understand the relationship the British have with the countryside and rural landscapes and reflect this in their marketing and consultation approaches. He describes 'Wordsworth's romantic paradigm', the nostalgic, pastoral landscapes of Constable and 17th century Romantic poets, pristine 'chocolate box' images, 'the noble peasant' and benevolent Lord of the Manor, as being at odds with the realities of the countryside (2002: 47, 50). 'Such a visual intuition echoes a classical idea of pristine nature as reflecting certain absolute aesthetic properties of order, symmetry and wildness that can only be harmed by human technological, and especially, modernist-industrial intervention' (Good, 2006: 79). The reality of the countryside, is one that is undergoing constant change, with competing demands on its land use: changes to agricultural techniques and crops; the impact of road, rail and

communications networks; the legacy of post-industrial landscapes; the influx of new urban incomers and second home owners; rural poverty; increasing housing development in sensitive landscapes, such as flood plains or the greenbelt; lack of public transport and social isolation and exclusion; closure of schools, libraries and pubs; the increase demands on services that support people experiencing drug dependencies and mental health issues; the economic dominance of the tourist sector and the siting of energy mining and power plants such as fracking, biomass, nuclear and onshore wind farms.

The landscape is the idealised version of the countryside, and is valued as a cultural resource, central to feelings of wellbeing (Pasqualetti, et al 2002:52, 54). An internal understanding of landscapes and countryside that is, our imaginations, are part of our identity. Changes to that understanding through the siting of wind farms, threatens identity and raises opposition. Short, calls for a landscape aesthetic that takes account of 'cultural, social, political and economic factors', and is specific to the local context (2002: 54). He states, that because wind turbines have aesthetic implications and the concept of 'landscapes' historically originates with the artist, they are best placed to explore the issues of what is beautiful and what is ugly. As such they have an important role in changing people's perceptions and securing social acceptance. The artist is a valuable resource during planning consultations acting as facilitator to redefine what is 'a sustainable landscape aesthetic', that is, culturally acceptable and includes local history, memories and spiritual meanings (2002: 52).

Renewable energy development straddles a no fly-zone of environmental debate. That is, environmentalists provide strong arguments in opposition, because of impacts on landscape and ecology, but also strong support for the provision of clean energy and the contribution towards global climate change efforts. The 'green on green' dimension of wind energy debate as coined by Warren and Birnie (2009, 118-120) asks what tonal shade of green has more credentials: the local or the global? They place this question at the centre of the debate on wind energy stating that those with a global perspective will

support wind farms and those with a local priority will oppose. Both sides agree that turbines have an impact on the landscape, but each side will apply different levels of significance to that impact. The same can be said about the impact on bird mortality, both agree that collisions with turbines, kill birds but, proponents will highlight the impacts of fossil fuel infrastructure or long-term climate change on bird populations. Warren and Birnie (2009) discuss the scale of impacts,

'the impacts of climate change are large scale, long term, diffuse and seemingly abstract, whereas the impacts of wind farms are localised, immediate, highly visible and very real. Asking people to accept that their cherished views should be transformed today in order to counter a predicted threat which will most seriously affect future generations in faraway countries is a tall order' (2009: 118-120).

Wolsink (2007) reminds us that to successfully deploy wind power, planning systems and renewable energy policy must be consolidated to meet that objective. Yet policy is affected by social and political contexts of government (Conservative), institutional (large energy companies) and grassroots campaigning (e.g. CPRE) ideologies. These ideologies will frame landscape values, which will then influence decision making. It is here that he argues for analysis of networks of support for wind energy locally and how this is engaged through participatory planning approaches, so the values assigned to landscape from supporters of wind energy can be included in the decision making Pepermans and Loots (2013). He questions to what extent has the supportive narrative been institutionalised at a local level, but also how can the values of those fundamentally opposed to wind energy be included? That is, the redundancy of collaborative planning processes if mitigation efforts such as changes to design, siting, community benefits, ownership models, size, number and density, position and colour are vetoed on principle (Wolsink, 2007: 2694).

Siting decisions and the conflict that arises can be due to how the framing of

specific impacts, such as landscape, are promoted over others by established and powerful lobbies. Pepermans and Loots (2013), use four social trends to understand siting conflicts: 'delocalisation, individualization, globalisation and the advent of the risk society' (2013: 322, following on from Mormont (1997)). They use 'distance' to explain these social trends in terms of wind energy developments. For them, social (between the community and the developer), political (communities and the local planning authority) and spatial (geographic) distances occur. They explain spatial distances as the locational distance between energy production and energy consumption. Fossil fuel mining, drilling and energy production is isolated from residential areas and local environmental impacts and wind farms are not. Increased mobility lessens the connections to place identity as does urban sprawl and any infringement of the Green Belt, which blurs the urban / rural boundary. Political distance is illustrated by low levels of trust and public participation through demonstrations, protest and single issue causes and decision making being limited to powerful elites. The social distance between developer and local community is evident in the lack of local knowledge and networks with media and local politicians, which a local campaign group has built over years, will put the developer at a disadvantage (2013: 324). For Pepermans and Loots (2013), the political distance expressed by a democratic deficit is the key acceptability issue. The closing of the assessment of alternatives and mitigation efforts through the EIA process to local communities means that local communities had very little power over the decision making process (2013: 325-326).

3.1.4 Local Economics and Community Benefits

Community benefits are a voluntary mechanism, developed by the wind industry. The origin of community benefits can be traced to the US, led by a community NGO, Los Angeles A New Economy (LAANE), in 1999, who were representing the concerns of the local community towards gentrification of neighbourhoods and widening inequalities (see www.laane.org). They worked with the private developer and planning department to ensure that local people had access to construction and operational jobs within the mixed used

development as well as site specific mitigation payments. The concept of community benefits in the UK, grew from social clauses that were added to public sector contracts through procurement processes. Clauses for social considerations in pilot schemes in the early 2000s, included training, recruitment and local labour and supply chain agreements Macfarlane and Cook (2002).

Community benefits for onshore wind farms were initially on an ad hoc basis with rates negotiated between developers and local communities for a specific project. The LA can advise, but not by members or officers who are involved with determining the applications. Representing the wind industry and to secure social acceptance, RUK developed a community benefits protocol offering guidance for developers and communities on establishing funds for a project. The protocol recommended £5000 per 1MW installed capacity, which became standard practice for farms over 5MW of installed capacity (DECC, 2014: 9). This led to best practice guidance being publish by DECC in 2014, specifically for England, which recommended that this level of payment should be applied to all scales of development. However, this is well beneath the income that could be achieved if the community owned the wind farm. This approach can also be found with the planning of other energy generators such as solar and nuclear power plants. The guidance examines good practice in delivering community benefits prior to planning stage, during and post consent and into operations of the fund. It outlines the roles for key stakeholders, participation and communication strategies, negotiation and agreement processes and governance and administration functions (DECC, 2014).

The increase in community benefits has seen an increase in conflict surrounding the definition of the recipient community and the governance of the funds. Bristow et al (2012) question if community governance will be given sufficient power in local decision making, if decisions are opposed to the government policy interests? Or if the community group previously formed to politically lobby interests, can adjust to providing services and

facilities? Will the beneficiaries simply be the share investors in a scheme who receive a return on their investment or will they be from a specific geographic area who received grants for the funding of services and facilities for the collective good? How is a small geographic community with an increase in investment for the area and so an investment in community facilities balanced with the needs of neighbouring towns and villages equally under the jurisdiction of the local government. How does this affect local government budget decisions and existing community funding schemes?

Bristow, et al (2012) examined operating wind farms during 2007 to 2008 with an update in 2011, to explore the mechanisms for community benefits. For many of the projects, community had been defined as community of place with funding directed towards those directly affected by the development site. They found evidence of pressure to widen the recipient base, so that effectively, community was being defined as both community of place and interest. They identify developers that view community benefits as impact mitigation and so funding is site specific as well as developers who support funding for organisations with a wider reach. However, they conclude, that community benefits are increasingly becoming formalised, institutionalised and prescriptive, yet it is too early to evidence if this is beneficial for the governance of the funding, meets community need or fosters social acceptance for wind energy schemes (2012: 1116).

Economically, the opportunities related to onshore windfarm development have been associated with rural economies and smaller populations due to the location of sustained wind resources. This in policy terms, has offered opportunity for sustainable rural development, through in part, the concept of community benefits (Munday, et al. 2011: 1). The initial problem for the definition of a recipient community has been in the multiple definitions of the term 'community'. To assist Walker (2011) offers a typography: 'community as actor', social networks connecting people; 'community as scale', it is positioned in the hierarchy of decision making, above individual and household but below local government; 'community as place', social

networks specific to a location; 'community as network', social networks beyond a place; 'community as process', public participation within the decision making process; 'community as identity', civic duty towards collective interests (2011: 778).

A diverse range of benefits can be afforded to wind farm schemes. In Munday et al (2011), the community benefit fund was managed by local partnerships and the parish and town councils, as well as membership from a representative of the local council and the wind developer. The eligibility for funding often included restrictions based on proximity to the project and its associated infrastructure and the charitable status of the community funder meant beneficiaries were unlikely to be individuals or businesses. Beneficiaries they found included 'sports clubs, churches, play and primary schools, community facilities (halls), local shows and events organisations' (2011: 7). They also found recurring themes for the award of funding such as education and training, energy efficiency measures and environmental enhancement. However, the researchers warn that a priority for resources associated with environmental enhancement is due to site specific mitigation as opposed to funding received for enhancement activities as part of the community benefits scheme. They suggest that this illustrates a tight limit on how community benefits can be accessed with little evidence of schemes linking to other similar projects within the wider area or for funding upskilling of local labour to access operational and maintenance jobs on the wind farm.

Cowell, et al (2012) view community benefits to 'achieve something transformational, which begins to tackle the disadvantages faced by many of the rural and coastal communities set to live alongside wind farms, and leaves them more resilient' (2012: 4). The question of significance of visual landscape impacts is discussed, they agree that adverse impacts on the landscape do occur but that these impacts are 'sensory rather than toxic' (Cowell, et al. 2012: 6). The distribution of these impacts is spatially uneven as are the distribution of community benefits (except for landowner rental

income). As the industry grows, the increase in cumulative impacts become an issue, especially in areas experiencing rural or coastal poverty, these areas also suffer from low voter turnout and participation demands within the planning system; which raises environmental justice concerns. However, they counter this by questioning if community benefits can offer procedural and distributive justice, because those affected can access the benefits.

The predominance of large wind developers in the development of the UK wind energy sector has led to a lack of local ownership models and the late introduction of community benefits schemes. This has resulted in a lack of economic investment into rural areas which has been widely cited as the cause for the absence of social acceptance (Munday et al 2011: 4). The economies of scale have a considerable impact on wind energy development. As wind is free the main costs of development are front loaded that is business planning, feasibility, planning (including any appeal costs) and construction costs are higher than operational costs. Related to this is the size of the farm, increased generation of electricity needs larger turbine blades which require higher tower heights. This in turn has bigger impacts on the landscape which is the most cited reason for objection.

Importantly what they find is community owned wind farms in Scotland had a vastly different level of investment back into the community than community benefits offered. At time of writing that was £400-500,000 per annum (maximum) for a 2MW turbine ownership compared to £1000-5000 per MW offered in community benefits (Munday et al 2011: 8). Which would mean granting planning permission for a wind farm of 50, 2 MW turbines, for community benefits (awarded at the highest rate) to reach the same level of maximum investment as a cooperatively owned single 2MW turbine. This raises the concern that if social acceptance is used as a rationale for community benefits provision then if a project is supported, would community benefits still be forthcoming? (Cowell et al. 2012: 10-11). For Cowell et al (2012) the rationale for community benefits should be 'compensation for harms and losses' (2012: 12). Potentially this could be

extended as a trade-off, for permitting the siting of energy production within a community environment. This allows for a compensation narrative but also acknowledges the transition to a post-industrial low carbon economy which embraces community resilience through sustainable development. The bribery accusation is put forward by opponents to diminish any power that community benefits may have in gaining social acceptance.

To avoid the charge of bribery, community benefits provision is voluntary and if part of the project development is managed outside of the planning system and has no material consideration. This is a problem for the planning of wind power schemes as the local positive benefits that arise from community benefit funding is not relevant to planning considerations.

Whereas the local negative impacts such as those on the visual landscape can prevent the approval of a scheme. CILs, whether they are perceived as bribery, are dealt with as part of the planning consideration process and will affect if permissions are granted. This is legally mandated payment for site specific mitigation. The site may cause a negative visual landscape impact, but this is not subject to a CIL agreement.

When as Cowell, et al (2012) states, community benefits have the potential to be transformational for communities, the question should be asked as to why community benefits are not granted weight in planning terms? Bribery would be a developer buying planning permission directly from the decision makers. It is a crime, in UK law to give or receive payment for planning approvals. Paying community benefits into a fund to pay compensation for loss and harm which can transform an affected community into a resilient and sustainable one, is difficult to associate with 'improper performance'. As such the outcomes of community benefits, that is, what the funding can achieve rather than the amount negotiated, should be part of the planning consideration.

Cowell, et al (2012) highlight the difficulties in applying values to impacts and benefits. For example, how do you equate a negative visual landscape

impact with the benefit of building of a new community centre? They discuss the difference between 'property rules', where prior bargaining between both parties agree a price or no change will occur and 'liability rules', where redress occurs after the fact and compensation is set by a third party. In terms of wind energy development, property rules protect environmental quality from interference until permission is granted prior to the development (CIL Agreements). If environmental quality is governed by liability rule, the interference can occur but compensation is due after the development is operational (community benefits) (2011: 542). Protections under property rule can be dealt with within the planning system, but protections under liability rule are determined outside of the planning system (2011: 544). Cowell (2011) uses these legal concepts to challenge the viewthat community benefits attain social acceptance. This he argues is more likely if community benefits have the protection of property rules, which would enable communities to control the development process with the right of veto. The legitimate compensatory (ex post) role of community benefits is detached from the decisions to proceed, and so to perceptions that they foster social acceptance.

Cowell (2011) suggests that the continuous compensatory payments through community benefits compounds the perception that the wind farm is illegitimate (2011, 552-553). He concludes that the debate about community benefits from renewable energy sources should be widened from gaining social acceptance for project consent, towards how they serve environmental justice and how they 'balance the responsibility between public and private sectors for addressing the social costs of development' (Cowell, 2011: 554, after Boucher and Whatmore 1993).

3.1.5 Community Ownership

Nolden (2013) defines community energy as 'the installation of electricity generation technologies in geographical communities with one or more of the following attributes:

- communities actively engaging in technological diffusion through community-led projects, or
- through the (part-)ownership of municipal utilities, or
- communities benefitting from technological diffusion through coownership, business taxes, community funds and / or share offers from commercial developments' (2013: 546-547)

His definition includes the plurality of community energy business models as well as community benefits. The ownership models can be summarised as 'community led ownership', where financing and implementation is the sole responsibility of the cooperative or community led structure; 'joint ownership', where the private sector is responsible for implementation, but through either 'equity partnership', where the community benefit organisation will buy a share in the project or through 'community shares', where a community owned organisation can buy shares in the project and finally 'public and or community led ownership', where a public body finances or implements a scheme and the community has full or part ownership of the project (Harnmeijer, et al. 2013:10).

The concept of cooperative ownership has developed over time. Originally 'common and customary ownership', during feudal times, established common land and group common rights. This developed into a 500 year history of diverse forms of 'community ownership': communal living experiments (alternative lifestyles); garden city and new town movements (community owned housing, public spaces, allotments, village halls, pubs, farms and post offices); 'cooperative and mutual ownership' (cooperative, mutual and friendly societies focused on community housing, insurance, savings, workers' rights, credit unions, football supporters trusts and food provision); 'charities', with a legal constitution and often subcontracted to undertake and provide public sector services and facilities and 'municipal and state ownership', the nationalisation of key industries, energy, transport, communications, education, hospitals and housing (Woodin et al. 2010: 5). These distinctions are important for the influence they have on the status and

decision-making power, given to community energy groups. An onshore wind cooperative may have charitable status, operating under a cooperative ownership model as well as providing what was once a state service; yet they are classified and referred to as community energy.

The UK energy supply market is structured by 'generating companies' that produce electricity from coal, oil, gas, nuclear, wind, hydro, solar, biomass and wave and tidal (the latter is at testing stage in the UK). The 'transmission companies', who manage and maintain the electricity infrastructure. The 'distribution companies', who transform high voltage electricity to low voltage power and manage and maintain local infrastructure and the 'supply companies', who buy gas and electricity in bulk and sell at wholesale prices and retail (Conaty, 2011: 29). A typical household bill will be proportioned against these different costs: 75% for generation, 5% for transmission, 13% for distribution and 7% for supplier costs (Conaty, 2011: 29). For community energy groups, as the electricity generated does not go specifically to their customers (the local community) they need to buy from a supplier company via an energy broker. The biggest savings are from buying at warehouse prices, but this must be a bulk purchase (Conaty, 2011: 29). Conaty (2011) suggests four ways to ensure significant savings through cooperative models: the 'energy supply company', to legally operate, the company would have to demonstrate to Ofgem that it had the capacity to provide electricity to 50,000 or more customers; as a 'white label supplier service', where the cooperative enters partnership with an existing energy supplier, 'energy brokerage', where a broker can buy at wholesale prices on behalf of the cooperative and for example, provide marketing, customer support and billing administration and 'energy bulk-buy groups' where energy cooperatives bulk buy electricity collectively (Conaty, 2011: 30).

The emphasis on community energy as a solution to social acceptance identifies the positive social impacts or the multiple outcomes of community energy provision. In table 3: *Outcomes of Community Energy Provision*, the key outcomes of community energy, have been consolidated.

Table 3: Outcomes of Community Energy Provision

Area	Outcome / Goods
Economic	Competitiveness and economic growth
	Job creation
	Revenue generation
Social	Fuel poverty reduction
	Regeneration
	Skills and education
	Social cohesion
	Fairness e.g. tariff discrepancy
Environmental	Carbon emissions reduction
	Air quality
Self-governance or self determination	Local accountability and control
	Energy independence

Source: Adapted from (Seyfang et al. 2013); (Roelich and Knoeri, 2015: 8)

In addition to the positive social impacts, is the contribution towards decarbonisation of the energy industry, however the current cooperative capacity for operational onshore wind farms in England is miniscule (see section 5.5.3). Walker et al (2007) identified the rationale for a community approach to wind energy generation at the end of the 1990s, to gain social acceptance arising initially from interest groups and then introduced into policy discourses. Along with social acceptance, new technology deployment and local social, economic and environmental outcomes, it also offered a mechanism to allow subsidies for capital funding to support the development without contravening state aid rules. In the UK, community energy cooperatives gained initial policy support not because of the collective and local context benefits but because the charitable 'not for profit' designation permitting direct government subsidy (2007: 72). This initial policy support, has given way to the FCA (as introduced in 2.2), no longer registering any new community energy groups as cooperatives and is challenging the continued registration of existing energy cooperatives. They have been encouraging groups to register as a 'community benefit society'. A community benefit society unlike a cooperative is unable to trade with their members designed instead to offer charitable support rather than financial. Now

community energy cooperatives and their representative advocates from intermediary organisations are challenging this position and demand that UK energy market rules are changed to allow for community benefit societies and community energy cooperatives to supply local markets at preferential rates with the renewable energy they generate (CEE, 2015:1-3)

The lack of policy coherence and the UK's neoliberal market, has favoured the dominance of the Big Six utilities companies driven by profit, over support for diverse, small scale cooperatives, motivated by securing sustainable outcomes Kern et al (2014); Roelich and Knoeri (2015). The private developer and public subsidy model of onshore wind development in the UK, has created a barrier to community ownership. The private sector is perceived by opposing groups as outsiders profiting from local suffering which results in conflict as existing urban / rural tensions reignite. Cooperative models have fewer economies of scale, a lack of skills, extended timescales and high administrative burdens. The reliance on wind speed and stable electricity prices, the lack of financial institutions willing to fund at risk projects which make community groups grant dependant for start-up and capital costs. This also requires a commitment to cooperative working and the ability to defend proposals considering any opposition, which occurs whether the scheme is community or corporate led (Munday et al 2011: 9). A more plural approach to energy governance is needed so that social and environmental outcomes for the common interest, are given a higher status in a market based system. As the value that can be created, is dependent on the motivations and capabilities of the community and the business model they adopt, means that energy governance must embrace a diverse community led sector (Roelich and Knoeri, 2015: 7).

At risk funding is required prior to planning permissions, before 2010 this would have been in grant form intended to act as a private sector funding levy. If planning permission is refused or likely to be refused, the grant funding is then lost. This coupled with European State Aid rules where government subsidies cannot be used in conjunction with grants has meant

at risk funding sources have changed to loans (Harnmeijer, et al. 2013). Harnmeijer et al (2013) argue that this is the major reason why community energy projects have not been successful in the UK, with planning and feasibility costs being 70% higher than commercial schemes. Understanding the planning system and access to project viability data is essential and local authorities should be key in providing local guidance to enable project success (2013: 15-16). The researchers evaluated the planning rejection letters of community energy applications against time, technology, community involvement and scale; finding that for some councils, community involvement had a positive influence on planning outcomes, but for others it was statistically insignificant. For the authors, this indicated 'a highly politicised and ad hoc planning system. In other words, the level of knowledge of local authorities and their attitude towards local energy is a strong determinant of success or failure'. This was matched by successful projects having access to key experts in the fields of law, finance, science and engineering (2013: 15-16).

The experience in England, is in sharp contrast to the often cited, successful cooperative energy case studies from Denmark and Germany. In Europe, there is a 'sense of ownership' not just legally but psychologically, which is a powerful influence on local attitudes (Warren and Birnie, 2009: 115-116).

'most people are used to the costs and risks being borne by others (for example, oil rig workers, uranium miners or people living near power stations) but energy generation is actually everyone's problem for everyone to help solve. The increasing recognition of this reality has birthed the concept of 'energy citizenship' (Devine-Wright, 2007).' (Warren and Birnie, 2009: 115-116).

Toke, et al (2008) undertook an investigation into cooperative ownership in Germany, Denmark and the Netherlands compared to England/Wales, Spain and Scotland. In the former group, these countries underwent a period of anti-nuclear activism, which promoted alternative energy models throughout the 1970s and 1980s. This was limited in the UK, which had anti-nuclear

activism, but this was not expressed through the promotion of alternative energy systems (2008: 1140-1141). This lack of campaigning for pro wind energy technology, can be viewed locally through the planning system and is associated with the lack of local ownership (2008: 1144); (Toke, 2004: 99). In Denmark, the belief in alternative technology, slowly advanced through the development of larger schemes. Initially, individual farmers provided the market with equipment designed by local engineers. The farmers joined together to create larger schemes through cooperative models which were owned by the local community. This created a renewable energy social movement who then had the power to lobby the Danish government to enforce utility companies to pay higher rates for the electricity supply. The payment system that resulted from these negotiations was the Feed-in-Tariff system. Toke (2011) uses the Danish example to illustrate the importance of social movements in the role of renewable energy in politics (2011: 66-67, 74). The cooperative model of ownership of renewables has been at a disadvantage because of the competitive, time consuming and expensive bidding system in the UK. Which supports bids from larger external companies who can afford to source the highest and windiest development sites. Toke's, (2004) comparison with Denmark, outlines that the acceptance of wind energy is due to the focus on cooperative / community ownership models of wind turbines. The level of participation and the numbers that participate financially in cooperative ventures creates a grassroots support base that is vocal at countering opposition based on landscape impacts. The Danish local management system includes policy parameters such as whether a cooperative is formed; how they are managed and choice of site. This is matched with national policy which outlines the number of shares per individual; prices developers can achieve for electricity; and the general obligation that local authorities should provide sites for development. However, it is noted that the often cited Danish example of cooperative wind energy groups is beginning to change, the increase in turbine size and subsequent increase in costs, has meant that large private developers are increasing their share of the market, which for the first time has seen an increase in community opposition in Denmark (Warren and McFayden, 2010: 211).

Nolden (2013) found that planning issues, the availability of at risk funding and grid connection problems were the biggest issues for community energy projects, which meant that most schemes analysed were small scale. However, larger projects more than £1m cost, have a wider source of funding streams from ethical banks investing in niche markets, such as the Cooperative Bank and the Triodos Bank (2013: 547). This is considered one of the key reasons why community energy has been successful in Germany. The regional state-owned banks *Landesbanken* and the government owned development bank KfW Bank, provide loans for community-scale renewable energy projects. This finance model is a result of the federal political system of Germany and would be difficult to replicate in the UK's liberalised system. The Green Investment Bank, a the policy outcome of the Coalition government was launched in 2012, it offered public sector funding to support the development of renewable energy projects, specifically to overcome the lack of at risk funding available. The aim that once the bank became profitable, which it did in 2014, it would be able to expand its investment portfolio and make profit for the tax payer. By 2015, the Conservative government began proceedings to sell the bank to the private sector. Once the bank is privatised critics warn it will no longer be required to invest in renewable energy or promote low carbon projects (Helm, 2015).

Nolden (2013) concludes that in the UK, in terms of energy activism, the development of community energy is happening bottom up from the grassroots, notwithstanding the lack of institutional support mechanisms. The scale of development for community energy is channelled into small scale FiT schemes rather than large-scale (over 1.5 MW) RO schemes, this deals with issues of risk funding and planning requirements but does not reflect the level of local support held for a project or the generation of electricity a site could provide. Holden (2013) concludes that this implies that it is easier to secure partnership with large scale developers rather than establishing community led projects (2013: 548). This means that deployment of community energy is in the hands of the private sector. 'In the UK, CE [community energy] appears to be a tolerated parallel development

but government is struggling to recognise it as an opportunity and not a threat' (2013: 549).

Roelich and Knoeri (2015) call for a redefinition of energy provision as one not for private good but for common good, as heat and light are universal basic needs. By doing this, they argue that the benefits of community energy provision can then be emphasised in terms of governance. (2015: 12). To enable this, a set of normative rules have to apply: 'institutional variety', governance employs a range of institutional types; 'design principles', offering general principles for the development of local institutions which allows for a plural governance responses and 'polycentric governance', embedded levels of decision making at multiple levels to enable 'adaptive governance' (2015: 13-14). The self-governance of energy must occur within governance at other levels, so it is essential that government supports its development. This can be evidenced by the growth of 'intermediary organisations' that are supported by local authorities (or are the local authority) to act as 'intermediary between local rules and national rules' (2015: 19-20).

Nolden (2013), UK survey in 2010-2111, found three kinds of community energy participants: the 'energy activist', who actively engages with the development of community energy generation; the 'change agents', those engaged with the decentralised deployment of community benefits and or ownership models and the 'facilitators', who engage with the governance strategies of energy policy (2013: 546-547). In Seyfang (2014) twelve case studies of community energy groups, they found that action was very much dependent on volunteer time, skills and resources. But they did find skill development occurring through: community 'learning' often facilitated by intermediary organisations; 'networking', in various ways with a diverse range of groups; shared 'expectations' and vision building for what projects are able to achieve (2014: 28, 33). However, this had not translated into a set of common goals and a unified vision for such a diverse sector. Their research established the skill capacity required to start a community energy project as

social, organisational, cultural and financial (2014: 37-38). This highlights the importance of interpersonal rather than technical skills for the development of community energy projects. All groups self-generated some of the skills and resources they needed incorporating existing skills from the members, recruiting new resources, undergoing training and research themselves and, using the resources of intermediary organisations including assistance from parish councils, planning departments, universities, energy companies, local farmers and statutory consultees (Seyfang, 2014).

'while community energy has successfully grown up in between the cracks of the mainstream energy system, it needs to be nurtured and supported (i.e. pro-actively supported, if not strategically managed) if it is to continue to grow and develop. This distinction is critical: to 'harness' or manage the sector may imply some kind of control or direction, which we argue may lead to dilution of the secret ingredient which makes community energy work: its core values' (Seyfang, et al. 2014: 41)

In the Seyfang et al (2013) study undertaken in 2011, most community energy projects in UK were initiatives dealing with energy consumption rather than energy generation. They identified five critical factors for successful activity: an effective and committed organising 'group'; a 'project' that was financially viable and supported with resources; a 'community' with trust and engagement; 'networks', of supportive relationships facilitation sharing of information and 'policy', a supportive national policy context. The most important success factor was the qualities within the 'group' itself (2013: 980-983). The threats to successful development, were external obstacles: policy changes; planning restrictions, other bureaucracy and lack of support from other actors such as opposition campaigns. Most of the community groups had 4-6 core members, no paid employees; all of them worked with the local authority and most with other community groups and the private sector (2013: 984-986). An assumption that community wind schemes have unanimous support is questioned by Bell et al (2013). They view community led schemes as partnership schemes with local authorities and private developers, this does not avoid local controversy as existing power relations

remain intact. What they do surmise is that if pro-wind activists have been involved their actions will have an impact on the power relationships (2013: 13).

The oligopoly of the energy industry in the UK, can be seen to have failed in fostering innovation, diversity and engaging individuals, unlike in Germany and Denmark (Willis in Julian, 2013: 88). Willis, views the two large-scale community wind cooperatives in England, Baywind in Cumbria and Westmill in Oxfordshire, as a 'dedicated group of insurgents trying to construct a very different energy system, even though the system is stacked against them' (2013: 89). Westmill Wind Farm, in Oxfordshire, was built in 2008, after 15 years of planning. A farm with five, 1.3MW turbines and planning permission for salvage during decommissioning secured with a deposit held with the planning department for the costs of decommissioning. The cooperative run this wind farm in parallel to the Westmill Solar farm, which was built in 2011. Together both projects generate enough electricity to power 4,000 homes. Both are cooperative models, with the wind farm having raised £4.6m from a share investment and the remainder from a 12-year loan from the Cooperative Bank. The solar farm was funded with £6m share investment and the remainder from 24-year bond from a pension fund. Over half of their investors were from within 50 miles of the schemes, which illustrated the level of support that the projects had locally. Despite the vocal opposition campaign group of 24 members, claiming otherwise. The chair of the Westmill Wind Farm cooperative, Luntley discusses in Julian (2013) how at the first AGM, members remained behind to work on how community benefits of the cooperative income were to be distributed. They agreed funding themes of 'arts, education and low carbon investments', from here a sustainable energy charity was established which trains volunteers, conducts visits around the projects and provides education outreach programmes. The cooperative donates a share of its profits to the charity as does several share investors (2013: 99). Luntley, calls for a change in the availability of at risk funding, a reduction in the costs of planning and specific recognition in planning for community based projects, development of a 'mutual bond' to

finance a number of community schemes at once, to revisit Section 106 Agreements (CILs) as currently they do not facilitate community ownership and public agencies should use their borrowing powers to support local community energy cooperatives (2013: 100-101). Simpson, in Julian (2013) adds to this by calling for an amendment to the Energy Bill or the Localism Act so all local groups to have the right to own the local grid, to establish a 'first use' legal framework for local communities to use the renewable electricity they generated and to encourage community partnerships with technology companies rather than energy companies (2013: 94-95).

3.2 Social Impact Assessment

The *International Guidelines and Principles of SIA* (2003), define social impacts as a *change* to any of the following:

- 'people's way of life: that is, how they live, work, play and interact with one another on a day-to-day basis;
- Their culture: that is, their shared beliefs, customs, values and language or dialect;
- Their community: its cohesion, stability, character, services and facilities:
- Their political systems: the extent to which people are able to participate in decisions that affect their lives, the level of democratisation that is taking place, and the resources provided for this purpose;
- Their environment: the quality of the air and water people use, the
 availability and quality of the food they eat, the level of hazard or risk,
 dust and noise they are exposed to, the adequacy of sanitation, their
 physical safety, and their access to and control over resources;
- Their health and wellbeing: health is a state of complete physical, mental, social and spiritual wellbeing and not merely the absence of disease or infirmity;

- Their personal and property rights: particularly whether people are economically affected, or experience personal disadvantage which may include a violation of their civil liberties;
- Their fears and aspirations: their perceptions about their safety, their fears about the future of their community, and their aspirations for their future and the future of their children.' (Vanclay, 2003: 8)

SIA identification of social impacts, notes the difference between social impact and social change processes. As one does not necessarily lead to the other, or the impacts that do occur, can be positive instead of negative. Impacts can occur before any development work, based on local community speculation, which if not recognised and effectively managed can impact on people's fears and or aspirations for their local environments Vanclay, et al (2015).

3.2.1 SIA Procedural Framework

The ideal SIA is a combination of technocratic and participatory approaches (Becker, et al. 2005), but the technocratic approach has been prevalent due to SIA's relationship to other impact assessment (environmental, strategic and economic). This has resulted in avoidance of meaningful engagement with communities allowing for the state and business to retain control over the development process (Lockie, 2001: 278); Fenton (2005: 15). This reflects the emphasis of SIA being a product when it is a process. The methodological procedure has developed over time and adapted to support either a technocratic or participatory process. Vanclay et al. (2015) argue, that a quality SIA will be integral to the development process and not an external assessment, like EIA, but instead should be part of a quality assurance process and a 'socially informed process of adaptive management' (2015: 4, 6).

The technocratic/ participative split of SIA is presented next to the process of EIA for onshore wind farm proposals in figure 4, *The Technocratic*/

Participative Procedural Framework.

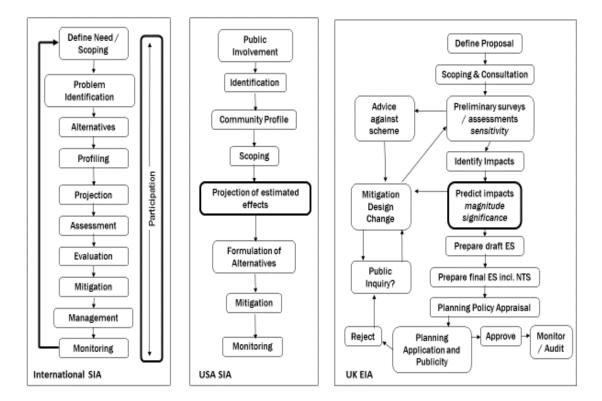


Figure 5: The Technocratic / Participative Procedural Framework

Source: Adapted from (Barrow, 2010: 38); (Becker et al 2003: 22); (Fenton, 2005: 16); (Stevenson, 2010: 3) (Acre-Gomez, et al. 2015: 88)

The international framework starts with screening for whether an SIA is required, then provides a scoping opinion. Public involvement is at every stage of the process through various methods of participation. Using local knowledge for data collection and local community members as social researchers to determine and evaluate the impacts and alternative solutions themselves; whilst being supported by expert facilitators. To enable this there is an understanding that the initial cost and time resources will be high, but in the medium and long term the benefits of meaningful participation, outweigh the initial SIA start-up costs Acre-Gomez, et al (2015).

The international framework provides space to integrate both a technical and participatory approach in scoping for social impacts by the host community. The formulation of alternatives is undertaken at an earlier stage, prior to the community profiling. This emphasises the important role of the community

in designing the alternatives with the proponent to assess the most socially accepted option for assessment and development. Projection and the assessment and evaluation stages are separated before moving onto mitigation.

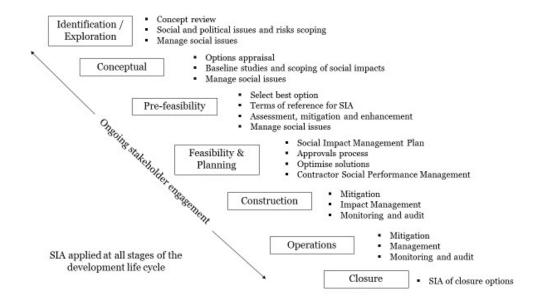
A mitigation hierarchy of significance, is applied to the impacts outlined from the process, and strategies to deal with the impacts are devised in collaboration with stakeholders. Beneficial impacts are then enhanced through strategies that will feed into the SIMP, for when the project is in operation. The international version leads into the management stage of the process, whereby SIMPS, key performance indicators and action and implementation plans are created to ensure systems are set up to capture the enhanced benefits. This allows for assessment of negative impacts and ownership of the issues are delegated to appointed stakeholders. The final monitoring stage evaluates the entire SIA process from pre-feasibility, planning, construction, operations and decommissioning. A lessons-learned project management approach to assist with information dissemination on future related policy, plans or projects. This maintains SIA as a cyclical process feeding back into the defining need and scoping stage.

The SIA community argue for the process to be led by the proponent or by the community (Esteves, et al, 2012); Arce-Gomez, et al (2015: 86). However, space must also be provided for community groups that are the proponent, and undertake developments on behalf of the community where they live. The community understand the problem, have identified the need, have self-organised and obtained local control. They have identified the solution or opportunity in a planned intervention. However, because an SIA is community led, it does not mean a project is supported by all of the host community. A process of discussion and negotiated agreement, whether by consensus or by agreement in conflict; is needed.

3.2.2 SIA Tasks and Activities

The stages of SIA development life cycle were update by Vanclay et al (2015) and is reproduced in figure 2.8, SIA, Through the Development Life Cycle

Figure 6: SIA through the Development Lifecycle



Source: (Vanclay et al. 2015: 6)

When commissioning an SIA, ideally all stages of the development life cycle would be included, but this can be amended to enable integration with other systems (EIA and operations). For onshore wind developments, an SIA can be commissioned. The costs are front loaded, for the stages of identification and pre-feasibility before outputs are integrated into the start of the EIA process. Or an SIA can undertake the stakeholder engagement activities as a standalone project. It can be commissioned to undertake the socio-economic technical paper of the EIA. Or undertake the development of the SIMP and its implementation throughout the operational life span of the wind farm. An SIA can be integrated with other IAs such as EIA and HIA or IA tools such as LVIA, EqIA, risk analysis or environmental conflict mediation. Or an SIA can be used to develop and implement decommissioning or repowering plans.

Throughout the development life cycle Vanclay et al (2015: 7) identified, 26

main tasks of a SIA, for assessing and managing the social impacts of projects. The researchers divided the tasks into four main stages: understanding the issues; predict, analyse and assess the likely impact pathways; develop and implement strategies and design and implement monitoring programs each of the 26 tasks are illustrated in figure 2.9, *Assessing and Managing the Social Impacts of Projects.*

Predict, analyse Social changes & impacts Understand proposed project Indirect impacts & assess the Clarify roles & responsibilities Cumulative impacts likely impact Social area of influence pathways Affected party responses Community profiling Significance of changes Inform community Project alternatives Inclusive participatory processes Scope issues Understand the Assemble baseline data Develop & issues implement strategies Address negative impacts Design & Enhance benefits & opportunities Indicators to monitor change implement Support communities with change Participatory monitoring plan monitoring Establish a grievance mechanism Negotiate IBA Implement adaptive programs management Develop SIMP Evaluation & periodic review Establish partnerships to implement SIMP Implement ongoing social performance plans The 26 Tasks of SIA

Figure 7: Assessing and Managing the Social Impacts of Projects

Source: Adapted from (Vanclay, et al. 2015: 7)

The tasks outlined in the first stage 'understand the issues' aim to: fully understand the project brief and all of its supporting functions. Clarify the roles and responsibilities of the project team involved with the process and production of the SIA. Outline the operational policy context. Draft a map of social influence of the host community. Compile a community profile which includes a stakeholder analysis and an understanding of the socio-political context of the area. An evaluation of the host community's needs, aspirations, interests and values. An assessment of the how development impacts have affected the community in the past. A discussion of current trends and assets of the local environment. And undertake a SWOT analysis and or public

perception surveys. Disseminate information about the proposal and similar projects for comparison. Detail methods for involvement and any regulatory rights and offer grievance mechanisms. Design participatory processes and deliberative spaces to engage with the host community so that the impacts are fully understood. Provide judgement on the social acceptability of likely impacts through future visioning exercises. Offer pathways for inclusion in contributing towards the mitigation and monitoring plans and prepare the community to manage change. Within the scoping stage identify any social or human rights issues that may be of concern and collate baseline data to support initial findings on social issues.

The second stage, 'predict, analyse and assess the likely impact pathways' undertakes a detailed analysis of the social impacts and changes incurred by the community because of the project and the project alternatives. Ensuring that community members are involved in the design and evaluation of alternative development options. Include a full examination of the indirect and cumulative impacts and establish their significance. Using the findings to ensure there is a full understanding of how communities are likely to respond the potential impacts.

The third stage, 'develop and implement strategies' uses a mitigation hierarchy to address negative impacts and enhance beneficial impacts. Develop change management strategies and feedback channels. Facilitate a negotiation protocol between project proponent and the community through the drafting of an Impacts and Benefits Agreement (IBA). Use the IBA to assist the developer in devising a Social Impact Management Plan (SIMP). The SIMP guides the implementation of the IBA once the project is operational. It supports key stakeholders to embed the SIMP into their respective systems and identify key responsibilities for the ongoing monitoring arrangements.

The final stage, 'design and implement monitoring programs', includes developing indictors to monitor change and an inclusive monitoring plan.

The emphasis on developing a SIMP with a schedule for regular audits and production of a final evaluation. This product is accessible for future SIAs and other impact assessment undertaken within the same community environment Vanclay, et al. (2015: 8). The tasks and activities of an SIA will be developed into codes to analyse data in sections 5.2, *LPA Planning Guidance*, 6.1, *Developers Websites*, and chapter 7, *Case Studies*.

3.2.3 SIA and Participation

The strength of SIA is its participatory nature; to undergo social research, meaningful public engagement must shape the decision-making process. Vanclay et al (2015) situate SIA within communicative planning theory and cite the spectrum of participation, called IAP2 Spectrum, designed by the International Association for Public Participation (IAPP). This is the international standard used for SIA participation approaches (2015: 20-21) (see chapter 3). Baines, et al (2013) found gaining informed consent with the host community for participation in the development process, was intrinsic to SIA itself. A strength of SIA is its ability to undertake informal observational or participant / observational fieldwork at an early stage of the process. For example, a social researcher will visit or stay within the host community to build a picture of local needs, perceptions and aspirations for their environment. This form of data collection adds value to the formal consultation exercises with key stakeholders.

The community profiling stage identifies the values, specifically the environmental values that a community hold. Environmental values are the beliefs that people place on the value of the natural environment, how place is given meaning. As extrinsic; its value derives from its economic use. Or as intrinsic; where the value of the natural environment is based on its value itself with no relation to human use. Communities may hold either position or a mixture of both, but at its crux is conflict. The SIA process enables the practitioner to uncover these positions that influence social acceptance and community involvement in decision making (Fenton, 2005: 35).

Place meaning is an important element of community profiling, especially when assessing the viability of alternative options based on location of development site. Place meaning offers a detailed description of the subjective community opinions, emotions and judgements on the significance and appropriateness of a location (Fenton, 2005: 35-38). A technocratic SIA, will bypass this understanding which 'serves only to privilege some values over others' (Lockie, 2001: 282), like economic growth and employment creation or landscape values assessed as part of an LVIA. Thus, arguing the added value offered in taking a participatory SIA approach to assessing impacts.

3.2.4 Identifying Social Impacts

The seven categories of social impacts, have been adapted to include change in one or more of the social impact domains, see figure 7, *Social Impacts and Social Change*. These categories of impacts and change have been used to code the data in section 5.4, *Recovered Appeals Local Written Representations*, 6.2, *Action Groups Websites* and chapter 7, *Case Studies*.

Figure 8: Social Impacts and Social Change

Way of Life How people live, work play and interact with one another on a daily basis. - Alterations in family structure Obligations to living family members and ancestors - Family violence Social networks - Community identification and connection - Community cohesion (actual) - Social differentiation and inequity - Social tension and violence - Change in cultural values - Cultural affrontage [hate speech] - Cultural integrity - Experience of being culturally marginalised
Culture Interact with one another on a daily basis. - Obligations to living family members and ancestors - Family violence - Social networks - Community identification and connection - Community cohesion (actual) - Social differentiation and inequity - Social tension and violence - Change in cultural values - Cultural affrontage [hate speech] - Cultural integrity - Experience of being culturally
- Family violence - Social networks - Community identification and connection - Community cohesion (actual) - Social differentiation and inequity - Social tension and violence - Change in cultural values - Cultural affrontage [hate speech] - Cultural integrity - Experience of being culturally
Culture Cultural affrontage [hate speech] Cultural integrity Experience of being culturally
connection Community cohesion (actual) Social differentiation and inequity Social tension and violence Culture Shared beliefs, customs, values and language or dialect. Cultural affrontage [hate speech] Cultural integrity Experience of being culturally
Culture Shared beliefs, customs, values and language or dialect. Cultural affrontage [hate speech] Cultural integrity Experience of being culturally
Culture Shared beliefs, customs, values and language or dialect. - Social tension and violence Change in cultural values Cultural affrontage [hate speech] Cultural integrity Experience of being culturally
Culture Shared beliefs, customs, values and language or dialect. - Change in cultural values - Cultural affrontage [hate speech] - Cultural integrity - Experience of being culturally
 customs, values and language or dialect. Cultural affrontage [hate speech] Cultural integrity Experience of being culturally
 language or dialect. Cultural affrontage [hate speech] Cultural integrity Experience of being culturally
Experience of being culturally
The Strains of
- Commercial exploitation of culture
 Loss of language or dialect
Natural and cultural heritage
Community Cohesion, stability, character, services and facilities Quality of the living environment (actual)
Leisure and recreation opportunities and facilities
 Environmental amenity value / aesthetic quality
 Availability of housing (actual)
 Social quality of housing
 Adequacy of physical infrastructure
Adequacy and access to social infrastructure
 Personal safety and hazard exposure (actual)
 Crime and violence (actual)
Political System The extent to which people are able to Functioning of government agencies
participate in • Integrity of government agencies
decisions that affect their lives, the level - Tenure or legal rights
of democratisation - Subsidiarity [Localism]
that is taking place, and the resources - Human rights
provided for this • Participation in decision making
purpose Access to legal procedures and advice
- Impact equity

Social Impact Domain	A Change in	Examples of Change	
Environment	The quality of the living environment.	 Environmental justice Quality of the air and water systems	
		 Availability of food 	
		 Level of hazard or risk 	
		 Levels of dust and noise exposure 	
		 Adequacy of sanitation 	
		 Physical safety 	
		 Access to and control over resources 	
		Resilience from climate change	
Health and Well Being	Health is a state of complete physical, mental, social and spiritual wellbeing and not merely the absence of disease or infirmity.	 Death of self or a family member 	
		 Death in the community 	
		 Nutrition 	
		 Physical health and fertility 	
		 Mental health 	
Personal and Property Rights	Particularly whether people are economically affected, or experience personal disadvantage which may include a violation of their civil liberties.	 Workload 	
		Standard of living	
		Economic prosperity and resilience	
		• Income	
		 Property values 	
		- Employment	
		 Replacement cost of environmental functions 	
		 Economic dependency 	
		 Burden of national debt 	
Fears and Aspirations	Their perceptions about their safety, their fears about the future of their community and their aspirations for their future and the future of their children.	 Community cohesion (perceived) 	
		 Quality of the living environment (perceived) 	
		 Availability of housing (perceived) 	
		 Personal safety and hazard exposure (perceived) 	
		 Crime and violence (perceived) 	
		 Perceived health 	
		 Aspirations for the future 	
		 Autonomy 	
		 Stigmatisation or deviance labelling 	
		 Feelings in relation to the project 	
_			

 $Source: Adapted \ from \ (Vanclay, 2003: 5-11); \ (Fenton, 2005: 10-12); \ (Vanclay, \ et \ al. \ 2015: 2)$

Prediction is on the understanding of the existing social environment as identified through the scoping and community profiling. Impacts predicted are direct, indirect and cumulative and informed by expert knowledge, comparison of similar cases and by applying statistical projections (Fenton, 2005: 17-18). Social impacts are identified through deliberation, negotiation and conflict within a participatory approach,

'we are not dealing with a straightforward causal process here (whereby a proposed change a, under conditions b, equals impact c). Rather, we are dealing with the fluid and contested meanings that are associated with spaces, activities, communities and proposed changes by those involved' (Pollard et al, 1998). Both the composition of communities of interest and the things they value most highly are likely to change throughout the life of a proposal' (Lockie, 2001: 283).

3.2.5 SIA and Planning for Onshore Wind in England

SIA has a wide reach over policy, plan, program and policy analysis. It can be applied over the full development life cycle both ex ante and post ante. It can operate through both technical and participatory research approaches. This flexibility can be viewed as a strength allowing context specific designs, but there is also a danger that it is attempting to be all things, to all people, all the time. For onshore wind farms in England, SIA offers its value as plan level analysis for neighbourhood planning with local communities in allocating sites for potential wind development. It offers project level analysis that is ex ante, participatory and conflict aware. It can also be extended to the operations of community benefits once a farm is operational through the SIMP negotiations and agreement protocols, and governance and management structures.

SIA added value occurs during the pre-application consultation stage and scoping and feasibility stages. Here participatory approaches are designed and the planning conditions of evidencing local backing and assisting communities in impact identification occurs. This assumes the proposed sites are allocated within the local plan. It is essential the EIA team is multidisciplinary, inclusive of social researchers and a participatory approach is undertaken for the full development life cycle. The proponent and funder must support and participate in the approach. Achieved by commissioning external and independent consultants who are under ethical scrutiny by their professional bodies. Their expertise must be robust enough to defend their research methods, within a court of law.

The English planning system, the LPA skills capacity and a supportive political will, can support this approach without change to resources or timescales. The socio-economic technical paper in EIA, needs to be reprioritised. SIA can support other required tests for example, the landscape and visual impact assessment, consultation, noise annoyance and health and well-being. Figure 2.12, *Integrating SIA into EIA for onshore wind farms*, explains how such as process would work within planning.

Neighbourhood plan Define Proposal / Need Scoping & Problem identification Preliminary surveys **Alternatives** Advice against / assessments scheme sensitivity **Profiling Identify Impacts** Projection Participation Mitigation Predict impacts (magnitude Assessment Design Significance) Change **Evaluation** Prepare draft ES **Public** Prepare final ES incl. NTS Inquiry? Repowering / Decommission Planning Policy Appraisal Reject Approve **Planning** Management Monitoring Application and **Publicity**

Figure 9: Integrating SIA & EIA for Onshore Windfarm Proposals in England

Source: Own design (2015), Adapted from Stevenson (2011)

The diagram combines the EIA, plan analysis and SIMP offering an approach to Integrated Impact Assessment (IIA). The boxes shaded in grey are the stages within the procedural framework, where SIA can be implemented. The key changes are the inclusion of plan level assessment, through neighbourhood planning. The connection from scoping to advising against a scheme at an earlier stage. The inclusion of SIMP and the ongoing monitoring, feeding back into repowering or decommissioning. This links to new project proposals through lessons learned and the feedback from monitoring. The overall framework shaped by a participatory approach for all stages of the development.

Researchers have found that social acceptability is not the only planning problem for developing onshore wind farms Toke et al. (2008); Ellis et al. (2006); Smart, et al (2014). Other interconnected tensions include the

extension to time frames for determination. The increases in technical data resulting in stakeholder 'information overload' which leads to limits in public access. A lack of clarity in agreeing the purpose of the EIA. An absence of impartiality and transparency in the result (as the developer funds the EIA). A weakness in the analysis of cumulative impacts with mitigation efforts. Inadequate resources and the lack of experience within LPAs. Poor consideration of alternatives and inadequate measures for decommissioning. However, the EIA was also considered highly important for wind farm planning applications. The EIA effectively mitigated and monitored significant impacts as well as offering avenues for detailed public scrutiny (Smart et al. 2014: 16-20).

3.3 Conclusion

In terms of social acceptance or local community backing, concepts of people's perceptions, opinions, values, ideas about tranquillity and wellbeing, local history and memories, spiritual meanings, aesthetics, community noise and annoyance and findings from psychosocial research are being addressed in the impact assessment process through LVIA and HIA methodologies (for onshore wind farms), with very little guidance as to how this is achieved or judged locally and without any comparison to other forms of energy provision (renewable or fossil). The NIMBY myth has been debunked by academia and rebuked by opposition campaigns as delegitimising the voice of opposition. Yet the limits on onshore wind farm developments in England appear to protect the concerns of the self-interested NIMBY, whether they are the 'good' NIMBY attempting to protect local environments or the 'bad' NIMBY responding to perceived economic impacts.

In England, the environmental movement has been slow in defining a 'sustainable landscape aesthetic' that includes the local and the global, accepts that energy production is now in non-industrialised environments, includes the rationales of investors beyond that of profit (the role of finance

institutions and community cooperatives) and includes the lessons that can be learned from the global south and international social movements. Until impacts are perceived as 'sensory rather than toxic' (Cowell, 2012) and community benefits are compensation rather than bribery, there will be no counter argument to the traditional views held by statutory consultees, powerful landscape protection groups and political elites.

The supportive discourse, needs to be amplified at a local level and community benefits can assist in this. The US origins of community benefits, where site specific mitigation payments were integrated with community fund payments may have contributed to the compensation narrative that we have in the UK. Even though the two are detached in the England, the legacy of this lingers. The focus of community benefits on a specific technology, predominantly onshore turbines, although the protocols have been expanded to nuclear and solar, suggests that onshore wind farms are negative. Could community benefits schemes become standard practice for all types of new developments regardless of technology type or industry? The supportive discourse needs to embrace the alternatives assessment in EIA, the 'no development' option, that is, what will the alternative future be, for a locale without community benefits?

Although most commentators including the government and the CPRE, support community ownership as a rationale for social acceptance; the market system is designed for large scale developments. A system that offers energy brokerage, but until cooperatives have increased in scale they are unable to offer other forms of delivery and so increased income levels for more social outcomes. The legal operational status of cooperatives is under threat, which in part means, there are very few community owned onshore wind farms in England. Successful case studies for cooperative models are offered from Denmark and Germany, but that success is due to their history of development, financial support regimes and policy support. So why recommend community ownership to achieve social acceptance if ideologically, politically, legally and financially, the system is unable to meet

the diverse needs of this development model?

The intent of this research is to strengthen the EIA process, by using the activities of an SIA, to also contribute towards issues of social acceptance. Through SIA, community energy can be redefined as an opportunity to deliver the basic need of electricity for the common good. SIA strengthens the EIA participatory framework by being honest about the difficult questions. It is better placed to uncover people's emotional response, their values and belief systems. It turns a technocratic approach into a participatory one. This then empowers communities in decision making. Communities own a method of income generation which makes them less grant dependent and alleviates poverty fuel. This community power, in both senses of the term, serves local democracy and with it comes social acceptance.

This chapter has identified sources of data collection that will be developed into codes to analyse data. That is, social impacts identification and the activities of SIA. Chapter four, will discuss planning theories that could support the introduction of SIA as a decision-making tool in the English planning system.

4.0 Introduction to Chapter

The planning theories which currently support integrating EIA into English planning and so offers the opportunity to include SIA, are discussed in chapter four, to provide the research with an analytical framework. In the 1970s, the dominance of the rational, technocratic planning paradigm of the post-war years in the UK, was challenged. Questions about power, diversity and participation in governance needed new planning theories. Within the arena of deliberative democracy, the work of Jürgen Habermas in the 1980s, on communicative rationality proposed that democratic legitimacy could be found in seeking consensus through rational debate.

In applying his philosophy to planning theories the communicative and collaborative school of planning emerged. The planning models are based on concepts of social inclusion in governance. They uncover imbalances of power relations and understand the diversity of interests through participation and consensus for planning decision making. Through this democratic legitimacy is secured. Overtime the collaborative model became paradigmatic in planning. Planning theorists offer a wealth of empirical evidence critiquing the original Habermasian ideals of rational debate and consensus seeking decision making, and the impact that has on communicative planning theory.

A key area of critique put forward by Chantel Mouffe's (2000); (2013) work on agonistic pluralism. To allow allegiances to democracy and challenge the hegemony of neoliberalism, individual passions and emotions must be expressed. The antagonistic embraced and given space to develop into agonistic conflict. Where there is mutual respect for differing opinions and no call on finding consensus. From this position, it is then possible to gain meaningful participation and challenge established systems of power. Critiques of the approach question the weak procedural framework that

Mouffe (2013) offers to uncover power. This needs further development by planning theorists, if it can support the daily practice of planning.

The contradictions and meanings assigned to the definitions of participation are discussed using Arstein's *Ladder of Participation* (1969) to uncover power within the practice of participation. Critique of her ideas means her ladder has evolved overtime. Definitions of community development and active citizenship, and how they engage in a neoliberal system is explored. The UK example of localism through Parish Councils is discussed offering examples both emancipatory and controlled. Consideration to participation in environmental management and an examination of the UK Development Control as a space for agonistic pluralism explored.

The chapter ends with a reflection on how the analytical framework will shape the research and support the development of the research strategy detailed in Part Two, Chapter Five.

4.1 Deliberative Democracy

In post-war UK, planning theories for governance through representative democracy shaped planning policies that were comprehensive, technocratic, centralised and rational. This reached its peak in the 1960-1970s, when power relations and the economic dynamics inherent in planning were critiqued by theories of *political economy* or Marxist planning. Planning's raison d'être, was not the common good, but planning was a mechanism of capitalism, handled by the state. Society is a diverse network of needs, values and interests and a centralised and over bureaucratic state was ill-equipped to deal with crisis or conflict that arose because of that diversity Allmendinger (2002); Healey (1996). However, planning theorists found political economy weak on providing a normative framework from which to develop planning theories on how to connect with diverse groups and gain consensus for planning outcomes (Allmendinger, 2002: 182).

Theorists seeking new solutions, turned away from representative democracy and towards deliberative democracy, based on Jürgen Habermas' (1984) philosophy of communicative rationality, whereby groups can negotiate through rational communication. By inclusive debate, consensus is found which results in better decision making, increased trust in governing institutions and better civic participation. There are two main schools of deliberative democracy one influenced by Habermas and the other by John Rawls (1921-2002), the American political philosopher. Both agree that liberal values should be at the centre of democracy and that individual rights and collective formation are not contradictory. Both agree that legitimacy is found through rational public debate. Where they differ; is in Rawls' focus on the principles of justice and Habermas concentrates on limitless deliberation, where agreement is replaced with rational consensus Mouffe (2000).

Mouffe (2000) recalls Benhabib (1985), to describe the features of the Habermasian discourse as participation that is accessible to all, and governed by the norms of equality. That all have the right to set agendas and define the way discussion will be carried out. If these conditions are met then 'ideal discourse' is found which offers an equal, open and impartial process which avoids coercion and results in consensus and so legitimacy. (Mouffe, 2000: 5-6). Agreement is valid because of its 'comprehensibility, truth, truthfulness, and rightness (Habermas, 1979: 3)', quoted in (Hillier, 2003: 39). Allmendinger (2002) elaborates by describing Dyrzek's (1990) practical application of Habermas' ideas. The ideal speech validity claims are critiqued as not existing in the real world, instead existing in everyday individual communications. Which can be used as a basis to create consensus and understand power mechanisms. Space in the public sphere to understand the machinations of social and political power can only occur if people can experiment with creating their own political processes. There can be no restriction on participation processes. Those processes of 'resolution, conflict, mediation, reasoned discourse, consensus and fluidity' can exist without formal structures. Organisations such as social movements can use these spaces and processes, but are likely to be compromised by the system once

they become more politicised (Allmendinger, 2002: 189-192).

With the work of Habermas, communicative and collaborative planning theorists also looked to the work of Foucault, the French philosopher (in the 1980s) and Giddens, the British sociologist (in the 1990s), to challenge the dominance of the rational planning paradigm. Foucault's work examined the meanings and power relations embedded behind language and Giddens evaluates the ways members of society interact through networks of social relations Allmendinger (2002). In trying to apply communicative rationality to planning, theorists developed two key planning theories: John Forester's communicative planning model, *Planning in the Face of Power* (1989) from the US and Patsy Healey's collaborative planning model, *Collaborative Planning: Shaping Places in Fragmented Societies* (1997); (2006) from the UK.

4.2 Communicative and Collaborative Planning Theories

Forester's (1989) communicative planning model, combines communicative action with a reworking of advocacy planning to provide the progressive planner with a way to identify 'misinformation'. To understand who sets agendas, the 'self-conceptions' of the involved actors and how that is used to preserve power (1989: 44-46). He calls for planning and planners to move from the technical expertise of the bureaucrat towards the ethics and equalities of a social activist.

Healey's (1996) collaborative planning model, recognises that knowledge is socially constructed and communicating that knowledge can take many forms. Social contexts inform interests, that those interests are diverse and that public policy needs to take account of the context and allow space to confront or adapt social relations. This is achievable through processes of collaborative consensus building Healey (2006). Healey (2006) offers an alternative approach to socio-economic and environmental developments through collaborative planning. Her ideas originate in the concepts of social

inclusion, with communities having a voice in the decision making. She analyses the patterns of social relations and how institutions adapt to social change through its policy and planning agendas.

Employing Habermas' ideas, planning theorists such as Innes and Booher (1995) call for a 'collaborative paradigm' a shift towards an inclusive adaptive model of communication, learning, action, policy, interests and citizenship (quoted in Brownill & Carpenter, 2007: 403). Innes and Booher (2010) argue that collaborative planning leads to collaborative rationalities that support action for individual and collective learning which creates resilient communities. They concentrate on how the collaborative processes perform, and if done well, then 'opportunity to discover new mutually beneficial options' become clear (2010: 9-10). Involvement in collaboration processes can lead to wider system change as participants extend the experience of collaboration to other contexts.

Bond (2011), uses the term communicative planning to encompass collaborative, deliberative, argumentative and communicative planning. (2011, 164). Collaborative planning has become the paradigmatic planning theory because it is considered the most democratic form of decision making. The Habermas' 'ideal speech situation' (1984: 177) offers an arena to place power relations in a blacked-out box at the centre of a round table. Each participant has equal opportunity to contribute to the debate, if you empathise with other arguments. Free of direct influence ('distortions', because they have been placed in the black box) agreeing that any decision is based on the achieving the common good. However, how is the common good defined and by whom? Is there agreement that common good is the aim of decision making? (Bond, 2011: 165) Communicative planning theorists, understand that this is an ideal, but it offer the chairs, of theory and practice, for participants to sit at the round table (Purcell, 2009).

The aim of communicative and collaborative planning is to place communication and participation at the centre of planning practice Brownill & Carpenter (2008). This offers planners involved in public participation 'a

critical role not least because planning is a matter of executing formal and informal power' (Brownill & Carpenter, 2007: 408). This extends to the public and not just to elected members. However, the Habermasian communicative rationality approach to planning, for example, by Healey's theory of collaborative planning, has attracted critiqued since its publication. Allmendinger & Tewdwr-Jones (1998, in Healey (1999b)) argue that consensus is not desirable in a postmodern world of diversity. That theory, practice and value have undermined the Habermas position resulting in collaborative planning being no more than heightened participation. They continue to evaluate how consensus cannot be found if stakeholders hold different power over the process of participation. The process relies on 'truth, openness, honesty, legitimacy and integrity' (the five types of validity for Habermas 'ideal speech' translated by Allmendinger and Tewdwr-Jones (1999b: 1981)), but stakeholders have their own agendas. The professional planner works within existing power relations based on independent autonomy and professional judgement; to ask for true collaboration means to de-professionalise the planner. For non-professional stakeholders, collaborative planning assumes all have the same knowledge as the professionals, which they argue is not the case.

The critiques of communicative and collaborative planning theory working from a Foucauldian perspective, highlight the processes of dialogue can be subject to distortion and ignores existing inequalities and complex power structures Bedford, et al. (2002). Many critiques focus on consensus through participation, as naïve and utopian for not considering operations of power. Flyvbjerg's (1989) Aalborg case study, uncovers a willingness by actors to aim for consensus through participation. The result is a 'distortion of communication', a 'masking of the operation of power' with powerful interests eventually met (Brownill & Carpenter, 2007: 403). The theories critiqued as a method to support global neoliberalism. Participation offers the accessories of democracy, but the suit and boots of economic and political decision making, remain the other side of the shop window. Participation used to offer an illusion of wider engagement when in fact it limits

democratic involvement Brownill & Carpenter (2007). While supporting vested interests and results in oppression and alienation.

Brownill and Carpenter (2007) consider Albrecht's incorporation of a 'strategy of power' (2003: 920) as a starting place for planning practice, the operations of power must be recognised. They use the term 'hybridity' (2007: 405) to define different interacting forms of democracy. Representative; consultation informs an elite on public opinion to give weight to decision making. Deliberative; stakeholder discussions and information dissemination that creates trust between governing agencies and the public to support decision making. This causes confusion about the sources of power and how that impacts on the quality of the participation Brownill & Carpenter (2008). Deliberative democracy swerves the hidden complexities of inequality, diversity and codified institutional power structures and normative governance cultures Brownill & Carpenter (2008), Leino & Laine (2011).

4.3 Agonistic Pluralism

Mouffe (2000), (2013) takes the Habermas critique into the postmodern. She reminds us that deliberative democracy is not new, it is how deliberation is undertaken and who shares in that deliberation, that has changed over time. She suggests that democracy, instead of seeking hegemonic consensus politics, should give space to differing and contradictory discourses in the political world to ensure real choices about clear alternatives; this she calls agonism. She puts forward a model of radicalised democracy called agonistic pluralism which understands that antagonism cannot be removed and inclusive rational consensus is impossible Mouffe (2000). The hegemony of neoliberalism has two strands of opposition: a 'withdrawal from institutions' by social movements or 'exodus' and an 'engagement with institutions' by 'dis-articulation and re-articulation' (Mouffe, 2013: 65-77). That is a transition from one hegemony to another without deserting the institutions of democracy.

Mouffe (2013) contends that radical politics wants transformation of the institutions of democracy from within and outside its structures to 'extend the principle of equality to as many social relations as possible' (2013: 75). This in turn uses agonistic engagement with those institutions to challenge the current hegemony of neoliberalism. Agonistic pluralism, in democratic politics transforms the 'enemy' that must be defeated into an 'adversary' who we challenge. It includes emotion and passion in democratic values (Mouffe, 2000: 10). We may even find temporary compromises, but ultimately, we defend the right to hold opposing views thus legitimising conflict and refusing its suppression. Mouffe (2000), continues that without agonism, confrontations will bleed into other forms of collective identity and an overemphasis on consensus will result in an apathy towards political participation. 'The idea that power could be dissolved through a rational debate and that legitimacy could be based on pure rationality are illusions, which can endanger democratic institutions.' (2000: 17)

Political institutions see agonism as antagonism because 'underlying the idea of public participation is the presupposition that people are consensusdirected' (Pløger, 2004: 77). That consensus strategies can be 'forced through' with partnerships, contractual arrangements or forms of bureaucratic systems (Pløger, 2004: 78). However, Pløger (2004) suggests, this is a way of exporting the controversial and the contentious questions that challenge power or support social justice within democratic institutions to communities to solve for themselves. Mouffe (2000), questions whether rational consensus should be the goal of democratic processes in the first place as it is 'incomplete and involves exclusion' (Bond, 2011: 167). The belief that consensus is found by tempering power could prevent any opposition before the processes of debate (Bond, 2011: 168). A healthy democracy, is one that views the safe expression of conflict as an essential part of political engagement McClymont (2011). Agonism explains the world is political, that political ideologies are expressed through discourse. Any discourse will promote its own ideology over another to win legitimacy within a competitive

space. However,

'the art of the game is not to dominate an opposing actor, but to anticipate and exploit its interventions, and thus to make one's own intervention of (counter)-strategies (Foucault, 1994: 238)' quoted in (Hillier, 2003: 42)

Agonistic pluralism as an opportunity for planners to be innovative and creative in using conflict to radicalise planning practice Bond (2011). It is this ability to use conflict as a political resource to change established power structures that offers democracy; and not in finding consensus. To enable antagonism to become agonism there needs to be mutual respect between adversaries to express opinion, but also respect from participants for the democratic principles of 'liberty and equality' (Mouffe, 2000: 102); (Bond, 2011: 170)

A privatised state is considered democratic because of formal and devolved participative decision-making strategies, yet that power is limited to decisions made within an embedded neoliberalism. The response is an emergence of counter-hegemonic challenges to that authority. (Purcell, 2009). In turn, neoliberal projects offer sweeteners to dissent and accept a negative impact on profit levels, through participation (seen as 'legitimate democracy'); to retain power and resist change to the hegemonic fabric (Purcell, 2009:147).

'What the neoliberal project requires are decision-making practices that are widely accepted as 'democratic' but that do not (or cannot) fundamentally challenge existing relations of power. Communicative planning, insofar as it is rooted in communicative action, is just such a decision-making practice.' (Purcell, 2009: 141)

Purcell (2009), critiques communicative and collaborative planning theory as unable to transform power relations, as it is one of the mechanisms of participation used to support the current features of political-economic activity. Communicative planning theories and its marriage to, or abduction

by neoliberalism, has meant it too has become hegemonic within planning theory and practice (Purcell, 2009); (Fox-Rogers and Murphy, 2014).

Critiques of the communicative turn in planning argue that 'language and communication, the centrepiece of the communicative project, cannot be neutral, fully shared, and an undistorted medium. Rather language is always political; distorted by power, and those distortions establish hegemonic relations among participants' (Purcell, 2009: 150). Mouffe (2000), asks us to not only make the black box at the centre of the table, transparent; but to unpack it and examine its contents. Participants will disagree about how to open the box and what is within it, but all have the right to be at the table. It is this disagreement or conflict that causes a game of musical chairs; relationships change and diverse counter-hegemonic challenges are embraced (Mouffe, 2013), (Purcell, 2009). These diverse social movements, for example, anti-austerity measures, or tackling climate change; each with their own identity and aims, are strategically united in challenging the power that are oppressing their values (Purcell, 2009).

When political antagonism is managed the post political argues that it is not eliminated but instead reformed and re-emerges as different types of political protest, social movements and direct action (Inch, 2012). This is evident when the space of conflict is local and close to the proposed development. Emotions and passions about values (subjective beliefs and feelings) towards local environments, will garner mobilisation to provide an opposition.

'Reclaiming power through political mobilization is our best hope for creating more democratic, more just, and more civilized cities. But it requires that, with Laclau and Mouffe, planners consciously take up the hegemonic struggle against neoliberalization, rather than trying to paper it over with dreams' (Purcell, 2009: 160)

There is tension in planning between the ideal and reality, where stakeholders may not want to participate and do not contribute to the process (Mouffe's 'exodus'). Or participants are experienced in working in a conflictual culture Hillier (2003). Planning decisions are often pragmatic ones born of negotiation and compromise rather than rational consensus. Hillier (2003), argues there may be no benefit acting communicatively if strategic power plays and manipulation of information can have more effective results.

Brownill and Carpenter (2007) move beyond the theoretical dichotomy of participation 'as essentially emancipatory practice within a communicative and collaborative framework'. Or interpreting participation as a 'new tyranny' to preserve the status quo of those with power (2007: 401). They provide an understanding of the operation of power. They place the rationalities of power within a context of place, the history of participation, political and policy culture to identify any distortions within the operation of power. They identify the instrumental (technocratic), deliberative (participatory) and transaction (agonism) rationalities of power and explain that agonism can unite the instrumental and deliberative power structures.

Context of Place Hierarchical Decision Making Towards Instrumental Rationality Conflict Consensus Towards Deliberative Towards Transactional Rationality Rationality Participatory Decision Making **Operations of Power** Deliberative: Breaking down of 'us and them', Transactional: Narratives, diversity, Instrumental: Technical language, experts. stakeholder involvement, search for consensus. fessional control, 'token' consultation. Linked cognition of conflict, agonism. Linked empowerment of participants, outcomes reflect to informal. Based on counter publics and variety of interests. Linked to participatory decision making and Based on networks and flows of power to hierarchical representative decision making. Based on formal authority and managerial power citizen power Context: Place, history of participation, local political culture, policy context. Operation of power, distortion of intentions by operation of power

Figure 10: The Dynamics between Rationalities of Power

Source: (Brownill & Carpenter, 2007: 408)

In planning, Brownill and Carpenter (2007) found that although local planning tried to promote deliberative and participatory democracy, it was working within a local government authority that performed through representative democracy. Where eventually decisions are made by the elected members supported by planning officers constrained by efficiency efforts, resource limits, access to appropriate participation methods and techniques and a disengaged public. The writers view agonism or 'transactional rationality' as a method to combine competing rationalities, of embracing conflict and of fostering social learning' (Brownill & Carpenter, 2007: 406).

Bond (2011) argues against a hybrid theory of a combined agonistic and communicative democracy in planning. If Mouffe's (2000) agonistic pluralism if not taken in context of her wider understanding of hegemony, power and the political, (see Laclau & Mouffe (2014) Hegemony and Socialist Strategy (1985), which build on theories of hegemony and discourse). Then agonism, like communicative planning could also support existing power structures rather than challenging them. Bond (2011) suggests, that if planners are to shape agonistic debate to gain democratic decisions; then a normative framework is needed. Although social justice, reciprocity, liberty and equality exist at the heart of agonism, which can be developed. She assesses the weakness of Mouffe's (2000) framework lies in how to gain a democratic decision in a space of conflict? As Mouffe offers little in the way of procedural solutions, which would be of benefit to planning theorists in working her ideas in to planning practice. Agonistic pluralism offers a framework to analyse identity, social relations, history of the location and alternatives. But what methods can uncover power relations and create a space for a 'counter hegemonic projects'? (Bond, 2011: 175).

4.4 Participation

Defining participation is a common concern for planning. Words such as engagement, consultation, empowerment, community development, involvement are used interchangeably. The objective of participation lacks clarity. Is it about increasing the number and diversity of participants or improving the quality of the decision making; is it about a process or a product? Brownill & Carpenter (2007b). Connelly (2010) views public participation as a placard holder for differing agendas. As a means for the public to improve their lives, to achieve political change through empowerment of marginalised groups and finally a channel for achieving social justice. However, central to the neoliberal agenda, is a perception change, away from the common good and collective responsibility, towards individualism and self-help (Connelly, 2010: 335).

4.4.1 The Participation Ladder

The connection between power and participation in planning practice, by the American Urban Planner and Community Development worker, Sherry Arnstein (1969), was expressed in an influential typography. The concept uses the metaphor of a ladder, for power achieved through citizen participation. Figure 3.1, *Arnstein's Ladder of Citizen Participation* adapts her ladder into a pyramid to show how citizen engagement is mainly tokenism, or not participation activity.

Partnership
Placation
Consultation
Informing
Therapy
Manipulation
Citizen Power

Partnership
Placation
Tokenism

No Participation

Figure 11: Arnstein's Ladder of Citizen Participation (1969)

Source: Own design (2015), Adapted from Arnstein, (1969: 218)

The *no participation* rungs at the bottom of the ladder mark a distribution of information posed by those in power as a vehicle for participation. *Manipulation*, is the engineering of support, through educating participants and in return receiving approval. *Therapy*, she links to work done by professionals, to those with mental health issues because of racism or victimisation, offering group participation work to afford a sense of power.

The centre of the ladder offers methods of *Tokenism* through techniques of consultation; that is, the powerless have a voice, but no power to enact those views. *Informing*, is a one-way flow of information from those in power to those that participate. *Consultation*, is informing but with views considered in the decision making. The *Placation* rung offers a decision-making role but not the power of veto. The top rungs of the ladder equate to increased levels of decision making. *Partnership*, is for when power is negotiated and decision making is shared. *Delegated power*, is when increased power is negotiated to allow citizens groups to have power of veto. The top rung of *Citizen Power*,

where the powerless through participation, have full managerial control through developing policy, the power of veto and the control of budgets (Arnstein, 1969: 218-219).

Arnstein (1969), confirms that this is an oversimplification of power, but she designed it to picture the missed graduations of control and access to decision making in achieving meaningful participation. Her work critiqued over the years for its hierarchical form, with one-way vertical movement, missing rungs and lack of relationship to other ladders in a context Tritter & McCallem (2006). The lack of understanding of the process of participation and the nature of a policy that will have an impact on the participation process itself. Participants do not have defined roles and responsibilities that will emerge from the process, rather than whichever rung of the ladder they may be on (Collins & Ison, 2006). Or for not recognising the choice for the powerless to self-manage through setting up cooperative models (Choguill, 1996). And overall, the criticism the model held an implicit message; that more control, is what communities want to achieve.

4.4.2 Evolution of the Participation Ladder

Nevertheless, Arstein's ladder has aided in shaping the understanding of power behind the definitions of participation. By the 1990s, Burns et al (1994) had reimagined Arstein's ladder as a *Ladder of Empowerment*, to encompass participation as a marketing and public relations exercise, where control is given and not gained. Explaining the difference between meaningful and sceptical engagement Dhassar (2013); CAG, (2013). At a similar time, Wilcox (1999) was developing a practitioner's guide to effective participation for the UK's regeneration professionals. Arguing that 'community' is not a homogenous group (Burns, et al, 1994) and engagement can occur over many levels and different timescales. In the 2000s, an understanding had emerged, that within the process of engagement, there was a blurring between the definitions of consultation and participation. Roberts (2002) contrasts consultative and participative process models in

figure 11, Consultative and Participative Models of Engagement.

Figure 12: Consultative and Participative Models of Engagement

Consultative Model	Participative Model		
Persuasion, dissemination of information	Increased direct involvement in decision-		
and public education at various stages of	making, which builds a sense of ownership		
the cycle but not in developing and	for the decisions and ensures a non-		
assessing	confrontational approach to		
Advisory	Non-directive		
Static	Empowering		
Controlled	Uncertain		
Prescriptive	Evolving		
Orchestrated	Innovative		
Directive	Shared		
Fixed or Rigid	Dynamic		
Company Accountability	Mutually Accountable		
Methodological and Linear	Flexible		
•	Spontaneous		
	Creative and Participatory		

Source: Roberts, R. in Becker & Vanclay (2002:258-277)

By 2014, the International Association for Public Participation (IAPP) developed Arstein (1969), Burns et al (1994), Wilcox' (1999), and Roberts (2002) into a continuum of participation, with their Public Participation Spectrum showed here in figure 12 *IAPP Spectrum of Public Participation*. This is set within an internationally agreed framework of core values for public participation and offers a set of promises, a contract, between the public and policymakers and project deliverers:

The IAPP Spectrum of Participation, will be used by the research to create codes to analyse the data collected from the Recovered Appeals, wind developers and action groups in chapter six and seven and the case studies in chapters eight and nine.

Figure 13: IAPP Spectrum of Public Participation

	INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER				
PUBLIC PARTICIPATION GOAL	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions	To obtain public feedback on analysis, alternatives and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision making in the hands of the public.				
	Increasing Impact on the Decision								
PROMISE TO THE PUBLIC	We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision. We will seek your feedback on drafts and proposals.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will work together with you to formulate solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.				

Source: (IAPP, 2014: 4)

4.4.3 Community Development and Active Citizenship

The word *community* has its origins in English, from the 14th century, with dual roots: libertarian individualism and communitarian cooperation (Shaw, 2008: 25). It is a social construct that does not need to be local or of a place. It can be communities of interest (for example; religious, political, cultural, occupational) exist both locally and internationally (through the Internet). Like community, *community development*, has dual foundations in paternalistic welfarism and autonomous class struggle. Shaw (2008), contends that it is this contradiction that expresses *community development* through either method for social inclusion within the current power structures (thus manageable, by the state). Or creates social mobilisation to change current power structures (thus unmanageable, by the state) (2008: 32); (Bunyan, 2010: 122). Community development viewed as a mediator between state and community, it can uphold the status quo, or it can create space for collective identity or dissent.

'Precisely because of its diverse provenance and ideological elasticity it is possible to forget that community has virtually become a political category in itself — a means of distinguishing the 'deserving' from the 'undeserving' in policy and practice; acting as an alibi for the-hollowed out decentralized state' (Shaw, 2008: 34).

Bunyan (2010), views community development as suffering from a lack of resources and government support. Any radicalism and capacity to hold the state accountable, is diluted by target led, partnership working and performance managed professionals. Bunyan (2010) warns that community development and or action is at a 'critical juncture', at risk of being subsumed by the power structures that it should be challenging (2010: 125); (Scott, 2011: i71-4). How the community to be consulted is defined and the methods used to engage, can contribute towards exclusion of the public and embed support for established power structures (Brownill and Carpenter, 2007).

Community development is a two-way process, for it to work it needs active citizens. Kenny (2011), describes four ideal types of active citizen:

- Maintenance of existing power structures and relationships, a
 paternalistic approach to support community cohesion, through
 charitable and altruistic acts;
- Individualised self-help, supporting the striver and the aspirer, a
 neoliberal approach, for self-motivated entrepreneurial citizens,
 "doing it for themselves";
- Defensive opposition, citizens that work within existing (unequal)
 power structures to defend or resist existing or potential resources and relationships or oppose change; and last,
- Visionary, proactive citizenship which challenges existing power structures and values by proposing alternative futures. These four ideal types are fluid positions and the active citizen may experience each at different times (Kenny, 2011: i9-i10).

However, Burkett (2011) warns that just because neoliberal approaches have effectively 'trammelled' community development, we should not reject market solutions for alleviating poverty, encouraging empowerment and gaining social justice. The complexities of hegemonic structures mean the response cannot be either for or against neoliberalism. Instead an understanding that personnel and communities living and working within such structures will adopt many positions to engage with the system.

4.4.4 UK Localism

Parish or Community Councils established as long ago as 1601, and so have a long providence in the UK (Morphet, 2008: 129). The Local Government Act (1894), offered a legal framework, which was extended in the Local Government (Miscellaneous) Act of 1976 (Anderson, 2008: 287). Following from the Skeffington Report of 1969, which stressed the need for the public involvement in planning. Local authorities were required to be proactive

about engagement and there were many types of public Allmendinger, et al. (2000); Brownill & Parker, (2010). This broadened through the Local Government and Rating Act (1997) part of which, enabled Parish Councils to have a wider role in consultation and neighbourhood governance. This was a response to the democratic deficit in low voter turnout Morphet (2008), because of a dissatisfaction with representative democracy and a support for bottom-up participatory decision making (Stewart, 2000). The Coalition government (2010-2015), continued decentralising community governance and planning, through the Localism Act (2011). Today local councils can be community, neighbourhood, parish, village or town councils with statutory powers at the first tier of local government. In England, there are 9,000 local councils 'representing the local community; delivering services to meet local needs; striving to improve quality of life and community wellbeing' (National Association of Local Councils)³.

Anderson (2008) puts forward a tension between local planning authorities with pro-growth agendas and local parish councils preserving place identity, use of local knowledge, conservation and no development or change objectives. Which, Anderson concludes, leads local communities to experience a 'disconnect' from the planning system (2008: 291).

'When local knowledge conveys the emotional and community connections of individuals and places, the planning system fails to recognize or exploit it. This knowledge fails to register because it not only complicates the process of statecraft, but also tends to question the applications for development under consideration. In these cases, the values, interests and epistemologies of those at the local level are seen to come into direct conflict with both the theoretical and practical values of those of the planning system.' (2008: 296)

³ available at http://www.nalc.gov.uk/about-local-councils)

As neighbourhood planning, has changed, the responses to securing local involvement has developed from breaching the democratic shortfall by uncovering hidden communities and engagement of 'hard to reach' communities through empowerment processes. To 'consultation fatigue' where communities have been overloaded with requests for their involvement and sharing of opinions. To one where once views are surveyed expectations raised, need managing, as wish lists for developments remain unfulfilled. (Parker, 2008: 62)

Brownill and Carpenter's (2007) research into participatory approaches in Oxford found a coalescence of approaches, dynamics, rationalities and strategies that perform within an 'uneasy coexistance'. Which they argue is dependent on context of place and power relations, so will differ depending on the arena and prevents a 'prescriptive framework' for analysis (2007: 423-424). However, they go on to emphasise that this acknowledgement of power relations does not need to be negative, ending in conflict. If participatory approaches are positive for the participant and this links to theoretical planning logic, then this can rebalance the power dynamic to ending in empowerment. They support a flexible understanding of power so the reality of practice informs the discussion rather than a normative framework designing what planning should be. But power still needs to be unpacked at all levels of interface, in doing this through participation, it can support the 'emancipatory' practice of planning by first understanding its limits (2007: 425).

Bedford, et al (2002) research on public participation practices in local spatial planning found there were limits to the distribution of political and economic decision making by local groups in UK planning. The absence of legitimate and diverse public representation, the lack of transparency, perception of fairness and a separation of arenas for debate. Resulted in consultation between public, developer and local council occurring in one sphere and objections to developments occurring though development control. Thus, missing the point of 'negotiating' within participative decision making. (2002: 325)

Brownill and Carpenter (2007b) try to find a path through the dichotomy of 'planning's darkside' and communicative planning's 'normative optimism'. By building local capacity to understand who and how the 'publics' are defined and the techniques used to support participation (2007b: 632). They debate the motives behind the increased support from the state (on an international scale) towards public participation. They view a spectrum of reasons from a genuine wish for legitimacy, to a neoliberal sharing of the 'burdens of the state' within a plurality of interests and differing democratic and governance contexts. This they call a 'post-collaborative' planning phase (Brownill & Parker 2010: 176). They draw on Arstein's (1969) work, but call for a furthering of the analysis on how stakeholders 'negotiate' around the issue of power. This they argue is essential if the gap between practice and theory in participation in planning is to be bridged Brownill & Parker (2010).

To work through the contradictions, Brownill and Parker (2010) suggest viewing participation as episodic; that is to check the complexity and differences of participation as it occurs. This way conflict and conflict mediation becomes part of engagement strategies for local governance, rather than seeking consensus as the reason for participation. The authors highlight the increased use of online content, social media and Geographic Information System (GIS) visualisations as creating new spaces to explore these contradictions and increase the reach and legitimacy of engagement strategies.

4.4.5 Public Participation and the Environment

Critique of rationalism, include its autocratic nature, the exclusion of public participation, the lack of consideration of inequalities, its lack of integration of social and environmental impacts and its overemphasis on technical and scientific knowledge (Lawrence, 2000: 610). EIA critique is for similar reasons such as its technical bias, authoritarian nature and lack of understanding of planning as a political activity. However, the influence of pragmatism ('bargaining and negotiation among interests' (Lawrence, 2000: 616)) and communicative planning theories can be seen to support the

strengths of EIA with its methods for public participation, education and consensus decision making (Lawrence, 2000: 617). Lawrence (2000) suggests the negatives of EIA can be managed using a partial integration of theories. Or a 'more appropriate model would be critical (conducive to evaluation and comparison) pluralism (different paradigms can and should coexist)' (2000: 619).

The lack of rationale for increased public participation or the absence of analysis of the multiple objectives for public participation and how those may interact within EIA, advanced by O' Faircheallaigh (2010). He also queries the exclusion, and to what end of potential benefits. He reminds us that 'in the real world of public policy decisions, the issue of public participation is contested and highly political' (2010: 20). This could also be true for practical application at project level development decisions. He highlights an assumption that through public participation, the quality of information for decision makers is improved, but that occurs independently from public participation being used as a tool of community empowerment. He revisits what empowerment could mean for decision-makers locally. If it is a redistribution of power, then what is the response from those currently with power, likely to be? Glucker et al (2013), undertook a literature review to analyse public participation in EIA. They found much debate over the meaning of public participation, of what it entails, what its objectives are and who should be taking part. They attest that for participation in EIA to be effective it must include an understanding of the diverse values and perceptions of the host community. Not only who, why, how and when participation occurs, but also question if those that participate are the most suitable to decide in the name of the common good (Salomons, et al. 2013). Communities have lost their trust in authority. The pressure of efficiencies and streamlining of environmental assessment and the power of wealthy and organised pressure groups who can afford expert witnesses and expensive legal teams. Results in overriding majority opinion for minority views Salomons, et al. (2013).

Conflicts locally can be a gateway issue for conflict with national level policy, plan and project interventions. And in reverse, national governments are finding it challenging to balance devolution with strategic oversight and control when necessary Gallent (2008). This is obvious in rural areas in England, where the countryside embodies an 'in situ ideological division between the proponents of further development, advancing an economic rationale, and defenders of the existing landscape, who argue a case for preserving the openness and character of rural England' (Gallent, 2008: 311). In England, countryside planning is grounded in conservation and protection of the natural heritage. At the same time, local communities, economic interests, environmental objectives and place identities all have diverse views on how local rural resources are managed. When local communities conflict with the state, it is not just a reaction to neoliberalism, but also heralds an increase in methods of direct action to ensure inclusion in the decision making. Geoghegan and Powell (2009), contend that this proliferation of forms of participation is a reaction to the roll back of the state, and the increase in voluntarism. Added to this is imposing austerity measures in the UK, the growth in the use of social media as an organising and distribution of information.

Wolsink (2012) reminds us that social acceptance of wind power, is not just about the deployment of a new technology but also a change how 'sociotechnical system of power supply' has been organised (2012: 83). The current system of energy production, generation, distribution and supply has been designed for institutions using fossil fuels. He states, 'institutionalized technocratic thinking is behind all bottlenecks to accepting RES' (2012: 83). He highlights the lack of understanding between social acceptance and finance institutions, as the latter is one of the key decision makers on a new development. He asks for a fuller understanding of the relationship between investment decisions and social acceptance (2012: 84); (Wüstenhagen et al. 2007: 2686). Does a bank reject investment if social acceptance is likely to be negative, and how is this qualified? Does a community and other agents support a development because it has investment support? To what extent is

or should a bank or investor be liable for conflict within a community because of a development they have funded? How much communication from a host community is directed towards the funder rather than developer?

The development of a wind farm is a political decision requiring sociopolitical, community and market acceptance. That is, the sociopolitical acceptance of technologies and policies by the public, stakeholders and policy makers. This needs to include any disconnect between national and local policy objectives and the level of government financial support mechanisms, such as subsidies; the community acceptance of procedural and distribution justice affecting trust, the influence of international networks through social movement campaigns and the lessons that can be learned from the global south, local ownership models and the market acceptance from consumers, investors and intra-firm trade, how do actors such as engineers, project managers, architects influence market acceptance? And why do customers buy renewable energy? Wüstenhagen et al. (2007).

To what extent can the motivation for buying renewable energy (market acceptance from the consumer) be a driver for social acceptance? That is if you can source your energy supply from renewable sources and it is considerably cheaper than traditional sources, would you as a vocal opponent to wind energy in your area, purchase electricity from a nearby renewable source? This multiple interaction of acceptance led Wüstenhagen et al (2007) to question,

'who is the investor? Is it an outsider? Is the initiator an actor from within the community? Does the local community have significant influence in the process? Is specific local, tacit knowledge used or is the community only expected to say "yes"? If locals can be involved in either the process or the investment, does this apply to all or not? Moreover, who decides about that?' (2007: 2686)

They emphasise that the answers to these questions are compounded if the investors, developers and operators are outside of the community. Trust building will then take account of the mission, objectives and skill of the

Wolsink (2007) advises to avoid investigating the reasons people object to wind farms and instead build institutional capacity for renewables through collaborative planning mechanisms and building on social capital. However, at the start of the planning process, the alternative options appraisals in the EIA is poorly assessed for onshore wind farms. Instead a location is selected and consultation then occurs (2007: 2702). This serves to antagonise local groups regardless of any opinion towards wind energy developments. Assessment of alternatives, different sites, has been identified as a weak area within EIA, which in terms of small to medium sized wind farms, can be attributed by differing extent to: business sensitivity; land ownership; cumulative impacts; wind supply; proximity to residential, historic or designated landscapes and arguably the option to veto a proposed development or opt for an alternative development that the wind developer is unable to supply, for example hydro power.

Jami and Walsh (2014) contend that quality participation in the case of wind energy is still a challenge. If poorly managed then the participants' credibility is at risk, power imbalances between participants create bias, expert knowledge can be overlooked, resources required for participation can threaten project implementation; those traditionally with decision-making power lose that control and increased conflict between communities and governments can occur as previously approved back room decisions made by local authorities are challenged or do not materialise (2014:197).

4.5 'Agonistic Encounters' in Development Control

Neoliberalism and spatial planning is more evident in the UK than elsewhere in northern Europe, following its introduction in 1980s, its implementation in the 1990s and its outcomes of the 2010s (Allmendinger, 2011), (Olesen, 2014: 289). The removal of politics from spatial planning by 'presenting a

logic of no alternatives' (Olesen, 2014: 291). In UK practice, this has ended in the removal of spatial planning at a national and regional level for Localism boundaries, thus removing a valuable space for deliberation of the contentious. Olesen (2014), continues that normalising neoliberal discourse has contributed towards widening the gap between spatial planning theory and practice. Removal of the strategic spatial planning, debating arena; supports the circumnavigation of formal planning structures and reinforces the neoliberal status quo (2014: 298-299).

The Localism agenda in the UK is focused on participation in planning, offering local empowerment by decentralising decision making to urban and rural neighbourhoods. It aims to allow participative policymaking within a forum of dissent towards any potential controversial development. Introduced by the Coalition government as a corrective response to the view that a centralised, excessively bureaucratic planning system, was excluding potential voters. By creating an NIMBY narrative (see section 3.1.1) for any opposition to development. This in turn was alienating business interests concerned with economic growth. The focus on planning as the problem, which needs reform, hides any debate about the suitability of a continuous growth model (Inch, 2012). Reform of planning closes avenues like *development control*, to be spaces for conflictual debate.

'Planning, too, has long stood accused of acting as a mechanism for depoliticisation, masking value-based decisions in rational-technical or professional justifications as a means of defusing conflict and imposing development without fully examining its social or environmental consequences' (Inch, 2012: 523).

McClymont (2011) discusses the role of development control in the English planning as a process that legitimises adversarial debate. This is contradictory to a planning system based on consensus decision-making for capital developments. Development control is based on discretionary power with every local planning authority producing a spatial development plan for their areas. All planning decisions are made regarding the development plan,

which informs the neighbourhood plans. Usually, the decision-making is delegated to planning officers unless a specific application is considered significant or controversial, this is then considered by the planning committee which is served by local elected representatives. This system allows for the applicant to appeal against a refusal.

McClymont (2011) argues dismantling development control by its focus on performance targets and administration, is in parallel to promoting consensus as the optimum way to achieve participatory decision-making. Disempowering it as a space for discussing different opinions. She contends there is an underlying assumption about conflict within participation, being negative and this is personified by the NIMBY. Legitimate debate is stifled because opposing voices are labelled self-interested rather than part of the consensus seeking paradigm. Agonism, offers legitimacy to opposing voices that also want to take part. Development control and the public inquiry system can provide the space for agonistic debate. As planning decisions are political ones, development control can provide a 'structure for political dissent in a context of post political neoliberalisation (Cowell & Owens, 2006)' (McClymont, 2011: 246).

'It is a public display of the fundamental principles of the system: a debate about right and wrong outcomes for a given place argued by legitimate adversaries in scenarios where agreement is neither possible nor desired.' (McClymont, 2011: 247)

Public inquiries legitimise opposition, as all opposing groups participate, which McClymont (2011), argues prevents vested interests in shaping the debate. A decision formed through consensus does not mean it is any more inclusive than opposing views in an agonistic arena (Purcell, 2009). It does raise the issue of the 'value' of the development control and public inquiry system as a legitimate agonistic decision-making space. (McClymont, 2011: 254)

However, Ince (2012) found mobilised opposition towards large-scale

housing development in Wolverhampton in the UK, was depoliticised, by local elected members resorting to decisions made by appeal or through planners with delegated authority. Planners contributed towards this, by labelling the opposition as vocal minority NIMBYs and so not representative of the silent majority. There were wider impacts beyond their control: cuts to public services, poor relations between the electorate and local government and a local planning undergoing radical reform. Issues that are not discussed as part of the planning process for a specific development, but issues that impact on local levels of support or opposition for that development. Ince (2012), found that this contributed towards the planner becoming the scapegoat for deflected local concerns. The planners defending their position by offering channels of participation as 'a means of containing the conflict generated by new development: part of a post-political search for a means of defusing the complex and contradictory politics generated by development' (2012: 532).

Institutionalising informal strategies of those with power (defined as the ability to serve your own interests unequally at the expense of another) to circumnavigate the structures of planning (Fox-Rogers and Murphy 2014: 246). The use of informal networks and lobbying undertaken by stakeholders (those with a vested interest: elected members; developers and senior civil servants) to influence decision making. That is, senior personnel from each key stakeholder group, liaising outside the formal system at pre-application stage of planning. This acceptance of informal decision making was financially driven by the need for development investment in the administrative area. But also from interpersonal experience of working with specific 'pro-development' planners, selected to smooth the passage of the development through the planning system (2014: 258).

'planning must be re-claimed as a socially progressive institution focused on achieving socially progressive outcomes; not an institution of (neo-liberal) capitalism. In practice terms, planners must become more aware of their original role as agents of progressive social change; not agents of power' (Fox-Rogers & Murphy, 2014: 264-265).

McClymont (2011), makes the difference between conflict mediation (agonistic) and conflict resolution (consensual) as the latter ignores differences and identity. Debates involving issues of differences and identity are those that engage the public. For Leino and Laine (2011), deliberative democracy and its consensus participatory models serve to dampen public 'passions' (Mouffe, 2000: 1) for issue politics, by channelling the emotion and will through conservative planning practices, that have been designed by powerful institutions to hold control over the decision making. These passions instead should be mobilised to encourage democratic decision making within the planning system (2011: 100)

Not all developments will be conflictual, many are welcomed by local communities in need of specific resources, assets and services and consensus can still be sought. In gaining agreement any suppressed views should be transparent as they are likely to re-emerge later (Hillier, 2003).

'Since we cannot eliminate antagonism, we need to domesticate it to a condition of agonism in which passion is mobilized and constructively (rather than destructively) towards the promotion of democratic decisions that are partly consensual, but which also respectfully accept unresolvable disagreements.' (Hillier, 2003: 42)

Hillier (2003) asks planners for a compromise by including conflict within planning frameworks. She discusses Rubin's (1998) work on the differences between resolution of a debate with result of an attitude change. And settlement of a debate where the conflict remains but a decision has been settled. She argues that planners should 'recognize the symptoms of irreducible conflict and, rather than forge ahead with intended strategies of resolutionary consensus-formation, to think through strategies aimed at settlement' (Hillier, 2003: 54). These strategies need to respond to local circumstances, so one model fits all approach, is to be avoided.

Aitken (2010a), contends that the binary categorisation of support or

opposition, is simplified and misses the complex and multiply motivations, perceptions, values and experiences that people have in opposing or supporting a development (2010a: 1836). Aitken, et al (2008) undertook thematic analysis of written objections sent to the planning system for a large-scale wind development in Scotland (which has less of a social gap than England), to uncover the extent to which objectors have power and what kind of power they have, in decision making for onshore wind farms. They found the key issues for objection were visual impact; ornithological impacts; negative impacts on the road network and increased traffic levels and the influence of national policy for renewable energy projects. In using these themes, the opposition did not exert direct power in preventing the planning approval for the development, but the researchers concede that the opposition, did exercise covert power in delaying the project through the planning system. The opposition campaign increased time and costs for the developer and planning authority, created negative publicity for the project and wind power generally and changed local community views which could impact on future renewable developments (2008: 204).

To what extent can opposition voices contribute towards participatory planning exercises that are designed and led by those attempting to gain approvals; usually funded and led by the developer or their agent? To what extent can a developer empower communities and facilitate sustainable solutions; the outcomes of meaningful participation? (Aitken, 2010a: 1839-1840). Aitken (2010a), views participation as a superficial tokenism to gain credibility for decisions that have already been made and that communities are aware of this, which makes the participation process useless and results in distrust. It is essential that participatory frameworks must not be limited, to avoid the difficult questions (2010a: 1839-1840).

Aitken (2010b) views the management of participation as a method of social control rather than empowerment of the participants (2010b: 248). The weight assigned to evidence on planning matters rests on the subjective judgement of the decision makers. The evidence has a hierarchy of

legitimacy, the most weight given to policy, then technical assessment and lastly public response, but only if that concern or support in made about planning conditions. This argues Aitken (2010b) means 'participation serves a cosmetic purpose of legitimizing projects and decisions which have already been decided' (201b: 252-253).

The relationship between LPA planning decisions for wind farms and the planning officer recommendation, parish council and landscape protection groups opinion, were researched by Toke (2005) between 2002-2003 in England and Wales. He provides general conditions for the likelihood of planning refusal or approval.

- 1) If a parish council object or planning officer recommends refusal then it is likely that the LPA will refuse.
- 2) If a planning officer recommends refusal, then the Councillors are likely to refuse.
- 3) If the CPRE objects, then the LPA are likely to refuse.
- 4) If the parish council does not object the LPA are likely to approve, and that is more likely after appeal.
- 5) If the planning officer recommend approval then the LPA will approve, at least after appeal (2005: 1532).

Councillors are influenced by the recommendations of the planning officer, Toke (2005) suggests this, in part, may be due to the planning officer advising that a developer will win at appeal, if refused by the LPA. The research was taken early on in 2000s at the start of the deployment of wind technology, and social acceptance issues were only starting to be recognised as a concern. However, his findings are useful in identifying the power relationships between key decision makers. He found active local anti-wind farm groups who effectively lobbied their concerns to councillors from the parish council and LPA, gained support from other landscape protection groups, especially the CPRE, as the latter added legitimacy to their position and argument, that the potential wind farm was a threat to the local

4.6 Conclusion

Chapter Three offers an analytical framework for the research to assist in understanding what planning theories could support the integration of SIA into the UK planning system. By first understanding the paradigmatic turn away from representative democracy to deliberative democracy, a discussion follows of how Habermas' communicative rationality has shaped the development of communicative and collaborative planning theories in the works of Forester (1989), Healey (1998) and Innes and Booher (2010). The Habermasian ideals are critiqued by the works of Mouffe (2000), through the concept of agonistic pluralism. This leads to discussion on participation and power in the planning system. Using Arstein's ladder of participation as a starting point and describing its evolution. An examination of community development, active citizenship and participation in environmental management within neoliberal systems. Leads into a UK response through Localism, participation in environmental assessment and the potential of development control to provide agonistic space.

As discussed, planning for renewable energy projects, specifically onshore wind farms have gained high levels of public approval but lacks *local* social acceptance in England and results in conflict within local planning systems. Multiple approaches of representative democracy and deliberative democracy has resulted in multiple planning approaches: technocratic and systems led impact assessment processes through the EIA, communicative and collaborative theories (shaped by pragmatism and advocacy) though consultation exercises in renewable energy development, LPA processes and the EIA and agonism through development control and social movements. Key to understanding legislative manoeuvring of the neoliberal agenda of the Coalition government, is how participation and power intersect. How participation can be used to conform to the wishes of powerful elites or offer

empowerment and social justice to local communities. Participation and conflict mediation are core elements of SIA, as is understanding the social impacts of the political domain. SIA guiding principles include rebalancing power inequalities, through participatory methods. It has the methodology to support discussion in conflictual arenas, which if formally introduced in the UK would offer additional decision-making support through the process of development control. But to enable this, planners need to accept that conflict can add value to the process and understand that consensus building approaches to planning will never bridge the diametrically opposed viewpoints of local people on contentious issues like the development of onshore wind farms. As discussed, agonism has very little in the way of procedural framework for planning — how do you uncover and make transparent the hidden power dynamics for a specific new development project? This is where SIA can be of assistance to planners, policy makers, developers and communities.

Habermas' validity claims for rational debate through equally accessible methods of participation requiring 'truth, openness, honesty, legitimacy and integrity' (Allmendinger and Tewdwr-Jones (1998: 1981)) has been critiqued as not existing in planning, but it does in daily communication. In a posttruth society, this is under review. The rise of contrarian science to support climate change denial for example, or social movements that campaign with misinformation, propaganda and social media click bait. The aim of contrarian impact science to support neoliberal economic growth at all costs. The aim of these counter-movements in part to push their agenda and raise emotional responses, at the same time increase advertising revenue to support the operations of their campaign. In their methods of communication there is instead, lies, intolerance, deceptiveness, illegitimacy and corruption. Theorists are calling for planning and the planner to be progressive, to be social activists to seek mutually beneficial solutions for the common good. For stakeholders to empathise with an opponent's point of view, but how is this possible if your opponent is peddling a pack of lies to protect self-interest and promote their ideology to win the planning response that serves their needs? How is mutual respect built between adversaries to allow antagonism to become agonism?

Brownill and Parker (2010) suggestion to view participation as episodic, could be assisted with the use of a participatory SIA. Participation occurs throughout every stage of development lifecycle, including prior and post approval. This is iterative and influences the project design, but involves different stakeholders at different times with diverse responses. In an SIA that uses the IAPP Spectrum, this is monitored with an aim of moving away from informing towards achieving empowerment. The complexity of participation, in SIA, is embraced. Achieving empowerment in the case of onshore wind, would be community ownership of a farm, with the assumption that the community are participating and social acceptance gained. But empowerment here means a redistribution of power and profit away from the Big Six electricity generators and a divestment from fossil fuels to renewables and low carbon technology. At the expense of rural place identities and landscape values based on conservation and protection. For planning and planners to be 'agents of progressive social change; not agents of power' (Fox-Rogers & Murphy: 246-265) developments that tackle climate change must be supported over those that maintain the status quo. Regardless of the latest ministerial statement, that purports to guide planning activity, when in fact it aims to win election votes.

The literature review for this chapter has highlighted the role of participation in planning. The IAPP Spectrum presented in section 4.4.2, will be used in the research to create codes to analyse the data collected from wind developers and action groups in chapter seven and the case studies in chapters eight and nine. In Part Two, Chapter Four, a research strategy is put forward to elect a route for methods for data collection and analysis on wind energy developers (private and community), wind energy developments, community campaign groups, and central and local planning authorities.

The second part of the thesis has three chapters. Chapter four, outlines the research design which elects a route for data collection and data analysis. This chapter offers preliminary data collection to identify the sample for research and confirms the methodological approaches. Chapter five, presents the data collection from central and local government sources. Chapter six, presents the data collection from wind developers and community group sources.

Chapter Five: Research Design

5.0 Introduction to Research Design

The research design is the story of this research. This chapter offers a planto meet the aims and objectives of the research and answer the research questions to test the research hypothesis, outlined in Chapter one. The plan identifies the sources of data and the methods by which the data collated will be analysed. Due to the number of potential English planning proposals a sample has been identified to manage the sources of data. Preliminary analysis of the history of local planning applications has identified 52 local planning authorities to source data for further analysis. The five LPAs (those with over ten planning proposals) with the most experience of onshore wind planning consideration, identified to source their planning guidance for content analysis in line with SIA tasks. From 228 recovered appeals, 51 Inspectors reports and Secretary of State response for content analysis in line with social impact identification. From the sample 32 developers identified for content analysis of their websites and survey responses, in line with SIA tasks and participation activity. From the sample, 22 Action Groups identified for content analysis of their websites and survey responses, in line with social impact identification and participation activity. From the sample and recovered appeals, identification of two community energy proposals, for content analysis of their websites, social media, mainstream media, planning proposals, appeal documentation and face to face interview.

5.1 The Research Questions

In chapters two, three and four the literature review set up an analytical framework for the research by examining the current context and planning theories that would support integrating SIA as a planning tool in England. An outline of the current planning practice and policy in England for onshore

wind farms. A discussion of the key social acceptance issues and a summary of SIA. The review of the literature divides the sources for raw data collection from:

- Central and local government, as responsible for policy and governance of onshore wind energy deployment (Recovered appeals, renewable energy databases and local planning guidance)
- Developers and community action groups, as delivery agents and location hosts for onshore wind developments (websites and surveys) and
- Community energy groups, as developers that are location hosts for onshore wind farms (Recovered appeal and interview).

The literature review identified themes that will be used to develop three coding sets for content analysis of the raw data:

- Social Impact Identification
- SIA Tasks
- Participation Activities and Techniques

In table 14, *Linking Research Questions to Research Methods*, the main research questions link to the sources of data, the methods of research and justification offered for these research choices.

Figure 14: Linking Research Questions to Research Methods

Main Research Question	Data Source & Method	Justification
What is the current policy context for the development of onshore wind farms in the UK?	Literature Review LPA guidance Recovered Appeals	Literature review will provide regulatory context. LPA policies will offer local context Recovered appeals will evaluate planning policy in practice
What planning theories would support SIA as an environmental planning tool in England?	Literature Review	Evaluation of environmental planning in England and value of SIA to support environmental decision making
What is the current practice for planning the development of onshore wind farms in England?	Literature Review Recovered Appeals Developers websites & questionnaire LPA guidance Planning databases	Literature review will offer understanding of planning and EIA procedures Recovered appeals will evidence how local practice is judged centrally Developers websites and questionnaires will outline planning activities of the proponent LPA policies will examine specific local conditions Planning database will highlight the current statistics for planning activity
Why is there local opposition to the siting of onshore wind farms England?	Literature Review Recovered Appeals AG websites & questionnaire	Literature review will offer understanding of the social acceptance narrative Recovered appeals will evidence current opposing and supporting arguments AG websites and questionnaires will evidence current social acceptance issues
What evidence is there the social impacts (positive and negative) have been assessed at a local planning level?	Recovered appeals LPA policies Developers questionnaire Desktop case study & interview	Recovered appeals will be coded to identify common themes from EIA LPA policies used to analyse guidance for social impact identification and SIA tasks Developers questionnaires will offer current methods for social impact identification Desktop study and interview will detail current activity for social impact identification
What SIA activities are currently used to support / oppose onshore wind farm proposals in England and in what context EIA?	AG questionnaire Desktop case study & interview	AG questionnaire will identify current activities used in opposing wind farms Desktop study and interview will analyse current activity for support of wind farms

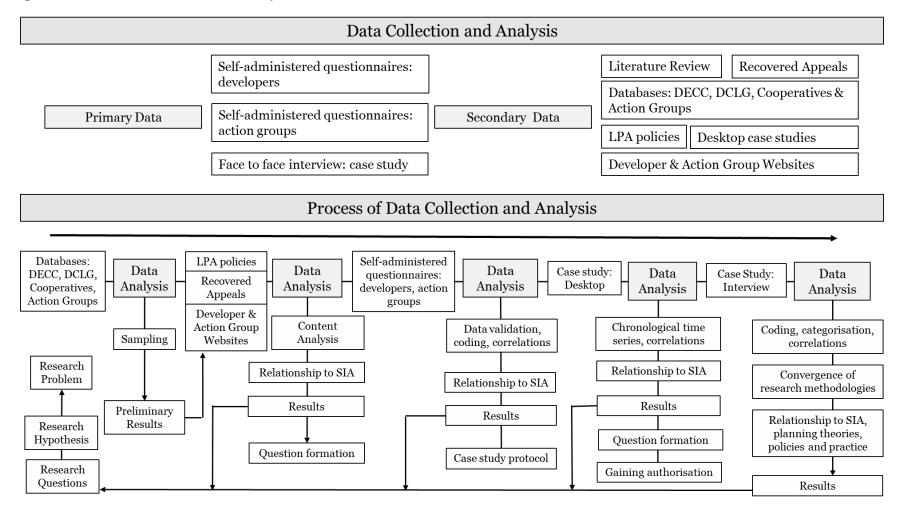
What SIA activities used in the siting of onshore wind farms are specific to: participation; profiling; impact prediction; mitigation; options appraisal; capacity building; conflict mediation, management, monitoring and evaluation?	Desktop case study & interview	Case study will offer a detailed analysis of EIA and SIA activities specific to a planning proposal with support, brought forward by the community
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Source: Own design (2015)

5.2 Data Collection and Analysis Process

The primary data sources include self-administered surveys to wind developers and to wind energy action groups, and face-to-face interview with the case study group. The secondary data, following from the literature review includes systematic data analysis of raw data held in existing planning databases managed by DECC, DCLG and by Energy Archipelago. These databases will provide a list of wind developers, LPAs and action groups for further content analysis. The secondary data collection and analysis of LPA history of planning activity for onshore wind farms and content analysis of their planning guidance. Content analysis of the Recovered Appeals by the Secretary of State for DCLG. Content analysis of wind developers' websites and action groups' websites. The analysis of the secondary data will lead to the design of the questions for the primary data collection from the surveys, the desktop case study and the interview. The process for the data collection and analysis shown in figure 15, *Data Collection and Analysis Process*. The process will be described throughout this chapter.

Figure 15: The Data Collection and Analysis Process



Source: Own Design (2015)

Figure 16, *Data Analysis Converging Methods*, explains how the data from the developers, LPAs, action groups and recovered appeals triangulate. In the case studies, methods converge to test the research thesis: *The English planning system uses Social Impact Assessment to site onshore wind farms*.

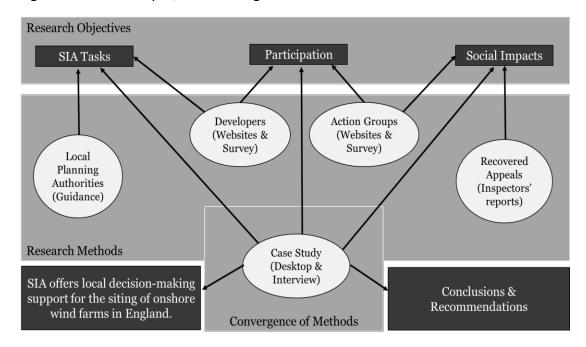


Figure 16: Data Analysis, the Convergence of Methods

Source: Own design (2015)

5.2.1 Content Analysis Approach

Content analysis defined 'as a research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns' (Hseih & Shannon, 2005: 1278). There are three main types of content analysis; conventional, summative and directed. The conventional approach allows for categories for coding to emerge from the data. Used for gaps in theory and literature. The summative approach, starts with text search and word frequencies. A quantitative start, to classifying the data to allow latent content analysis or interpretation of the meanings behind the text. Directed content analysis, allows for existing concepts to be applied to the data Hseih & Shannon (2005); Humble (2009).

This research will use a directed content analysis approach to apply the concepts of SIA tasks (Vanclay, et al. 2015: 7), social impact identification (Vanclay, 2003: 5-11); (Fenton, 2005: 10-12); (Vanclay, et al. 2015: 2) and the participation spectrum and techniques (IAPP, 2014: 4); (TSG, 2015) to the context of onshore wind farm development in England.

5.2.2 Coding Framework

The data sorted and coded by the code sets listed in figure 17, *Coding Framework for Data Sources*. The research methods converge to support and build on the main themes of the research. Using NVivo software; word frequency, text search and hierarchy chart queries brings together the responses from mixed data sources. The software explores the data to analyse patterns and emerging themes. Tree map visualisations offer blocks of nested rectangles which picture the number of references (text, images, sound) coded to that node (code set). The larger the rectangle, the more content in the code or node. The bottom right-hand of each tree map has the number of sources of information and the number of times text has been reference to that code.

Figure 17: Coding Framework for Data Sources

Data Source	Coding Construct	Code Sets	
Recovered Appeals	What are the Secretary of State's formal	Social Impacts	
The covered rippears	reasons for refusal?	Social Impacts	
	What are the local community reasons for	Social Impacts	
	opposition?		
	What are the local community reasons for	Social Impacts	
	support?	1	
	What is the LDA adviser on bounds		
LPA Guidance	What is the LPA advice on how to understand the issues?	SIA Tasks	
	What is the LPA guidance on prediction,		
	assessment and analysis of impacts?	SIA Tasks	
	What is the LPA advice for implementing		
	operational strategies?	SIA Tasks	
	What is the LPA advice for establishing		
	monitoring programmes?	SIA Tasks	
Davidonana Wahaitaa	How are developers facilitating participation	Participation activities and	
Developers Websites	with host communities?	techniques	
	To what extent is the activity informing,		
	consulting, involving, collaborating or		
	empowering?		
		D	
Developers Survey	What participation methods has the	Participation activities and	
•	developer used?	techniques	
	What SIA tasks does the developer undertake?	SIA Tasks	
	undertake:		
Action Crown Wahaitas	What are the reasons for ennesition?	Social Impacts	
Action Group Websites	What are the reasons for opposition?	Social Impacts	
	What participation techniques are used to gain support for campaigning against	Participation activities and	
	proposals?	techniques	
	proposais:		
	What are the reasons for opposing a		
Action Group Survey	windfarm planning proposal?	Social Impacts	
	What engagement techniques have been	Participation activities and	
	used to gain support for the campaign?	techniques	
	What are the reasons for support?	Social Impacts	
Desktop Case Studies and	How have the community developers	Participation activities and	
Interview	ensured participation?	techniques	
	What tasks have the community developers		
	undertaken to complete the planning	SIA tasks	
	process?		

Source: Own design (2015)

5.2.3 Coding Sets

Hierarchy charts will explain the content applied to each code set that can answer the code construct questions. The coding sets adapted to delete irrelevant codes or add new codes during the data collection. In analysis, the Secretary of State formal reasons for refusal, as outlined in the recovered appeals, compared with the main reasons communities oppose planning proposals for onshore wind farms through written representation to appeal hearings. The reasons communities support planning applications compared with reasons communities oppose development (see figure 19, *Social Impacts for Onshore Wind Coding Set*). The participation techniques employed by the developers, the actions groups and the community energy developers compared (see figure 20, *Coding Set for Participation Activity*). Offering understanding of the power gained by host communities and its use in local planning. The LPA guidance analysed to evidence how the advice compares to the procedural framework of SIA (see figure 21, *Coding Set for SIA Tasks*). Each coding set applied to the case studies and case study interview.

Figure 18: Social Impacts for Onshore Wind Coding Set

Social Im pact Dom ain	Social Impact Code	Social Impact Domain	Social Im pact Code	Social Impact Domain	Social Impact Code
Community	Amenity Value & Aesthetic Quality	Fears and Aspirations	Community Cohesion	Personal and Property Rights	Aviation
	Cumulative		Feelings about Project		Employment
	Health & Safety		Future Aspirations		Horses Riders & Stables
	Leisure & Recreation		Perceived Crime & Violence		Income
	Physical Infrastructure		Perceived Health		Local Businesses
	Quality of Living Environment		Personal Safety & Hazard Exposure		Local Economy
	Social Infrastructure		Stigmatisation		Property Values
	Telecommunications				Reversibility Costs
		Health and Well Being	Amplitude Modulation		Tourism
Culture	Archeaology		Mental health		
	Designated Area		Noise	Political System	Access to Legal Counsel
	Heritage Setting		Physical Health & Fertility		Developers & Landowners
	Rural Landscapes		Shadow Sun Flicker		EIA
			Sleep Disturbance		Environmental Justice
Environment	Bats		Wind Turbine Syndrome		Government Integrity
	Birds				Government Performance
	Flora & Fauna	Way of Life	Community Cohesion (actual)		Human Rights
	Risk of Flooding		Community Identification & Connection		Impact Equity
	Soil		Family Obligations		Localism
	Water		Social Differentiation & Inequality		Participation
			Social Networks		Subsidies
			Social Tension & Violence		Targets
			Spiritual Needs		Technology

Source: Own design (2015), Adapted from (Vanclay, 2003: 5-11); (Fenton, 2005: 10-12); (Vanclay, et al. 2015: 2)

Figure 19: Coding Set for Participation Activity

Level 1	Level 2	Level 3
Inform	Information Sharing	Newsletters, brochures, leaflets Local print and broadcast media National print and broadcasts media Statement of Community Involvement Project Website EIA NTS Government Calls for Evidence
Consult	Surveys Corporate Social	LENS method Participatory Rapid Appraisal Opinion Surveys Sustainability Policy
	Responsibility	Environmental Policy
	Public Events	Open Space / House Events Future Search
		Public Scrutiny Community Auditing Public Meetings Interactive Displays Community Conference / Seminars
Involve	Community Visioning Social Mobilisation	Planning for Real Demonstrations
		Petitions Celebrity Endorsement Mainstream Media Direct Action Social Media
	Regular Involvement	Citizens' Juries Citizens' Panels Meeting Local Community Groups
	Arts / Education Outreach	Neighbourhood / Parish meetings Graphic Recording Story Dialogue Legislative Theatre
	Discussion Groups	For Young People Research Publications Focus Groups Priority Search
		Appreciative Inquiry Scenario Planning Conflict Resolution Face to Face meetings
Collaborate	Capacity Building and Support	Community Animateurs Achieving Better Community Development
		Learning Evaluation and Planning

Level 1	Level 2	Level 3		
		Action Research		
		Participatory Evaluation		
		Participatory Budgeting		
		Working in Partnership		
		Community Funds		
		-		
	Community Energy	Links to further information		
		Legal Structures		
Empower		Off the shelf packages		
		Funding sources		
		Constraints		
		Shared Ownership		
		•		

Source: Own design (2015), Adapted from (IAPP, 2014: 4); TSG (2005)

Figure 20: Coding Set for SIA Tasks

SIA Procedural Framework	SIA Tasks
Understand the Issues	The project proposal Social area of influence Scope issues Roles and responsibilities Informing the community Inclusive participatory process Community profiling Baseline data
Predict and Assess the Impacts	Social Impacts (see figure 19) Significance Indirect Cumulative Community response Alternatives
Operational Strategies	Negotiate & Implement SIMP Grievance mechanism Enhancement Community support Address negative impacts
Monitoring Programmes	Participatory monitoring plans Periodic reviews & evaluation Decommissioning

Source: Adapted from (Vanclay, et al. 2015:7)

5.3 The Sample

There are 650 electoral constituencies in the UK: 533 in England; 59 in Scotland; 40 in Wales and 18 in Northern Ireland, each represented by an MP. In January 2012, a letter signed by Chris Heaton-Harris, a Conservative MP for Daventry and '105 other MPs' [sic] (see appendix 4, MP's Letter to David Cameron), sent to the Prime Minister, David Cameron arguing:

- a) cuts in subsidies for onshore wind energy;
- b) amendments to the NPPF, to support local people in opposing planning proposals for onshore wind farms:
 - that LPAs have positive strategies for renewable energy sources;
 - ensuring negative impacts are addressed;
 - identify suitable areas for the siting of renewable energy generators;
 - balance environmental, social and economic planning objectives, including the contribution of rural landscapes and heritage assets to local economies;
 - support community led initiatives, even if outside of the neighbourhood plan;
 - identify areas for development to access local energy supplies;
 - to remove the requirement for developers to evidence the need for renewable energy and compliance with EU targets;
 - to approve applications if the impacts can be managed, addressing any areas of concern and
 - establish the wider benefits of a development to counteract any harm;
- c) planning inspectors at appeal, give planning considerations emphasis

over renewable energy targets.

The MPs who signed the letter to cut subsidies for onshore wind farms as a response to social acceptance, link to their constituencies. Each constituency, analysed for the planning statistics of onshore wind farms within each LPA. Collating data on the following:

- MP's political party
- Name of LPA's within constituency, with website details
- Number of operational farms (>4MW)
- Number of farms under construction
- Number of applications approved
- Number of applications withdrawn or rejected
- Number of applications at appeal or called in
- Number of applications decommissioned or repowered
- Number of cooperative farm proposals

The sampling logic lessens the population of study from 650 potential constituencies across the UK. To constituencies represented by MPs that lobbied the Prime Minister to cut subsidies for onshore wind energy. Fix the policy direction as part of the election manifesto and remove their support for siting of onshore wind farms in their constituencies. The research assumption, that local concerns are represented by constituent MPs. As social acceptance is not gained and participation in planning is through direct representation to central government. This is a 'strategic sampling' approach not to represent the wider population, but to examine how local communities take part in conflictual planning arenas (Mason, 2002: 123-125).

The sample reduced to 100 English constituencies (removing any MPs representing the devolved regions) contains 124 LPAs. The analysis of their planning activity includes the details of associated wind developers and action groups for onshore wind farms (greater than 4MW installed capacity) in their administration boundaries.

5.4 Renewable Energy Planning Databases

DECC established a data tracker called the Renewable Energy Planning Database (REPD). This tracks the progress of renewable electricity proposals in all UK LPAs across the full planning cycle³. The database managed by Eunomia Research and Consulting. Information queried from the database for this research includes:

- Developers details
- Location details, geo-referencing
- Technology type, capacity, size
- Development status and
- LPA details, planning status, applications details.

The second database is Energy Archipelago, a global community renewables portal, which maps community energy projects across the world. Self-governed and managed by Scene Consultancy⁴. This database identifies the community wind cooperatives and their planning status across England. The rationale for this is to identify potential onshore wind farm developments that have social acceptance and fall within the sample area.

Further sampling may be required to source cases for analysis. For example, if a constituency has a high number of operational farms, this could lead to understanding social acceptance, around issues of cumulative impacts or environmental justice. If a constituency has no history of planning for onshore wind farms, this could highlight the impact of political ideology on local planning activity. Or if a constituency only supports cooperative wind farm proposals, this could signal an LPA supporting this model of development as a reason to gain social acceptance. However, this then raises further questions of representative democracy and decision-making power.

³ (available at https://www.gov.uk/government/collections/renewable-energy-planning-data).

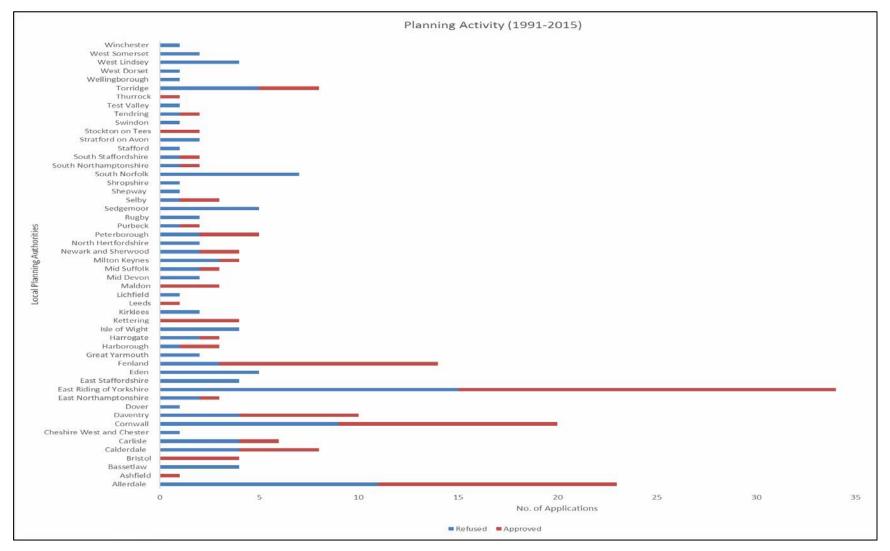
⁴ Available at https://energyarchipelago.com/#/map

5.5 Preliminary Results

Collating from the sample, a list of LPAs, wind developers, actions groups and cooperatives for further analysis (see appendix 2, Community Wind Cooperatives, appendix 5, List of Commercial Wind Developers and appendix 6, List of Action Groups). Analysing content from LPA planning guidance for onshore wind farms with the themes arising from the recovered appeals. The role of the LPA in the EIA, participation strategies, planning conditions and the use of any SIA methods. Analysing the content on wind developer websites for social acceptance techniques including CSR policies, community benefits, participation strategies, EIA and SIA. This will support the question formation and respondent list for an online self-administered questionnaire to developers. The sample will also offer a list of wind energy action groups and their websites content, analysed for themes on social acceptance, participation and power, and SIA. This will support the question formation and respondent list for the self-administered questionnaire to the action groups. Undertaking collation of the planning status of all community energy cooperatives, to source desktop case studies and a face-to-face interview.

For this research, data under investigation is from the first application for a windfarm, in Delabole, Cornwall 1991 to 30 April 2015. This enables an analysis of the status of renewable electricity planning proposals during the coalition government (2010-2015), the call for abolishing onshore wind subsidies and is before the May general election in 2015. Of the 124 LPAs, 72 LPAs (59%) have had no history of planning activity for onshore wind farms (1991-2015), so removed from the investigation. Over half of the MPs (all Conservative) who lobbied for the cuts of subsidies for onshore wind farms have never had an operational farm in their constituency. The planning data on the remaining 52 LPAs filtered to explain the planning status of all operational, planning permission granted, under or awaiting construction and appeal granted applications (approved). This compares to all applications withdrawn, refused planning, appeals lodged, appeals refused and Secretary of State refusals (refused). Figure 22, *Planning Activity (1991-2015)* shows the total approvals, at 101 and total number of refusals at 132.

Figure 21: Planning Activity (1991-2015)



Source: Own Design, Adapted from DECC, REPD (2015)

The LPAs in figure 22, *Planning Activity (1991-2015)* with a history of the most planning activity (over ten applications) in England, is in East Riding of Yorkshire (34 applications), Allerdale, Cumbria (23 applications), Cornwall (20 applications), Fenland, Cambridgeshire (14 applications) and Daventry, Northamptonshire (10 applications). These LPAs have approved more applications than they have refused, so will be used for further content analysis of their planning guidance in Chapter six. This is a limitation of the research, of the 52 LPAs, 24 have experience of only refusing a proposal, these applications are further analysed in section 5.5.2 to investigate any link between refusal and social acceptance. However, six LPAs have experience of only approving an application and 15 LPAs have experience of both approving and refusing applications with a tally of under eight proposals each. These 15 LPAs could be included within the sample limits and may affect the research outcome. For the purposes of this research the minority of extreme case,s that is LPAs with experience of processing over ten applications (with both approval and refusal decisions) have been selected for further analysis. The logic for this is to analyse LPAs that have been highly active with onshore wind planning.

East Riding of Yorkshire, has experience of processing 34 planning applications from its first in 2008 to 2015. Of these, 11 farms are operational with two farms under construction and six awaiting construction. The total installed maximum capacity of these is 147.5MW, they are considering seven applications for an extra 83.4MW capacity. The potential capacity of 230.9MW, approximately equates to an electricity supply for 138,540 homes, from a total number of dwellings of 153,941 ERYC (2015), using 2.5MW equals supply to 1,500 homes¹. Of the planning refusals, ten applications totalling 111.4MW of which four were refused at appeal and one refused by the Secretary of State. In 2009, East Riding of Yorkshire Council, published

¹ An average onshore windfarm with capacity of 2.5-3MW produces 6 million kWh per year, to supply 1,500 average EU households EWEA (2015) available at http://www.ewea.org/wind-energy-basics/faq/

Planning for Renewable Energy Developments, Interim Planning Document, a countywide planning guidance for renewable energy.

Allerdale Borough Council, in Cumbria has experience of processing 23 planning applications from its first in 1999 to 2015. Of these, 11 farms are operational with one farm awaiting construction, following approval after an appeal. The total installed maximum capacity of these farms is 82.4MW, and they are considering two applications for another 15.9MW capacity. Of the total potential capacity of 98.3MW this approximately equates to an electricity supply for 58,980 homes of a total number of dwellings of 45,069 ONS (2009). Of the planning refusals, eight applications totalling 73.6MW. In 2007, Cumbria County Council published *Cumbria Wind Energy Supplementary Planning Document* (SPD), a countywide planning policy for developing onshore wind farms. Allerdale Borough Council adopted the SPD in 2008.

Cornwall County Council, has experience of processing 20 planning applications from the UK's first in 1991, to 2015. Of these, eight farms are operational with three farms awaiting construction. The total installed maximum capacity of these farms is 100.7MW, and they are considering one application for an another 6.1MW capacity. Of the total potential capacity of 106.8MW, this approximately equates to an electricity supply for 64,080 homes from a total number of dwellings of 243,886 ONS (2010). Of the refusals, nine applications totalling 151.7MW of which three applications withdrawn (63.8MW), five applications refused permission (75.4MW) and one application refused at appeal (12.5MW). Of the sample area, Cornwall Council has the only decommissioning cases, listed in table 5, *Decommission and Repowering Cases, Cornwall*, all three farms repowered on the same site. They have a reduced number of turbines but increased tower height and maximum installed capacity:

Table 4: Decommissioning & Repowering Planning Cases, Cornwall

Name	Developer / Operator	MW	Start date	Decommission Date	Repower Date	MW
Delabole Wind Farm	Good Energy	4	1991	2010	2011	9
Carland Cross	Scottish Power Renewables	6	1992	2013	2013	20
Goonhilly Downs	REG Windpower	5.6	1993	2010	2010	12

Source: Adapted from DECC, REPD (2015)

In 2011, Cornwall County Council published *Renewable Energy Planning Guidance Note 3, the Development of Onshore Wind Turbines*, a countywide planning guidance for developing onshore wind farms. Since 2011, Cornwall County Council has made yearly updates to the guidance.

Fenland District Council have considered 14 applications from its first in 2009 until 2015. Of these 10 are operational (101MW) and one under construction (13.3MW) offering a capacity of 114.3MW supplying 68,580 homes. The total number of dwellings in Fenland is 42,069 ONS (2011). The remaining three applications refused (39MW); two of them following an appeal. In 2014, Fenland District Council published their *Resource Use and Renewable Energy* Supplementary Planning Document.

Daventry District Council (in the constituency held by Chris Heaton-Harris MP, the originator of the campaign to cut ROs for onshore wind) has experience of processing 10 applications from its first in 2008 until 2015. Of these two are operational and four awaiting or under construction with a total maximum capacity of 68.8MW, providing electricity for 41,280 homes. The total number of dwellings in Daventry is 31,647 ONS (2011). Two applications awaiting construction granted permission following appeals. Two applications refused permission (48MW), one refusal following an appeal. In 2012, Daventry District Council published its *Interim Guidelines when Assessing Proposals for the Development of Wind Turbines*.

These five LPA's with the most planning activity sourced for data on planning guidance, advice and position statements for developing onshore wind farms in their areas. These documents analysed for content using the coding data set, SIA Tasks, to find out to what extent LPAs are using SIA tasks to guide onshore wind developments in their areas.

5.5.2 History of LPA Refused Applications (1991-2015)

Of the total sample, 48 per cent have a history of refusing applications for onshore wind farms alone. The end status of these unsuccessful applications classified and pictured in figure 23, *End Status of Refused Planning Applications*

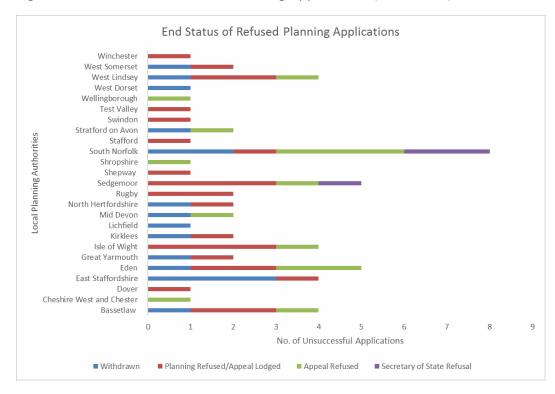


Figure 22: End Status of Refused Planning Applications (1991-2015)

Source: Own Design, Adapted from DECC, REPD (2015)

The 25 LPAs listed in figure 23, *End Status of Refused Planning Applications* (1991-2015) have not approved an application for an onshore wind farms in

their administration. However, they have considered 59 applications that were unsuccessful for the applicant. Of these 27 per cent withdrawn; which offers the applicant the chance to resubmit the proposal within 12 months and not incur extra planning costs. Of the 59 applications, 45 per cent refused by the LPA of which eight per cent had lodged an appeal. Twenty-three per cent of applications went to appeal and refused by the Planning Inspectorate. Five per cent were subject to refusal following a Secretary of State call in (when the decision making is by the Secretary of State). Or recovered appeal (when the decision making by the Secretary of State, based on the planning inspector's recommendations). The 25 LPAs analysed to identify the wind developers involved with the planning proposals and the campaign action groups that opposed the developments. This is the sample for the analysis of developer and action group website content. Of these 59 unsuccessful proposals, one was for a community energy proposal. Submitted but later withdrawn to Kirklees Metropolitan Borough Council by Valley Wind Cooperative. This proposal will be selected for further analysis through case study in Chapter eight.

5.5.3 History of Community Energy Applications (2002-2015)

The second database used is Energy Archipelago, which maps community energy projects². Listed in appendix 2, *Community Wind Cooperatives*, are all the community cooperative planning proposals over 4MW in England, from the first in 2002 to the end of April 2015. As discussed, the literature review on the current planning practice for onshore wind farms in England. There is a lack of support offered community cooperative developments, which is plain in the number of applications not achieving planning permission.

Of the 13 community energy applications; only four have secured planning permission. South Holland District Council in Lincolnshire, approved a private development by Wind Prospect in 2009, of which two turbines owned by Fenland Green Power Cooperative. The cooperative was not the developer,

² available at https://energyarchipelago.com/#/map

but it receives an income from the farm. Fenland District Council in Cambridgeshire approved the application for a wind farm by the Cooperative Group on their 3,800-acre agricultural estate in Fenland, in 2002 during the Labour government of 1997-2010. The Vale of White Horse District Council approved the planning application for the Westmill Cooperative windfarm, sited on a disused RAF airfield in Oxfordshire, in 2007. The cooperative used the support of the intermediary Energy4All and based their development model on Baywind in Cumbria. The Twin Rivers wind farm on the Cooperative Group's 4000-acre pastureland site in Goole, approved by East Riding of Yorkshire council in 2009, and is tendering the construction contracts.

Of the seven planning refusals, Bodmin Moor, Cornwall, was a large-scale development (greater than 50MW) for consideration by the Secretary of State at DECC. This does not fall within the sample limits. Two applications withdrawn and one withdrawn at appeal. Two proposals refused and one subject to a recovered appeal and refused by the Secretary of State. This proposal by the Roseland Community Energy Trust will be used for further analysis through a case study in Chapter seven.

5.6 Recovered Appeals (2012-2015)

Eric Pickles the Secretary of State at DCLG (2010-2015) recovered 228 planning appeals for a planning inspector to recommend a result to the appeals, but passed to the Secretary of State for decision. Figure 18, *Appeal Recoveries by type (2012-2015)* pictures the breakdown of the planning proposals recovered during the 2012-2015 period.

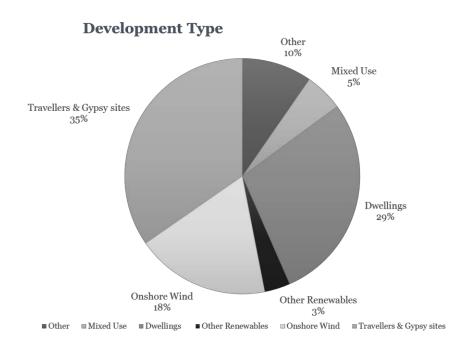


Figure 23: Appeal Recoveries by Type (2012-2015)

Source: Own Design, Adapted from DCLG (2015)

New housing developments and Travellers and Gypsy sites represent the greatest development recovered at appeal. This followed by onshore wind farm appeals at 18% of recoveries. This equates to 51 appeals; the Secretary of State, approved four appeals with planning conditions, refused 30 appeals in line with the Inspector's recommendation and refused 17 appeals against Planning Inspector recommendation. The content of the 51 planning inspectors' reports and Secretary of State decision reports, analysed for the main reasons for formal refusal or approval and the arguments given locally in support or objection towards the planning proposals. The reports will be transported into Nvivo software and content analysed against the code sets for social impact identification. As this, identifies common themes on social acceptance. Evidences how planning conditions and the EIA are used by central government to support or prevent a new onshore wind development (see Chapter five).

5.7 Developer and Action Group Websites and Surveys

From the sample area, 32 commercial developers and 22 community action groups have been selected, for content analysis of their websites. The content from the developers' websites will be coded for SIA tasks and participation activities and techniques. The 22 action groups with live campaign websites, coded against social impacts and participation techniques (for both, see Chapter six). The data collection from the websites and the results of the literature review will inform the design of the self-administered questionnaires. The surveys use Survey Monkey, an online survey builder to deliver the questionnaire by email to the identified sample. The research logic is to question how developers engage with communities in areas of conflict? And how local communities respond to potential planning proposals through participation in local opposition campaign groups?

The research questions form the basis of the survey and interview questions (see appendix 7, *Interview Questions* and appendix 8, *Developers Survey* and appendix 9, *Action Group Survey*). Developers' exploratory questions focus on 'what', 'where', 'how many', 'how much' and 'who' questions. Testing current planning activity, inclusion of social analysis of impacts and how they promote participation with host communities. Through the EIA and wider planning processes (Yin 2009: 8). For the opposition campaign groups, 'how' and 'why' questions test local people's attitudes and perceptions towards wind farm development proposals (Yin 2009: 9). The aim here is to test local participation in the planning system, social acceptance and methods used by developers to address these issues.

5.8 Case Studies

The aim of the research is to select 'information-rich cases' to aid understanding of the current context in England (Wiklund, 2011: 162). The case study may be 'instrumental', where single case selection provides depth into the context of onshore wind farm planning in England. The case typicality is not tested, instead it advances the understanding. A few case

studies or a 'collective' case study, may be found, which is several case studies analysed instrumentally, but extended to several cases. The may not offer any commonality but still ensure an understanding of the issues to answer the research questions (Stake (1986), in Denzin and Lincoln 1994: 237). Yin (2009), discusses the parts of case study design as:

- 1. 'A study's questions;
- 2. Its propositions, if any;
- 3. Its unit(s) of analysis;
- 4. The logic linking the data to the propositions; and
- 5. The criteria for interpreting the findings' (2009: 27).

The 'study's questions', follow from the research questions and the question formation for the questionnaires, designed for the developers and campaign groups. The 'propositions', offer direction, suggesting the consideration in the case study, by using 'how' and 'why' questions. For example, designing questions that ask how communities have participated or why they oppose or support a current development. The 'unit of analysis', enables a narrowing of the relevant data with the use of specific questions and propositions.

The case is a current planning proposal, occurring during time when a political party electioneer on the removal of financial support as part of their general election manifesto. A planning proposal submitted during an encouraging policy environment to one where policy in practice, reduces this support. The case or unit of analysis, is the planning application and role of the stakeholders in its consideration. The case study ends at the planning decision. This allows focus on how EIA and SIA are considered within planning.

The stage of research '[l]inking data to propositions and criteria for interpreting the findings', connects the questions to key themes of the study, such as the policy and practice environment (Yin, 2009: 27-35). Local democracy and decision-making support and the use of experts (EIA evidence) to support a planning application. Exploration of the polarised

debate on onshore wind farm planning and any evidence of consultation, engagement and participation techniques. Baseline profiling of the community can gain understanding of the community's values. Outlining how mitigation, alternatives and significance of impacts are assessed. Questioning to what extent conflict mediation or resolution has occurred. The 'criteria for interpreting a study's findings', is to offer a 'rival explanations' (Yin, 2009: 27-35). That is, SIA cannot support the successful siting of onshore wind farms or that EIA successfully identifies, predicts and mitigates social impacts to gain social acceptance.

For Yin (2009), the data collected for a case study follows a protocol that offers an introduction to the case with its hypothesis (SIA can help decision making). Questions (developed from the research questions), its propositions (the key themes that guide the question formation). The protocol should state procedures for data collection: list of wind development sites and key stakeholders (developers and or community groups); a data collection plan (see figure 16, *Data Analysis: The Convergence of Methods*) and any pre-site visit preparation. A case study review of the planning proposal, history, event timeline, current context, its innovativeness and any results so far. This links to relevant planning documentation and a list of potential interviewees for the research. Evaluation of the answers to the case study questions will be in line with the main research questions (Yin, 2009: 80-81).

From the literature review and preliminary results, data collated shows that in England, only thirteen, larger than 4MW, CE proposals were submitted during 2002 and 2015. From this, two case studies have been identified for case study (see section 4.5.3). The case studies offer desktop analysis. The desktop study of Roseland Community Energy Trust uses all three code sets against the recovered appeal documentation. The desktop study of Valley Wind Cooperative uses all three code sets against the semi-structured interview transcript.

Roseland Community Energy Trust (RCET), subject to a Recovered Appeal, resulting in refusal, due to impacts on the historic environment, in March

2015. This has been selected as the only CE planning proposal to be called in by the Secretary of State during the timespan of the research. The planning documents, outcomes of the EIA process, the project website, local media coverage, the appeal documentation including the written representations, the Inspectors report and the Secretary of State's response has been analysed against the tasks of an SIA, social impact identification and the IAPP Spectrum of Participation.

Valley Wind Cooperative (VWC), withdrawing their application locally, due to predicted refusal based on ornithology and land designation impacts, in June 2015. This has been selected as a CE proposal from within the sample area of the research. In November 2014, two of the founding Board members from VWC were interviewed for this research and the transcript available in appendix 10, Case Study Transcript. The planning documents and ES, project website, social media pages, local media, and their interview response has been analysed against the tasks of an SIA, social impact identification and the IAPP Spectrum of Participation.

The planning application, ES, project website content, local government policy and guidance, media coverage and supporting documentation will be used to examine the case studies. Overall, the cases will be analysed from the position that SIA can assist with the decision-making process.

5.8.1 Case Study Interview

Before forming the questions for interviews, the roles of people to be interviewed will be outlined. Yin (2009: 87), distinguishes five levels of questions:

- Level one: which are specific to the interviewee
- Level two: which are specific to the case
- Level three: which respond to patterns across multiple cases

- Level four: which relate to the entire research study, and
- Level five: which relate to policy recommendations and conclusions.

For case study research, both in the data collection plan and in the interviews, Yin (2009) advises that level two questions will be the most significant.

Undertaking interviews is an accepted method of qualitative research. This approach will enable an understanding of people's opinions, perceptions and the local context within which these are shaped, specifically towards a continuing planning proposal for onshore wind. The research aims to understand people's experiences of a specific social situation and context, to explain their issues and concerns. The face-to-face interview method through semi-structured questions, will allow for an informal and flexible interaction. An 'organic' approach that can respond with follow-ups to specific questions relevant to the interviewees personal experience (Mason 2002: 64). This allows the interviewee to have more control over the interview, by asking the interviewer questions, especially if the context has been a conflictual one. This method of data collection will support an examination of the 'social process, social change, social organisation and social meaning' of onshore wind planning for local communities (Mason, 2002: 65). The main aim of this methodological approach within this context, is to ensure the participants enjoy the experience and gain from it, rather than close on any future research requests. The semi-structured interviews recorded and transcribed to produce data, for directed content analysis.

As the area of study regards social acceptance for onshore wind farms, case studies may be planning proposals within a conflictual arena. Potentially problematic for gaining consent for interviews. Offering anonymity to any respondents to ease openness in the dialogue. Anonymity not only of the identity of the interviewees but also of other identifying information such as locations, addresses and planning application reference details. To what extent an interviewee seeks anonymity must be agreed Fox-Rogers & Murphy

(2014: 257). To gain informed consent for participation in an interview, means that respondents do not have to answer the questions and can withdraw at any point. This may be renegotiated during the interview in line with specific questions or answers, for example giving information about a third-party that has not consented to interview or the use of off the record comments.

To gain consent, the researchers credentials and legitimacy may need evidencing, with support of the academic institution and supervisor of the research. The ownership of the data, any rights to publish, and access to the information by research supervisors as well as access of data by future researchers should be confirmed (Mason, 2002: 80-81). Questions for interviewees sent before interview, to relieve any concerns. And a return for respondents' time can be considered such as distribution of peer reviewed articles, lectures to developers or campaign groups on key findings or participation in future research efforts.

5.9 Conclusion

Chapter four, presents the research plan for data collection and analysis through the qualitative methods of content analysis, survey, case study and interview techniques. To manage the potential sources of data, a sample was created using the constituencies of the signatories of a lobbying letter to the Prime Minister. The MPs argued for cuts in subsides and amendments to the NPPF to support local people in opposing proposals. The research logic assumes that the proliferation of planning proposals and developments within these constituencies having caused concerns for local democracy. The letter did not request the abolition of subsidies, instead cuts in subsidies for onshore wind. The request for planning support for local people who wished to oppose developments was balanced with a request for continued support of renewable energy, community led initiatives, local energy supplies and establishing the wider benefits of onshore wind.

However, over half of those MPs, all Conservative, did not have an operational farm within their constituency. Their lobbying for cuts to subsidies was not because of deliberative democracy or even representative

democracy. Instead, an outcome of partisan whip politics, the antithesis of democracy. The preliminary research finds, of the five LPAs with the most experience of onshore wind applications, three have operational farms providing an oversupply of renewable electricity for the number of households in its administration. Unfortunately, this is considered by the representing MPs (specifically Chris Heaton-Harris of Daventry) as an issue of Environmental Justice rather than something to celebrate. Situating the numbers in a global context, the size and scale of the farms and the number of planning applications over a twenty-five-year period, is relatively small. Yet, a narrative has been created that England is undergoing a proliferation of farms to the detriment of local communities and local democracy. The literature review established cross-party, central and local government support for community energy as a method to gain social acceptance. However, the preliminary results illustrate this is no more than political rhetoric. Of the thirteen applications (at the scale for village-wide supply) in the history of CE onshore farms, only four have received planning permission. Those permissions granted during a Labour government at the beginning of enacting the Climate Change Act (2008). It is no surprise that cooperative community energy would ideologically sit more comfortably with a Labour government. Even if the outcomes are insignificant, nationally. At the same time, it is a surprise that the Conservatives in the Coalition government are opposed to the growth of new industry. Targeting onshore wind with the same ferocity (through the appeal system) as other supposed threats to rural ways of life, such as new housing development and Travellers and Gypsy sites. Renewable energy generators include the Big Six of the privatised electricity sector, which ideologically sits within the neoliberal aims of the Conservative Party. The growth of onshore wind is hampered by political parties failing to support their ideological foundations. The Labour party in not supporting CE and the Conservative party in not supporting the growth of an industry.

Chapter six, will examine the data from central and local government.

Content from LPA guidance and Recovered Appeal reports will be analysed for SIA tasks and social impact identification, respectively.

6.0 Introduction to Chapter

Chapter five, presents the findings from the content of the LPA planning guidance coded against a node set that encompasses the 26 tasks of an SIA. That is, understanding the issues, prediction and assessment of impacts, operational strategies and monitoring programmes. The content of the written representations within the recovered appeals coded against a node set drawn from the domains of social impact identification. That is, community, political system, personal and property rights, health and well-being, cultural and heritage, environmental, fears and aspirations and way of life impacts.

6.1 LPA Planning Guidance

The documents from the five selected LPAs listed in *LPA Planning Guidance* for Content Analysis (see appendix 11) coded with NVivo software against the SIA Tasks coding set (see section 4.2.3). The tree map visualisations picture the content from each LPA planning document that relates to specific SIA activity. The original code set adapted during coding to remove any tasks not relevant and add any new occurring tasks.

The earliest planning advice for onshore wind energy published by Cumbria County Council in 2007, adopted by eight LPAs and used for material consideration. Allerdale Borough Council adopted the SPD in 2008. The landscape capacity assessment, LVIA, cumulative effects and design guidance researched by Cumbrian planners and landscape architects, Coates Associates CCC (2007a). Part one, explains the need for the guidance and what impacts the council expects a developer to assess. Part one, offers guidance on how to assess cumulative impacts and how to site and design a scheme. It offers a series of maps showing designated sites, wind speeds,

potential sites for onshore wind developments and is 49-pages long. Part two of the guidance, devoted to landscape and visual considerations. Explains assessing impacts, on Cumbria's Landscape Capacity Assessment and a full description of how to undertake an LVIA. Part two is 117-pages long. Attached, are a series of GIS images that map Cumbria's landscape capacity, landscape character, wind speeds, special areas of conservation, special protection areas and Ramsar sites. The maps picture approved wind energy schemes in Cumbria. The council also publish the HRA and a Sustainability Appraisal on the wind energy Supplementary Planning Document. The SA recommended a review of the SPD to meet EIA laws on biodiversity, water environment, soil quality, waste management and social objectives. Consultation undertaken on the SA in parallel with the SPD and in line with SEA Directive; recommended the SPD performed well for objectives on landscape and visual impact, air quality, climate change and public participation.

East Riding of Yorkshire Council, first published their wind energy interim planning document in 2009. The guidance written in-house in two volumes. Volume one, 69-pages in length, supported by the appendices in volume two with 68-pages. In volume one, an introduction on the renewable energy targets and the policy for the Yorkshire, Humber and East Riding areas. The capacity and constraints and planning issues for onshore wind farms outlined before discussing other renewables such as biogas, hydropower, solar and geothermal. Guidance for applying for planning permission offered to developers with other sources of information to support an application. In volume two, the appendices, constraints and sensitivity mapping (biodiversity and landscape character) with specific guidance on nature and heritage conservation, mapping of airfields, and consultation before and after application submission.

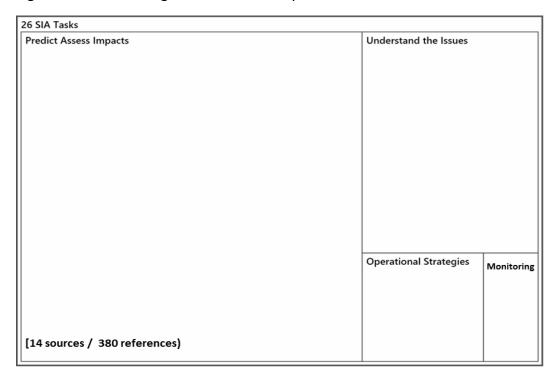
Cornwall County Council, originally adopted their planning guidance in 2011, with yearly updates and revisions; the guidance analysed for this research, is the latest version amended in 2014. Published in-house apart from the

Interim Guidance on Birds and Single or Several Turbines, published in collaboration with the RSPB. The 88-page document, discusses the wind resource in Cornwall, subsidies and the technology. It describes the EIA process before detailing consideration of the impacts. The impacts on historic environment and noise explained with case studies and a section on community involvement and benefits. The appendices offer planning advisory notes, templates and checklists to ensure the information presented by an applicant on issues of noise, birds, LVIA, EIA and generating capacity.

Daventry District Council, Northamptonshire, published their interim guidelines in 2012, as an update to their Energy and Development SPD of 2007. The interim guidelines produced in-house by their Local Strategy Service, Business Team and is 31-pages in length. The guidelines offer a background to wind energy, the planning policy context and the planning considerations. Of the considerations, they outline community benefits and engagement. There is a specific section on reversibility, cumulative impacts and the ES. This planning guidance made specific reference to the impact on property values.

Fenland District Council, Cambridgeshire, adopted their SPD in 2014. Offering a map of approved wind energy developments in their area and within 4km beyond their boundary. The 39-page document produced inhouse, starts with an explanation of the council's points system that a developer needs to prove in responding to climate change and mitigating flood risk. The use measures listed, of which a developer, would need to score ten points to meet a 'reasonable contribution' (FDC, 2014: 3). The guidance discusses the planning policy context, permitted development rights and community benefits and engagement before focusing on wind, solar and biogas technologies. Figure 24, *LPA Planning Guidance Coded by SIA Tasks*, draws the number of references and sources of information from the LPA guidance assigned to the key stages of an SIA: Understanding the Issues, Prediction and Assessment of Impacts, Operational Strategies and Monitoring and Evaluation Plans.

Figure 24: LPA Planning Guidance Coded by SIA Tasks



Source: Own design (2015)

The guidance from the five LPAs, focuses on stages of prediction and assessment of impacts. Tasks that occur within the EIA. The advice then discusses understanding the issues, which occur during the pre-application consultation stage of a proposal. To a lesser extent advice offered on creating and carrying out operational strategies and monitoring plans for approved developments. The coded content shown in figures 25 to 28.

6.2 Prediction and Assessment of Impacts

Within predicting and assessing impacts, most advice is on social changes and impacts, followed by assessing cumulative impacts, significance and indirect impacts. There is less advice on options appraisals and alternative project proposals or the inclusion of community responses in this stage of development.

Predict Assess Impacts Cumulative Social Changes and Impacts Visual Landscape Recreational Designated Physical Infrastructure **Historic Setting** Economy Telecommunications Sun / Shadow Flicker **Ecology** Significance Residential Grid Connection Health & Safety Archaeology Indirect Noise Renewable Energy Aviation **Tourism** Alternatives [13 sources / 220 references)

Figure 25: Predict, Assess the Impacts (LPAs)

Source: Own design (2015)

Most content assesses impacts on ecology and visual and landscape character (both with more than 20 references) by the EIA. Summarised in this section is advice that goes beyond referring to national planning guidance, in considering what is significant locally, about social changes and impacts.

6.2.1 Visual landscape

East Riding of Yorkshire, offer maps drawing the Zones of Natural Heritage Sensitivity. These show the landscapes in East Riding which are most and least sensitive to onshore wind developments. In undertaking a landscape character assessment, they refer the developer to the *Planning for Renewable Energy Targets in Yorkshire and Humber Final Report* (2004) and the 'Scottish Natural Heritage guidance as a method for deciding the sensitivity assessment zones' (ERYC, 2009b: 37). The landscape and visual impacts consider: size; number and colour of turbines; location; landscape characteristics; sensitivity of viewpoints, avoidance of remote, wild and tranquil areas, the visual amenity of historic settings and impacts on

associated and transport infrastructure. The council states, that a development in an area where there are none will always cause an impact, so assessing,

'this kind of development is an exercise in relative comparison, and prioritisation of key criteria. Predicting the sensitivity of a landscape character type and its visual sensitivity to the placement of wind farms is a professional judgement' (ERYC, 2009b: 37).

Cumbria County Council, offer baseline data for the county through a strategic landscape capacity assessment for wind energy developments. This assessment outlines the size and location of approved sites for wind farms in Cumbria. The capacity assessment sets out the criteria for assessing landscape and visual impacts: cumulative assessment undertaken with a minimum range of 30km radius of the centre of the site, when proposal site is 6km of another farm; a visual effects assessment; an assessment of landscape character sensitivity and values; an assessment for each of the landscape characters within a site. The guidelines ask to consider scale, proportion, order, pattern, balance and stability and to avoid adding to local visual clutter. To ensure that turbines improve the landscape,

'Association with manmade influences and the functional rationale of exposed sites are recognised as a favourable characteristic in terms of sensitivity or site selection criteria...The design of a turbine composition can further assist in creating a positive image by reinforcing associations and symbolism and appearing rational.' (CCC 2007b: 16).

Developers should consider the visual amenity by reducing dominance of the turbines and associated infrastructure towards key views. Avoid sites with access through villages, built up areas or steep and narrow rural lanes. The council considered the landscapes with a moderate to high capacity to house wind farms in Cumbria are the intermediary moorland landscape of Bewcastle Fells and Furness areas. Cumbria Council provide comprehensive guidance on how to undertake an LVIA.

Cornwall County Council, refer the developer to the *Cornwall and Isles of Scilly Landscape Character Assessment* (2007), (CCC*, 2014: 16), to understand the existing qualities of the Cornwall landscapes to enable a full understanding of the sensitivity to the development proposal. They ask developers to avoid areas with distinctive skylines, historic landmarks and coastal edges. To site turbines on the flattest part of the site or follow the land contour. To avoid spanning turbines across different typographies. To minimise views of blade tips, prioritise siting on brownfield sites and site proposals 2km from important tourist, scenic viewpoints. The council suggests use of grey colours for turbines 'to reduce contrast with the sky and match existing wind turbines in Cornwall' (CCC*, 2014: 19), and completion of an LVIA regardless of an EIA.

Fenland District Council, guides the developer to avoid adverse impacts (direct, indirect, cumulative) on any landscape or townscape in the Fenland District. The turbine colour, should be off-white or light grey. In keeping with other wind farms near the development site. They consider a three-blade turbine with a tapered tower as more 'elegant' and in keeping with other farms in Fenland (FDC, 2014: 15). No logos, names or signage displayed on turbines except for health and safety signage. To avoid overlapping of rotating blades. Blades given the same rotation speeds as neighbouring turbines. All associated equipment housed in the turbine and groups of turbines the same size, colour and appearance.

Daventry District Council, request landscape assessment of direct and indirect impacts, including all associated infrastructure. Considering landscape character, historic character, size, location, scale, spacing density, colour, need for tower lighting, blade length, turbine orientation, pattern and height. Assessment of cumulative impacts of existing and planned renewable energy developments. They assert the visual amenity on views as,

'Residential properties and users of recreational routes/facilities are likely to be considered more sensitive as receptors. Road/rail users

and industrial areas are likely to be considered less sensitive.' (DDC, 2012: 22).

The council refer the developer to Natural England (2010) *Making space for renewable energy: assessing on-shore wind energy development*, and the council's 'Northamptonshire Character Assessment' (DDC, 2012: 23).

The advice and guidance from the five LPAs regard impacts on: shadow flicker, residential amenity, renewable energy, recreational amenity, physical infrastructure, noise and historic setting has equal coverage (10 to 20 references each).

6.2.2 Ecology

East Riding of Yorkshire, outline the area as high-risk from flooding and high levels of coastal erosion. Developers must refer to the 'Strategic Flood Risk Assessment, various Catchment Management Plans and Flood Risk Management Strategies or the Shoreline Management Plan' for the area (ERYC, 2009a: 21). Parts of East Riding are covered by a Source Protection Zone, developers will need to consult with the Environment Agency to ensure there are no impacts on water quality. The guidance notes the concern that disturbance of peat can cause longer energy payback times. They advise developers to consult with Natural England. With impacts on birds East Riding states, the

'RSPB are generally in favour of wind turbines as the effects of climate change will devastate bird habitats and harm more birds than wind turbines will damage' (ERYC, 2009a: 21).

However, where there is wildlife the developer must assess the impact on: habitats; flight paths and feeding, swarming and hibernation sites and cumulative impacts on birds. The council refers the developer to the *Scottish National Heritage (2005) Guidance for assessing impacts on birds*. The council notes that several vulnerable and at risk of extinction species have

habitats or winter in the area, so require assessment as part of the EIA and in line with the HRA (EYRC, 2009a: 29). For consideration of bats they refer the developer to, English Nature (2005) *Bat Mitigation Guidelines* and Bat Conservation Trust (2007) *Bat Survey Guidelines*, seeking consultation with 'North and East Yorkshire Ecological Data Centre and the East Riding Bat Group' (ERYC, 2009a: 28).

Allerdale, offer a map series of international and national statutory designated sites of special interest. Stating they will not apply a buffer zone around these sites, but any development near to an appointed area must assess the potential impact on biodiversity in these protected areas. Assessment made under the HRA. Like East Riding, they note that soil and hydrology impacts, specifically peat disturbance, would cause more CO2 emissions than saved through the renewable energy generation. For the impacts on birds and bats they advise developers to refer to the *Scottish National Heritage (2005) Guidance for assessing impacts on birds* (CCC, 2007a: 16) English Nature (2005) *Bat Mitigation Guidelines* and Bat Conservation Trust (2007) *Bat Survey Guidelines* (CCC, 2007a: 17). They state that 'whooper swans, pink footed geese and greylag geese could be affected by wind energy schemes' (CCC, 2007a: 16). These species found wintering in Cumbria, so a developer must consult with the RSPB. Assessment must also include cumulative impacts on birds and bats.

Cornwall County Council, offer a mapping service to identify all protected areas within its administration borders, advising avoidance of these areas for onshore wind sites. For soil and hydrology conditions they seek a water interest survey. The guidance confirms that no evidence exists that turbines cause significant impacts on birds and with more damage caused by windows and cats. However, certain species such as 'wintering golden plover, wintering hen harrier, breeding nightjar and chough' are vulnerable and exist in Cornwall, so take a precautionary approach (CCC*, 2014: 24). The assessment approach to include: direct or indirect loss of habitats; mortality rates because of collision and migratory flight paths. Cornwall Council,

published guidance in collaboration with Natural England and Cornwall Wildlife Trust on bats and small wind turbines.

Fenland District Council, ask developers to follow their Local Plan policy on the Natural Environment. Not to conflict with policies on minerals andwaste or the 'Lock Fen/ Langwood Fen Master Plan' and to undertake HRA if necessary (FDC, 2014: 20). Developers are to consider the impacts on designated sites, regardless of the scale of development.

'Developers are encouraged to consider opportunities to achieve net biodiversity gains (i.e. gains in addition to any measures deployed to mitigate any adverse impacts that may result from the development)' (FDC, 2014: 20).

The council confirm the low risk to birds and bats, but ask developers to assess impacts such as collision, displacement, disturbance and barotrauma in bats.

Daventry District Council, advise developers to avoid harm to soil, hydrology and water quality, by asking for full details of the turbine foundation types. They show concern that vibrations from turbines could impact on ground conditions. For example, 'if a turbine was located close to a railway then Network Rail would want to be assured that there is no potential instability of the embankments' (DDC, 2012: 21). Developers should assess the flood risk using 'Technical Guidance to the National Planning Policy Framework (2012)' (DCC, 2012: 25). Consideration given to impacts on wildlife from turbine noise on a site in proximity to a designated area. The assessment on birds and bats to include: direct and indirect habitat loss; disturbance or displacement; collision risk and to specify how development does not negatively impact on the Northampton Biodiversity Action Plan.

6.2.3 Renewable Energy

Cumbria, discusses climate change, renewable energy targets, other renewable energy sources and the contribution renewables can have towards the local economy, rural diversification, energy security and community led schemes. The Sustainability Appraisal of the SPD critiqued the language used as too negative towards encouraging wind developments in Cumbria, advising the review of any subjective terms. Clarity given to the issue of intermittency or any perceived concerns about inefficiency included in the SPD. Daventry, discuss carbon emissions asserting, that although wind energy does not create emissions during operation; they do during manufacture, installation and decommissioning. However, they do note that this is still fewer than conventional power stations. Their policy recommends production of an environmental constraints map across the district to identify suitable locations for renewable energy developments. Applicants must prove the net benefits of a proposal and its contribution towards national targets. East Riding, discuss climate change, energy security, decrease in dependency on fossil fuels, the local economy, rural diversification and the potential for internationally recognised renewables industry based in East Riding of Yorkshire.

6.2.4 Recreational Amenity, Physical Infrastructure and Physical Safety

Impacts on the physical infrastructure concerns transport. All LPA's seek consultation with the Highways Agency and Network Rail. Cornwall, provide a 'Definitive Map and Statement' of the 2,706 miles of public rights of way in Cornwall, which cannot have a detrimental effect from a development (CCC* 2014: 38). However, they state that it is possible to regrade or delete an existing right of way following consultation. No construction works can start on or immediately adjacent to a public way until written approval from the LPA. Cumbria, refer developers to the Highways Agency for a formal assessment of the transport route, site access and any conservation impacts

on roadside special interest verges. Turbine fall over distance is the correct distance from any public right of way. Cumbria refer developers to the British Horse Society guidelines for bridleways (CCC, 2007a: 22). Daventry, advise siting turbines at a fall over distance plus ten per cent or more (DDC, 2012: 21). East Riding of Yorkshire, consider fall over distance to maximum blade height as the minimum distance from a public right of way but ask the developer to consult with them first. They refer the developer to the 'British Horse Society Advisory Statements 'No.4 Width of Bridleways' and 'No. 5 Standards and Dimensions' for developments near to bridleways (ERYC, 2009a: 30). East Riding state that applicants should avoid medium to largescale developments in densely populated areas such as Beverley, Kingston upon Hull and Borough. Developers to ensure the site is accessible for maintenance and decommissioning and the council may seek a traffic assessment for the construction period. East Riding suggest to reduce impacts on public highways, that applicants 'consider the use of inland waterways such as the Aire and Calder Navigation, the Pocklington Canal and River Ouse, to transport machinery and turbines during the construction phase of a development' (ERYC, 2009a: 31). Fenland, may also seek a detailed traffic management plan.

6.2.5 Historic Setting (visual impact), Archaeology (direct impact) and Designated Areas

Cornwall, locate schemes away from known archaeological sites as named in the Cornwall Historic Environment Record. They note that for visual impacts on historic settings,

'The extent and significance of setting, and the impact of development upon it, are not fixed as they change over time and need to be assessed on a case by case basis' (CCC* 2014: 26).

The council refer the developer to English Heritage and offer a checklist of likely assessment. Cornwall, expect experts in the field, to undertake assessment. If not, then 'very burdensome conditions might be imposed or the application simply recommended for refusal based on a lack of

information on which to judge it' (CCC* 2014: 70). In Cumbria, no scheme can impact on the nomination for the Lake District to as a World Heritage Site. They do not specify a buffer zone around designated areas but any impacts on views from historic settings will need assessment as will any areas considered important for their remoteness. In Cumbria, a Historic Landscape Characterisation is underway to identify all archaeology valuable sites, which developers should refer to. Cumbria expect an archaeologist or heritage specialist to be a member of the EIA team. East Riding, advise developers to contact the council's conservation team or the Humber Archaeology Partnership early in the planning stages and expect a specialist to be part of the EIA team.

6.2.6 Residential Amenity

Residential amenity means the impacts on dwellings, businesses and public buildings by shadow flicker, visual impacts and noise. All LPAs refer to the national planning guidance. Cumbria, advises that if local community members are concerned about noise impacts on their homes then the developer should take community members to visit another operational farm in Cumbria. Daventry, have not applied a minimum separation distance from dwellings for visual amenity, noise or shadow flicker. However, they will pay attention to properties within a 'distance of 10 times the blade tip height of a wind turbine' (DDC, 2012: 21). Fenland, state developments avoid impacts on the main views from a property or garden.

6.2.7 Noise

All LPAs in line with national policy need ETSU-R-97 noise assessment. Without one, Cornwall state the Environmental Health department will object and the application recommended for refusal. Daventry, state that although the ETSU-R-97 is 'sometimes criticised as being outdated, this is a commonly accepted benchmark for assessing proposals' (DDC, 2012: 10).

East Riding comments, 'until such time as there is a more up to date standard the Council will expect developers to use ETSU-R-97' (ERYC, 2009a: 17). East Riding also advise developers to organise visits to operational farms for community members who have concerns about noise. The council refers applicants to the 'Guidelines for Community Noise World Health Authority' and the 'Health and Safety Executive Noise information' (ERYC, 2009a: 17). Fenland, state that they may also seek a cumulative noise impact assessment and explain any mitigation methods through a noise management plan.

The impacts on *economy*, *grid connection* and *capacity factor*, *telecommunications*, *aviation* and *tourism*; defined during this stage of development has less content in the guidance from the LPAs (fewer than ten references). All LPAs refer the developer to the Civil Aviation Authority, the Ministry of Defence and the National Air Traffic Services for assessment of aviation impacts. In Cumbria, aviation impacts, may 'prevent development from taking place around the north, east and some coastal locations within Cumbria because of MoD sites and aircraft activity' (CCC, 2007a: 12). East Riding, offers a map of exclusion zones for airfields/ ports; commercial and RAF sites at 10km and civil or private airfields at 5km (ERYC, 2009a: 33). East Riding refer the developer to RUK to access their guidance and proforma for consultation with aviation stakeholders.

For *grid connection*, Cornwall warn that some of the rural electricity infrastructure may need upgrading before a farm can connect to the National Grid. For *telecommunications*, Cornwall need 'baseline domestic television and domestic radio reception [to be] undertaken in the area by a qualified television and domestic radio engineer' and a mitigation scheme that includes insurance for any claim by residents, for domestic loss of reception within two years of the farm commission date (CCC*, 2014: 42). Cumbria and East Riding, refer the developer to the Office of Communications and all emergency services that may be effected. These stakeholders may then apply an exclusion zone around their systems or developers pay for re-routing of signals.

On the economy and tourism impacts, Cumbria states,

'Research is available to suggest that wind development could bring positive and negative benefits to tourism, however there is currently no evidence to suggest that the existing wind energy schemes in Cumbria, some of which have been built for a decade, have had a significant adverse economic effect on the tourist industry'. (CCC, 2007a: 24).

Cumbria ask developers to consider local labour agreements, locally sourced or recycled materials and training for the local workforce. Cumbria's SA on the SPD, noted the section on economy and economic benefits should be strengthened. Daventry note the local concerns towards property value decreases, but state that this is not a planning consideration. East Riding, discuss the positive impacts on the economy as being rural diversification, local supply chain, and 'multiplier effects on the local economy, creating additional local jobs and increasing prosperity' (ERYC, 2007a: 21). They also recommend promotion of the sites as visitor attractions and education facilities.

The content on cumulative impacts (9 sources, 31 references) is followed by significance, indirect impacts, alternative project appraisals and community. All LPAs considered indirect impacts to mean impacts from supporting infrastructure such as power cables, road access, substations, foundations, transformers and fencing.

6.2.8 Shadow Flicker

Cornwall, will 'Request a shadow flicker assessment and the identification of appropriate necessary mitigation measures where the nearest residential premises are within 10 rotor diameters of the proposed wind turbine(s)' (CCC*, 2014: 77). Each development with a computerised system remotely switching the turbine off at times of risk. Daventry, seek programmed

turbines to shut down at times of risk. Regard given to the number of potential homes effected at different times of the day, throughout the year. East Riding, ask that developers are to 'calculate the number of hours per year that shadow flicker may occur at a dwelling from the relative position of a turbine to a dwelling, the geometry of the wind turbine and the latitude of the wind farm site' (ERYC, 2009: 25). To ensure the working frequency of the turbine is less than 2.5 hertz, to avoid any potential impact on people suffering photosensitive epilepsy. However, the council states this is unproven, and would affect a minority of people with the condition. The assessment on dwellings to include window widths, use of rooms and intervening typography and plant screening using the approved council methodology. Cumbria, discuss shadow flicker impacts on residential amenity, but state cases are rare and mitigated. Fenland, state that if shadow flicker is likely to impact on dwellings, businesses, schools or hospitals, then 'applicants will be required to undertake a quantitative analysis of the anticipated impact' (FDC, 2014: 16). Developers are to state mitigation measures such as the 'use of non-reflective, matt materials' (FDC, 2014: 16).

6.2.9 Cumulative, Significance, Indirect (landscape visual, noise and ecology)

Cornwall, provides a mapping service, showing the planning status of all wind energy developments, but state that,

'Cumulative limits may present an eventual limit to the extent of wind energy development in particular areas' (CCC*, 2014: 21), (CCC, 2009a: 30).

In Cumbria, developments are larger in areas with the most wind and the least technical constraints, in the Solway Basin and Furness. This is likely to increase in the Lune and Eden Valleys and around the Lake District National Park boundary.

'The combined effect of onshore schemes with offshore schemes also needs to be considered in coastal areas. Cumulative effects should also be considered with neighbouring areas outside Cumbria' (CCC, 2009a: 30).

Cumbria will not set separation distances and each application dealt with on a case by case basis. They refer the developer to Scottish Natural Heritage guidelines for dealing with cumulative impacts. Cumulative impact assessment undertaken when the area contains one or more approved schemes. Cumbria warns,

'In order to meet government targets for renewable energy and help reduce negative climate change impacts multiple schemes may need to be accepted as a defining characteristic in some of Cumbria's landscapes' (CCC, 2009a: 30).

East Riding asserts that it has already exceeded its regional renewable energy targets with wind energy proposals alone. Developers, when considering onshore visual impacts should also consider offshore wind developments and developments in bordering local authorities to East Riding of Yorkshire.

6.2.10 Community Responses to Impact Assessment Alternatives

Cornwall Council urge the developer to engage at an early stage of the development during pre-design and feasibility stages to gain community views. Incorporating views in the proposal before and after the submission. They ask for evidence of how the community responses have shaped the proposal. Cumbria, state that,

'an insight into local concerns early on in the process can help to identify community benefits, assist with planning the overall scheme and mitigate against any identified negative impacts' (CCC, 2009a: 18).

They seek consultation with communities early in the process. None of the LPAs offered advice on assessing the viability of alternatives or in offering options appraisals, except for Daventry, who suggest there may be a national

change towards alternative renewable energy technologies (DDC, 2012: 11).

6.3 Understanding the Issues

The first stage of an SIA is *Understanding the Issues*, the content analysis for these SIA tasks pictured in figure 26. Advice on scoping, followed by ensuring an inclusive participatory process and gathering baseline profiling data; has the most references. Understanding the project including support for community led energy schemes, informing the community and the social area of influence has the next content. Less advice offered on, profiling the community and clarification of roles and responsibilities.

Figure 26: Understand the Issues (LPAs)

Source: Own design (2015)

Cornwall, state that in sensitive areas wind turbine developments will require an EIA, regardless of height, but elsewhere it will be on a case by case basis. Developers should avoid delays and gain a Screening Opinion from the LPA at an early stage. Cumbria, assert the EIA is the main decision making tool

for assessing nature conservation interests. A scheme may not need an EIA, but if located in an area subject to existing impacts then an EIA is required. Daventry, advise developers to consider not just the impact on the site but on the wider local area, with emphasis given to find appropriate sites and ensuring good design to lessen impacts. East Riding focus on cumulative impacts in the area and near to its boundaries, so note the available land for a development may be limited. They encourage developers to contact them at an early stage of the development to discuss the need for an EIA and the scope of the assessment,

'Exceptionally, an informal EIA, presented as an Environmental Statement, may be requested by the Local Planning Authority. Such a statement may include an assessment of the landscape, visual, ecological, transportation, amenity, and safety impacts, unless otherwise stated' (ERYC, 2009: 25).

They confirm that this early contact with the council will set up mitigation measures and set potential planning conditions.

6.3.1 Inclusive Participatory Process

Cornwall, refer the developer to the Regen SW (2004) *Guidance South West Engagement Protocol and Guidance for Wind Energy*, for guidance on community involvement during planning. They specify at what stages of the development life cycle they wish to see consultation exercises undertaken. Achieved through presentations and exhibitions with feedback from local communities. Developers must evidence how this has influenced project design. They also ask the developer to sign up to a Planning Performance Agreement with the council to agree project programme, timescales and resources.

Cumbria, suggest developers should be consulting with communities throughout the full development cycle and not limit engagement to planning, but also into construction and operations. They admit that they have a role in

promoting renewable energy to local communities, through guidance and training. They suggest the use of engagement techniques such as,

'consider inviting people who live near wind energy development to meet with local communities to discuss the realities of living near them' (CCC, 2009a: 18).

Providing leaflets and briefing packs and organising exhibitions and public meetings. They recommend setting up community liaison groups with dedicated personnel. They state that active approaches like this,

'could help reduce the feeling that communities have no ownership of a scheme, which may be the case if they are presented with a finalised scheme at an exhibition or meeting. Recent studies have also suggested that lack of information or awareness on renewable energy can result in people feeling unable to give positive support' (CCC, 2009a: 18).

The council recommend that communities identify constraints as well as opportunities such as community benefits, habitat enhancement and links to local schools and colleges. As part of the planning proposal they would want to see 'information and examples showing how community concerns have been successfully dealt with elsewhere' (CCC, 2009a: 19). They refer the developer to follow the Centre for Sustainable Development (2005) *Community Benefits from Wind Power* and the DTI (2006) *Protocol for Public Engagement with Wind Energy Development in England.* Cumbria offer a consultation list of people and organisations in the region. The SA found the section on community engagement, one of the strongest in the wind energy SPD.

Daventry, confirm they will 'carefully monitor' a developer's engagement processes (DDC, 2012: 28). They advise developers to arrange meetings between the local community and people currently living in proximity of a wind farm. They warn that local concerns may include impacts on local economy, shadow flicker, noise and landscape and visual effects. They expect

to see 'positive' and 'meaningful' engagement throughout the planning process from layout and design stage to construction and operations (DDC, 2012: 28). They suggest that a developer evidences community support by stating the socio-economic impacts and enhancement measures in areas of employment, equality, community cohesion and well-being.

East Riding, ask developers to follow the approach taken for the council's Statement of Community Involvement (SCI). They want to see evidence of the methods of engagement used and suggest using the following techniques: 'exhibitions, open days, workshops, public notices, leaflets, briefing packs, public meetings and presentations' (EYRC, 2009: 25). Similarly, to Cumbria they recommend setting up a community liaison group to ensure regular involvement for before and after the application. This is important for mediating any concerns because of construction and into monitoring of operations, which may be part of the planning conditions.

Fenland, want the developer to,

'demonstrate that a proposal will directly benefit a local community in the medium and long term and/ or is targeted at residents experiencing fuel poverty' (FDC, 2014: 12).

They want detail outlining the expected social, economic and environmental benefits of the development. They offer examples such as employment creation and lower fuel costs, but specifically ask a developer to evidence targeting of people living in fuel poverty for any benefits from the scheme. About community energy they state,

'Community led renewable energy proposals will be particularly supported. Such proposals should demonstrate (by evidence of community engagement and consultation) that their preparation has included significant community involvement from an early stage' (FDC, 2014: 12).

6.3.2 Baseline Data

Cornwall, provide the developer with wind speed and wind farm maps for the county. They provide advice on how to assess the wind feasibility of a site with a set of questions to test site suitability, outlining preliminary surveys to assess technical, environmental and local amenity impacts. They offer this as advice only and confirm that this is not of planning consideration, but for the developer to assess financial viability of the site. Cumbria, set up a wind energy officers working group to collate biodiversity baseline data as part of the SA process, extended to include baseline data on the historic environment across the county. They amended the SPD to provide clarity on why weight is given to landscape issues from the impacts of poor siting and design. Daventry, discuss the need for an anemometer mast, temporary planning permission, to assess wind speeds. The measurements taken continuously over no less than a six-month period. From these measurements, they want to see wind speed, wind direction, energy rating and energy output indicated. East Riding, view siting and design as an iterative process of an ongoing environmental assessment. However, they confirm the financial viability linked to wind speeds of a farm is not of planning consideration. They offer good practice guidance on avoiding general sensitivities for example, peatbog soils and general elements of good design for example, following existing land typographies and use of existing planting for screening. East Riding, offer GIS constraints maps showing areas of environmental sensitivity. They state that these maps are for guidance only and an applicant will need to provide more detail site assessment. Fenland, provide a map of existing turbine developments (and those approved) and landscape character (designations, settlements, built environment, residential nodes and airfields), but state that these maps are not of planning consideration. They aim to update the maps quarterly.

6.3.3 Understanding the Project and Community Energy

Cumbria, advise developers to employ the services of an EIA team at an early stage of the development because they want the environmental, social and

economic impacts to have equal consideration. They expect the personnel in the EIA team to be qualified to assess each of these key areas. Cumbria offer a description of the county through its declining manufacturing and agriculture economies. They view wind energy developments as a method to diversify the local economy from rental income or sale of land for farmers and component construction and maintenance for the manufacturing industry. To explain this, they give the case study example of the positive economic benefits to the community in Barrow from the nearby offshore scheme. They warn, because of the importance of the landscape to the tourist industry, often, local concerns will include impacts on the tourism and the local economy. They state that local labour agreements could temper these concerns but state,

'It is accepted that the interpretation of EU rules when tendering a scheme prevent a local preference, but steps should be taken to ensure local businesses are invited to tender for relevant aspects of a scheme' (CCC, 2007a: 12).

Feedback from the SA process confirmed the section on in the SPD on community energy needed strengthening to show the council is proactive in supporting community issues and community led schemes at all levels of development (commercial, smalls-scale and micro).

Daventry, declare the difficulty is considering wind farm applications,

'the District Council, has the difficult task of trying to balance objectives that are sometimes conflicting. On the one hand, there is the national policy to increase the proportion of energy from renewable sources to address climate change. On the other hand, there is the need to protect local heritage assets, attractive landscapes and sites of nature conservation value from any adverse impacts' (DDC, 2012: 4).

However, Daventry concludes that wind developments could offer opportunities for local employment, rural diversification and community led schemes.

East Riding, state that wind energy could be the key resource for meeting regional targets for renewable energy. East Riding and North Lincolnshire are two councils in the country that can capitalise on the opportunity. However, they conclude the pace of renewable technology development may mean that wind energy is phased out overtime for other types of renewable energy schemes, so remind the reader that onshore farms are temporary structures.

6.3.4 Informing and Profiling Community, Clarifying Roles and Responsibilities

East Riding, offer a list of typical consultees and wish to agree an approach with the developer for the pre-application consultation stage. Their aim is to maximise opportunities for community engagement in renewable energy schemes, through community investment and stewardship. By increasing community involvement in the planning system. They view the environmental scoping report as an important facilitator for the consultation process. They advise that setting up working groups for larger schemes should include both statutory, non-statutory and community representation.

'Early information, as well as quick responses to particular concerns, will help local people to feel informed, and hopefully more confident, about this new development in their area.' (ERYC, 2009b: 26).

East Riding urge developers not to present communities with completed designs and to provide information at an early stage in an understandable format. Cornwall offer their Planning Performance Agreement Charter to inform membership and methods of consultation at early stages before application.

6.3.5 Social Area of Influence

Cornwall, state the county has one of the highest average wind speeds in Europe and the county was the site for the first wind farm in the UK.

Cumbria, recognises that much of the county's biggest wind resource is on land with designations, so policies to protect these areas may conflict with developing onshore wind energy. The increase in wind energy development and the increase in turbine heights in the area has called for a review of the landscape and visual assessment of impacts. They warn that land designations are likely to change following Natural England's work on boundary extensions for Lake District and Yorkshire Dales National Parks. East Riding, consider their interim planning document, as support to the council in meeting its renewable energy targets for '2021 and beyond' (ERYC, 2009a: 5). However, they note the guidance does not include planning conditions for micro scale domestic schemes in urban areas. They state,

'energy generated by domestic developments does not count towards meeting local, regional or national targets, unless these developments are connected to the national grid' (ERYC, 2009a: 6).

The council confirm that they will monitor the government's intent to improve grid connection for small-scale developments. As a district, rather than county council, Fenland, warn of their limited resources for completing a capacity study for their area.

'This task is technically too difficult as no two proposals are the same: for example, a 100m turbine in one location may be totally inappropriate, but a 10m turbine in exactly the same location may be acceptable - a capacity study will not reflect such distinction.' (FDC, 2014: 2)

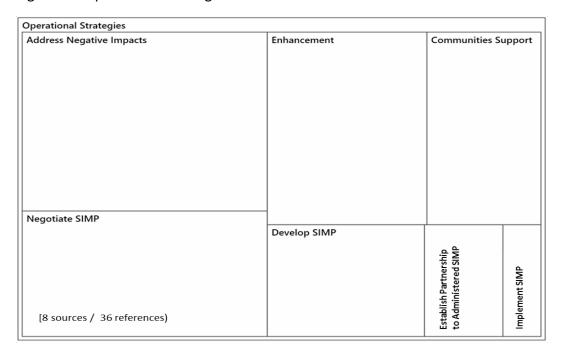
Therefore, their scope of influence limited to responding to applications on a case by case basis.

6.4 Operational Strategies

Setting out operational strategies for construction and electricity producing stages of the scheme. The negotiation, development, administration and implementation an SIMP through the community benefits funds is the main

content from the policies. Followed by addressing negative impacts and enhancing positive impacts. There is some discussion, how this can gain social acceptance during this stage of the development lifecycle.

Figure 27: Operational Strategies



Source: Own design (2015)

Cornwall, expect any financial contributions to be proportionate to the scale of the development. How the developer will deliver contributions approved under a Heads of Terms through Section 106 Agreements, for which they provide a template. Cumbria, declares that benefit payments are not of material consideration, but encourage developers to work with communities to strengthen community interests. They advise developers to look to Europe for models to emulate.

'Developers could consider supporting the local community when engaging with community stakeholders and developing a proposal, including opportunities for local cooperatives to purchase turbines as part of the development. This concept is supported and was pioneered in Cumbria. Experience should be taken from the Baywind scheme and its investment model' (CCC, 2007a: 19).

They advise host communities undertake any potential for community benefit funds through non-legal planning agreement with the council. Any land management for biodiversity measures will be through Section 106 Agreement. East Riding, confirms community benefits are not material consideration, but advise developers to explore how schemes can offer 'community wellbeing' and 'meaningful local benefits' (ERYC, 2009a: 21). They offer an exemplar case study for reference,

'Novera Energy obtained consent in July 2007 to develop a 12-turbine wind farm at Lissett near Bridlington. As part of the Section 106 Agreement it was agreed that a Community Liaison Forum be set up to deliver local community facilities and initiatives' (EYRC, 2009a: 22).

They seek developers who offers community benefits, to contact them for support in contacting the community, the funding amounts and the types of schemes the funding can support. The council offers a position statement on *Goodwill Payments* as part of the guidance. The statement confirms the council will manage the fund for communities and developers for a small management fee drawn from the fund payments. If impacts of a scheme are further reaching than the local environment, East Riding agrees the beneficiaries of the fund can originate beyond the locality of the scheme. The council concludes that,

'Offers of co-ownership and part-ownership are also welcomed provided that no liabilities fall to local communities, the public sector or Councils' (ERYC, 2009b: 62).

Cornwall, order housing of ancillary structures and cabling within turbine towers, or underground, but where not possible then use the local vernacular design. They suggest avoiding urbanisation of rural areas by minimising the use of kerbs, fencing, lighting (use infrared) and hard surfacing. They want to see measures such as improvements to the right of way network and provision of visitor facilities. For bird habitats, they suggest creating wild birdseed mixes in areas of corn crops although they admit in case law this is

debatable to its appropriateness. They confirm that if sensitive areas are avoided through planning, then in operations, creating new habitats is possible. Any mitigation measures should support traditional land management approaches by preserving small fields and traditional plant species. Overall the council would want schemes to increase the value of local habitats. For the areas of low wildlife value in Cornwall, there may still be a cumulative impact on farmland birdlife. Cornwall recommend improving seven per cent of the land effected by the scheme.

'Buffer zones should be identified to ensure that enhancement is outside the zone of influence. For instance, for farmland birds a buffer of 200m is recommended. Otherwise the corn bunting, cirl bunting and chough species should be targeted for enhancement measures' (CCC*2014, 93-94).

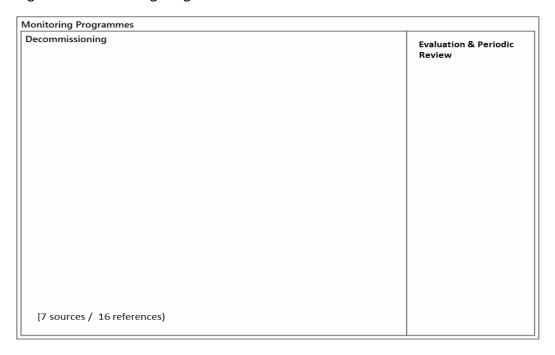
Cumbria, expect solutions to mitigation efforts during an 'iterative design process' however, they understand making secondary measures allows schemes to improve existing conditions (CCC 2007a: 42). They suggest a developer focuses on hedgerow and stone wall restoration and managing heather moorlands. Otherwise they would want to see creating new habitats that support a wide range of species. Daventry, follows Cumbria, in viewing mitigation as part of the design, but direct developers to improve existing habitats or creating new ones. By creating off-site screening by planting and providing new habitats for ones lost. East Riding, want developers to identify biodiversity improvement choices, even when there is no negative impact from a scheme. The council view potential developments as a method to increase biodiversity value in areas of low value. They view mitigation efforts as iterative design, if it has responded to community concerns. Secondary measures can include, off-site planting, hedgerow and stone wall restoration and new habitat creation. Compensatory habitat creation enforced by planning conditions, but they would like to see net gains in fixing sustainable ecosystems to aid the council in meeting its targets for biodiversity in the region. East Riding warn that implementation of measures may have an impact on development timescales as a planning condition may state a

certain season in the year to begin works. This prevents disturbing specific breeds or habitats.

6.5 Monitoring Programmes

The final stage of the SIA for onshore windfarms has two main tasks; content on decommissioning and evaluation and periodic review.

Figure 28: Monitoring Programmes



Source: Own design (2015)

Cornwall, offer temporary planning permission for 25-years, at which point they expect submission for planning permission to decommission the scheme. Or a new application to extend the time of the existing farm if still financially viable. If a farm lies idle for more than 12-months, they would expect removal of the infrastructure habitat and land conditions reinstated. Cumbria, Daventry and East Riding, expect restoration measures at decommissioning as part of the planning application with evidence of the pre-construction habitat baseline information and the objectives of enhancement measures used to inform decommission plans. East Riding, may apply decommissioning conditions if any part of the development stops functioning for a period and expect a timescale for the works to ensure

decommissioning as part of the planning application.

Through its use of an SA, Cumbria have a comprehensive section on monitoring, which has recommended setting up a monitoring framework for the wind energy SPD. However, with project monitoring information, this is in line with specific impacts during the technical survey assessments (for example, for noise impacts during construction and decommissioning or archaeological ground conditions during construction). Cornwall, for construction and post construction recording of bird habitats, seek

'a dated photograph of any mitigation measures is submitted annually to the planning authority to confirm the presence of the habitats through the lifetime of the permission.' (CCC*, 2014: 95)

For East Riding, the environmental management plans and or construction method statement from the ES will set up the monitoring arrangements, from which the council may stipulate construction working hours.

The overall focus of the LPA guidance on wind energy developments is during the prediction and assessment of impacts from the SIA procedure. Followed by content on understanding the issues. There is less information on operational strategies and monitoring programmes. Emphasis is on assessing landscape and visual impacts, ecology and cumulative impacts by use of the EIA. Other impacts identified and in line with national planning policy (noise, renewable energy, historic setting) have equal content within the LPAs guidance. Within the understanding the issues stage, content is equally coded to scoping, baseline profiling and ensuring participatory engagement. Less content found on operational strategies and if stated then this links to community benefits funds. Lacking description, is monitoring, evaluation or review processes during and after operations. When it is discussed it refers to decommissioning and habitat reinstatement.

6.6 Conclusion

The content from the local planning guidance concentrates on the SIA stage of prediction, analysis and assessment of impacts. The direct, indirect and cumulative impacts and the significance of those impacts. How the host community respond to the mitigation of impacts and the assessment of alternatives. This stage of SIA is most comparable to planning guidance and EIA for onshore wind developments. All the LPAs, expect that assessment will be carried out by suitably qualified experts. Some stating the types of professional judgement they seek, such as an archaeologist as a member of the EIA project team or a radio engineer to assess impacts on telecommunications. Cornwall, explicitly states the likelihood of refusal, if experts have not been used. When combined, the planning guidance offers less than ten references towards impacts on the economy and that content is amalgamated with grid connection, capacity factor, telecommunications, aviation and tourism impacts. None of the LPAs specify the use of an economist, sociologist or regeneration professional to evidence the positive and negative socio-economic impacts. Cumbria's SA of the SPD, confirms that this is a weakness, especially if they expect social, economic and environmental impacts to be considered equally.

In SIA, informing activity would fall into understanding the issues. Each LA, has in part, engaged with myth busting of common concerns from potential objectors. Confirming the rarity of impacts on people with photo sensitivity epilepsy from shadow and sun flicker. The harm climate change, cats and windows have on bird species compared to turbines. Cumbria, admitting no adverse impact to their tourist industry in the ten years of hosting wind farms. The lack of research supporting a negative impact on property values, emphasising that this is not of material consideration. Daventry's confirmation on carbon emissions through manufacturing supply chain of turbines being less than those of conventional power stations. Or Cumbria's acknowledgement that the lack of awareness about renewable energy may

lead to community objections. All the LA's confirm the need for early consultation and request a developer to evidence how the community have affected change to the design proposal. They all emphasise the need for a continued participatory approach throughout the development life cycle and into operations. East Riding and Cumbria offering suggestions for the types of techniques that can be used to engage with their communities.

In SIA, develop and implement strategies stage, includes assessing the positive impacts of a development. Cumbria, emphasises how turbine site design can offer a positive symbolic meaning, which could contribute towards a new understanding of its landscape. East Yorkshire of Riding, state they have met their set targets for renewable energy and wish the region to be considered an internationally recognised region for the technology. They view onshore wind as having a multiplier effect on rural diversification and the local economy generally. The operational sites are considered visitor and educational facilities. Daventry, advise developers to considered impacts on equality, wellbeing and community cohesion. Fenland, was the only LA to discuss the impact on fuel poverty, advising developers to evidence this by targeting vulnerable communities for any community benefits funding. Community benefits funding, is confirmed as not being of material consideration, but East Riding, offer their Goodwill Payments scheme where they will undertake the finance administration on behalf of communities and developers. All the guidance state community led developments will be supported, Cumbria, offers the case study of Baywind, in Cumbria, England's first community owned farm. Fenland, advise developers to look to Europe for case studies.

On the one hand, the LA's appear to apply difficult technical constraints to siting of developments. In Cumbria, developers are asked to avoid steep, narrow, rural lanes or to consider offshore and onshore developments (including those in neighbouring local authorities) in the cumulative assessment. In Cornwall, siting must not be within proximity to approximately 2,700 miles of public rights of way. Daventry, simply state a

potential for a national policy move away from onshore wind altogether. The LA's use the guidance to admit their difficulties, for Daventry, they are attempting to balance the conflicting aims of renewable energy with protecting local heritage assets. Fenland, do not have the resources to offer further advice to developers such as through a land capacity study. But, then they do offer innovative solutions; East Riding, suggest using the canal network for transportation of machinery to alleviate impacts to road networks. Or state their intention to monitor government policy on small scale developments, potentially adding to national target levels for renewables. Cornwall, are open to regrading or deleting PROW designations. Cumbria, want the Baywind model adopted by future CE developers.

The LPA guidance shows an understanding of the issues. The LAs define their role in project development, helping developers through various mapping, wind speed and landscape capacity and character studies. They offer an overview of their administrations and their social area of influence. They offer advice on how to engage with communities and urge long term participatory approaches. They guide the developer on scoping issues through the EIA process. Prediction, analysis and assessment of likely impacts, continues to use the EIA process for direct and cumulative impacts although less content was found on indirect impacts and the significance of changes. The inclusion of stakeholder responses and project alternatives also had very little content. This stage was most prevalent within the LPA guidance. The development and implementation of strategies, coded content towards mitigation and the development of SIMPs for the administration of community benefits. Some content was coded towards enhancing benefits, although no advice given as to how to evidence the socio-economic benefits. The least coverage was given to the SIA stage of designing and implementing monitoring programmes, where this was given, it related to the construction period, decommissioning and habitat management plans. This is discussed further in Chapter nine.

6.7 Recovered Appeals

There were 51 recovered appeals, which involved 35 LPAs, for onshore wind farms in England between 2012 and 2015 (see appendix 12, Recovered Appeals Inspectors Reports, for a list of references). Of these, 47 cases refused planning, 17 of which refused against the Planning Inspector's recommendation. Of the refusals against the Inspector's recommendation, 38 cases rejected because of impacts on the landscape character. The Secretary of State, approved five appeals, granting planning permission in line with the Inspector's recommendation. The Secretary of State did not approve an appeal against an Inspector's recommendation for refusal. Figure 29, Formal Reasons for Refusal by Secretary of State (2012-2015), provides an illustration of the recovered appeals, the cases granted, those that refused against recommendations and the main reasons for refusals. Of the 35 LPAs: North Lincolnshire, Melton and Northumberland have experience of processing three recovered appeals each, during the timescale. The largest refused proposal was for 12 turbine farm covering three LPAs: Milton Keynes, Bedford and Wellingborough. The largest approved schemes for East Lindsey with eight turbines and Malden with seven turbines. Of the total 47 refused appeals, 18 were for developments of fewer than two turbines. All five of the LPAs analysed in the LPA planning guidance in section 5.1 have experienced recovered appeals by Secretary of State for this period.

Commercial energy developers were appellants in 27 cases, 12 cases brought forward by individuals and 11 cases by other industries for example, construction, farming, and waste services. The site proposals mainly located on agricultural farms, but also include brown fill sites such as a disused mine at Asfordby (Melton), Torr Works quarry (Mendip), Winterton landfill site (North Lincolnshire) and Bicton industrial site (Huntingdonshire). There was also an application for a site in the grounds of Nottingham Trent University.

One appeal was by a community led energy scheme, refused planning permission by Bolsover District Council. The Secretary of State refused the appeal in line with Inspector's recommendation because of impacts on the historic setting and living conditions. This planning case for Roseland

Community Energy Trust, is selected for further analysis through a desktop case study in Chapter 8.

Each inspector's report and the associated response from the Secretary of State (DCLG) in a covering letter, analysed for the formal reasons for refusal. Coding the reasons given in written statements at appeal, or written representations during planning, from community members in support or in opposition towards the application. The formal reasons by the Secretary of State have followed material consideration, so a simplified set of social impact codes have been created to code content. This coding set adapted in line with identifying social impacts for content from written representations from community members in support and in providing objections.

Figure 29: Formal Reasons for Refusal by Secretary of State

	ecovered Appeals				Formal Reasons for Refusal								_								
no.	LP A	no. Turbines	Year	Approved	Refused Against Recommendation	Landscape Character	Historic Assets	Visual Amenity	Living Conditions	Cultural Heritage	Designated Areas	Cumulative Landscape	Poor Consultation	Policy Conflict	MOD	Birds / Bats	Aviation	Network Rail	Reversibility Costs	Ecology	Cumulative Tourism
1	Carlisle	6	2012		0									0	0						_
3 4 5	Copeland Fenland and South Holland Milton Keynes (1), Bedford and Wellingborough South Lakeland	6 4+2 3+6+3 1	2013 2013 2013 2013			0	0	0000	0	0		0									
7	Allerdale (1) Aylesbury Vale (1) Breakland Cornwall (1)	1 4 2 1	2014 2014 2014 2014	0	0	0000	0	0	0	0	0						0				
10 11 12	Cornwall (2) Daventry East Riding of Yorkshire (1)	2 1 6	2014 2014 2014		000	000	0000		0			0								(0
14 15	East Riding of Yorkshire (2) Huntingdon (1) Lake District National Park Malden	6 6 1 7	2014 2014 2014 2014	0	0	000	0	0		0		0									
18 19	Melton (1) Milton Keynes (2) Newark and Sherwood (1)	9 5 3	2014 2014 2014	0	00	00	0	0	00	0				0		0		0	0	0	
21 22	Newark and Sherwood (2) North Lincolnshire (1) North Lincolnshire (2) North Lincolnshire (3)	10 3 3	2014 2014 2014 2014		0	000	000	0	0	0	0										
24 25 26	Northumberland (1) Northumberland (2) Ryedale	2 5 10	2014 2014 2014		0	0	0	000	0	0	000			0							
28 29	Sedgemoor (1) Sedgemoor (2) Selby (1) South Norfolk (1)	4 4 1	2014 2014 2014 2014		0	0000	0	0	0												
31 32 33	South Norfolk (2) South Northamptonshire Stratford upon Avon	3 5 4	2014 2014 2014		000	0000	000	0	000												
35 36	Allerdale (2) Aylesbury Vale (2) Bolsover East Lindsay (1)	4 1 6 8	2015 2015 2015 2015	0	0	0	000	0	0			0									
38 39 40	East Lindsay (2) Huntingdon (2) Kirklees	9 3 2	2015 2015 2015			00	0	0	0	0	0	0									
42 43	Melton (2) Melton (3) Mendip Northumberland (3)	1 1 4 1	2015 2015 2015 2015		0	0000	0	0			0		0								
45 46 47	Peterborough Rugby Selby (2)	4 4 1	2015 2015 2015 2015		0	000	000		0		0		0								
49 50	South Lakeland Stafford West Lindsey (1) West Lindsey (2)	1 2 1 10	2015 2015 2015 2015		0	0 00	0	0					0		0		0				

 $Source: Own \ design, adapted \ from \ https://www.gov.uk/government/collections/planning-applications-called-indecisions-and-recovered-appeals \ [last \ accessed \ 15/12/15]$

The aggregated content of the appeals is mainly for impacts on landscape character, historic assets, visual amenity and living conditions as the reasons for refusal. Followed by cultural heritage, designated areas and cumulative landscape impacts. To a lesser extent, content assigned to reasons of poor consultation, policy conflict, objections from MOD and Network Rail, impacts on birds, ecology, aviation, reversibility costs and cumulative tourism. Most formal reasons for refusal are the visual impacts of turbines, assessed with LVIAs through the EIA. A summary of other reasons follows.

Poor Consultation

For Melton³, Peterborough⁴ and Stafford⁵, the Secretary of State decided the concerns identified by the communities were unaddressed. For Melton, and Peterborough this consideration weighted in the planning balance with visual impacts. For Stafford, this was the main reason for refusal; community concerns were for the effects on landscape and townscape quality.

Policy Conflict and MOD

Carlisle⁶, Milton Keynes⁷, and Ryedale⁸, the proposals conflicted with other policies. Ryedale appeal decision weighted with visual impacts. Milton Keynes, weighted with visual impacts and ecology impacts. For Carlisle, there was concern that,

'the noise budget for the Array [Eskdalemuir Seismological Monitoring Station] would be exceeded and thereby result in the generation of additional seismic noise which would compromise the capability of the UK to detect distant nuclear tests in breach of the Agreement under the Comprehensive Nuclear-Test-Ban Treaty' (Rose, DMH. 2012: 3).

³ Figure 29, no. 42, ⁴ Figure 29, no. 41,

This weighted with the objection from the MOD, however the Inspector did recommend approval following a request to the MOD to review the noise budget levels. The Secretary of State, predicted this consultation would be lengthy and should occur outside the planning appeal; he overturned the Inspector's advice.

Ecology, Birds and Bats

The ecology impacts identified in the appeal for Milton Keynes⁹ weighted with visual impacts. For Milton Keynes, the ecology impacts included potential harm to protected species of dormice and great crested newts.

Aviation, Network Rail, Reversibility and Cumulative Tourism

In Breakland¹⁰ and West Lindsey¹¹ the appeals rejected on aviation impacts weighted in the planning balance with visual impacts. The West Lindsey appeal because of an MOD objection due to negative impacts on Air Traffic Control at RAF Waddington. For Breakland, although the statutory consultees, Civil Aviation Authority and National Air Traffic Services did not object to the scheme, the Secretary of State noted the Inspector's comments on Norwich Airport's,

'proposed changes to the controlled airspace, and that it is likely to concentrate low-level flying directly over Shipdham village creating a possible low level choke point' (Watson, JB. 2014b: 5).

The Secretary of State considered this would create a flying hazard, so the impact included in the planning balance. Melton¹², appeal refused against the Inspector's recommendation because of visual impacts as well as objections from Network Rail. Concerns that fall over distance of a turbines on the site, located in a disused mine would interfere with the operations of a rail test track facility. The Inspector outlined alternative mitigation solutions for

relocation of the identified turbine, but the Secretary of State disagreed that these measures would overcome the overall harm of the scheme. The Secretary of State disagreed with the Inspector on temporary and reversible impacts at the end of the 25-year planning permission. Arguing, that construction and decommission times would mean impacts were felt for longer than 25-years, so should be considered significant. East Yorkshire¹³, appeal refused against the Inspector's recommendation on issues of visual impacts. However, the Secretary of State, did not agree with the Inspector's conclusions about tourism. Local communities raised concerns on negative impacts on tourism, but the East Riding of Yorkshire council did not object. The Secretary of State believed the Inspector had not considered the cumulative impact on tourism with the nearby operational and permitted farms, so he gave weight to this in the planning balance.

6.8 Local Written Representations

Any content within the Inspector's reports about interested persons, written statements and written representations is coded to identifying social impacts code set. Some Inspectors include quotes from given representations, while others summarise the concerns and support in their reports. The arguments offered by both supporters and objectors to a proposal, coded using tree maps pictured in figure 30 and 31. Each of the social impact identification domains discussed through figures 32 to 45.

Figure 30: Written Representations in Opposition

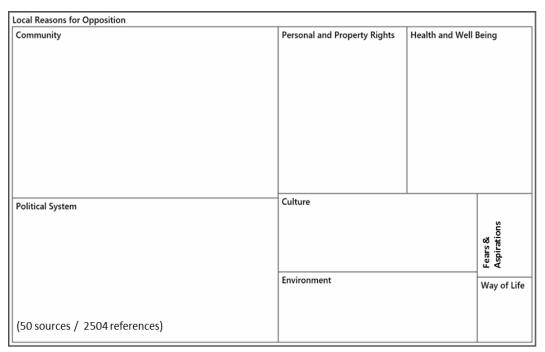


Figure 31: Written Representations in Support

Local Reasons for Support				
Political System	Environment	Fears and Aspirations		
Community [30 sources / 682 references)	Personal and Property Rights Way of Life	Culture Health & Well Being		

Source: Own design (2015)

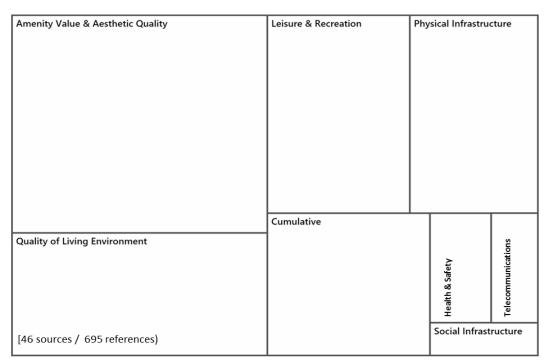
Figures 30 and 31, illustrate the numbers of written representations objecting to a proposal (50 sources, 2504 references) has more content than those supporting proposals (30 sources, 682 references). For objectors, most

content is coded to community impacts, whereas supporters content is mainly coded to political system impacts.

6.9 Community Impacts

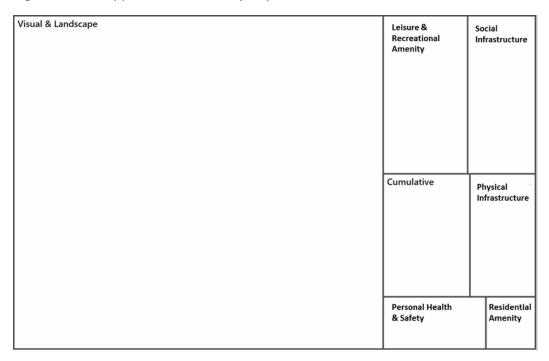
Identifying impacts on the *community* means change in 'Cohesion, stability, character, services and facilities' (Vanclay, et al. 2015: 2). The community social impact domain, showed in figures 32 and 33, dominated by the visual impacts on amenity value or landscape appearance. Cumulative impacts are a newly created impact stemmed from the coding process. For supporters, there was no comment regarding telecommunications.

Figure 32: In Oppostion to Community Impacts



Source: Own design (2015)

Figure 33: In Support of Community Impacts



6.9.1 Amenity value and aesthetic quality (visual and landscape)

The comments from opposing representations associate with concerns for industrialising rural areas. How this perceived industrialisation and urbanisation impacts on the landscape character, appearance and value Jackson (2015c). The impact on the landscape leads to a reassertion of the importance of rural environments for seeking tranquillity and beauty Robinson (2014). These concerns strongly link to the visual impact on residential amenity. Support offered to proposals, as commentators felt the appeal sites were not sensitive, tranquil, or considered remote and isolated; so visual impacts reduced. Or a site was in a managed landscape, which had changed over centuries to support industrialisation (with the siting of electricity pylons, substations, intensive farming). Renewable energy infrastructure in a landscape was preferable to other energy generators such as nuclear power stations. Negative impacts on the landscape should balance with the positive impacts of mitigating climate change, securing energy independence and the UK being able to compete in a global market.

Comments discussed the subjective nature of beauty, with supporters

considering turbines as 'impressive', 'elegant', 'modern and high tech', 'peaceful and serene' and 'in harmony with nature'. They note that they are a symbol of hope and thought of with pride in other countries Jackson (2015c).

6.9.2 Quality of living environment (Residential and leisure amenity)

The concerns for impacts on residential amenity were chiefly about suitable proximity distances of the project site and the loss of or change in view from residential properties. The proximity of turbines to dwellings, raised concerns about changes in views from individual properties and gardens, changing for the worse Jackson (2015c). This apprehension closely connects to the impacts on leisure and recreational amenity. This involves the loss of amenity through compromised bridleways, walkways and paths for riders, cyclists, runners and walkers. There was also concern for other forms of leisure and recreation, such as the impact on sports clubs, pubs and camping sites Graham (2014). Negative impacts went beyond public route networks and how that would impact on users. To include damaging impacts on the use of existing facilities. Supporters stated there would not be a negative impact on their leisure, recreational and residential amenity. The siting of turbines would not prevent enjoyment of the PROW or homes and existing infrastructure such as 'spoil heaps and railways', already have an impact on recreational amenity (Jackson, PK. 2014c).

6.9.3 Cumulative impacts

Concerns about cumulative impacts divide between those that felt the proposal would set precedent for further development and those that felt the area was already at maximum capacity. Cumulative impact arguments are contradictory; used when there are no operational schemes in an area, and when an area is at maximum capacity. The cumulative impact fears, focus on the potential visual impacts and landscape character impacts from multiple schemes rather than other impacts, for example ecological cumulative impacts. Supporters of proposals challenged that multiple farms in a landscape has a negative impact and does not prevent enjoyment of views.

Others, state there are farms in the area that interrupt views or other infrastructure in the landscape that cause more intrusion.

6.9.4 Physical and social infrastructure

Anxieties about impacts on the physical infrastructure highlight road networks: traffic congestion and road safety issues during construction, closure of existing routes during construction and driver distraction during operations Jackson (2014d). Social infrastructure are assets that support social services, such as hospitals, prisons, schools and community centres. Impacts on social infrastructure raised little concern but where they did, it connected to wider concerns about the proposal. Impacts on telecommunications was of concern to communities for mobile telephone networks and interference with television reception and radio signals. Telecommunications impacts has no content from supporters of a proposal. Supporters concerns on changes to and impacts on social and physical infrastructure were all related to how the income from community benefits funding can improve circumstances Jackson (2015a).

6.9.5 Personal health and safety

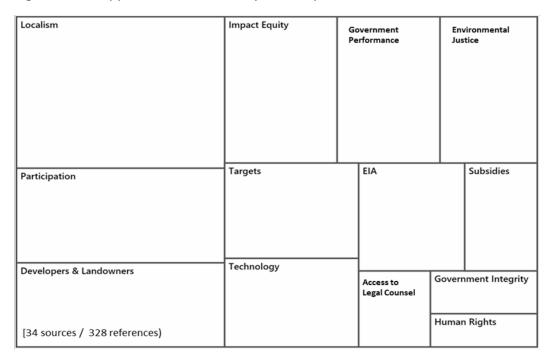
Health and safety impacts are from the construction stage of the development and equipment failure during operations. The responses associate with safety impacts on existing infrastructure and the risks to people's health safety from blade and ice throw Major (2014). However, specific health risks are of great concern to communities and discussed further in the social impact domain of health and wellbeing (see section 5.4.4). Respondents in support, countered that turbines would not pose a risk to the physical health and safety of community members. Balancing their argument with the risk to health and safety from climate change Jackson (2014d).

6.10 Political System Impacts

Identifying impacts and change on the *political system* in SIA means 'the extent to which people are able to participate in decisions that affect their

lives, the level of democratisation that is taking place, and the resources provided for this purpose' (Vanclay, et al. 2015: 2). Figures 34 and 35, show that most objections raised were about the Localism agenda and participation efforts. For those in support of applications the political social impact domain contained the most comment, compared other social impact areas. This realm dominated by content coded to renewable energy technology. Localism, targets, EIA, developers and landowners, renewable technology and subsidies are new social impacts gathered from the coding process.

Figure 34: In Opposition to Political System Impacts



Source: Own design (2015)

Figure 35: In Support of Political System Impacts

6.10.1 Localism

For objectors, the Localism Agenda has the largest number of references, arguing the failure of developers to meet the Localism Act (2011), evidence the agenda in action and use the agenda to discuss local democracy Jackson (2015c). The Localism agenda used to support objections to proposals by residents, community groups, local councillors and MPs. The representations evidence majority support for opposition to developments; localism here is less about involving communities in neighbourhood or local plan making, but more about the right to local democratic decision making. This strongly links to the concerns over participation in the project planning process. The supporting arguments are considered to lack scientific rigour, or objectors deny the effects of climate change. A rebuttal towards support letters as not originating from locals, but from residents living in urban areas who would be unaffected by schemes.

6.10.2 Participation

Concerns over the impacts on participation were mostly because of poor consultation techniques by developers and some content on techniques used by community groups to evidence support for their opposition campaigns. The arguments about participation focus on the robustness of the developers' data collection on the levels of support gained for the proposal. Those in support, wrote to criticise the participation methods of opposing campaign groups. Referencing, duplicated written representations from the same individuals; intimidation of supporters; inaccurate visual representations, for example, an action group flying a blimp from the site to show turbine height; inaccurate information sharing; the need to undertake myth busting by supporters and criticism of scaremongering in local media Jackson (2014b), Baird, SRG (2014). Supporters offered comments which reiterated public opinion polls that show support for wind energy in the UK. Realising that decisions are made by a vocal minority against a silent majority.

6.10.3 Government performance and accountability

Concerns about government performance and accountability, grouped by central government, local government and local planning authorities. The ministerial position of the Conservative Party while in Coalition government used to support objections to proposals:

The opening remarks made on behalf of the appellant at the inquiry that "every turbine counts" and that "enough is enough is not a valid argument" are flatly contradicted by Mr Michael Fallon MP, the Energy and Business Minister, who has said "the Government will not tolerate areas being swamped by wind farms" and "not against renewables, but have to have community consent". Mr John Hayes MP, a former Energy Minister, has also said "fully expect the Government to make a number of significant changes to the future prospects for wind power. Given this I advise you that any precipitous application would be unsafe" (Robinson, AD. 2014)

Some respondents had concerns over the performance of local authorities. Or concerns were specifically towards the performance of the local planning system. Representations view mismanagement of local planning, against the wishes of central government. Here supporters questioned the gap between national policy on renewable energy and local implementation because of the lack of planning proposals receiving approvals. Some questioned their LA commitment to renewable energy, by not supporting applications which affects the performance of UK trade and industry. It also prevents other public industries from meeting their targets. LAs are mindful of the impacts of fuel poverty and the costs of importing energy at a time of austerity measures. Commentators were concerned that planning is not giving equal consideration to the economic benefits of schemes and the threat of planning refusals is threatening sustainable development Jackson (2014b).

6.10.4 Targets

Responses questioned the European setting of targets, reminding Inspectors that government ministers have repositioned community concerns over renewable energy targets and claim that targets have been met Graham (2014). Supporters felt targets are ignored, they should be increased as the UK is behind other countries production and investment levels. Supporters feel it is essential the UK evidence its support for the Kyoto Treaty, and increased investment in wind energy especially micro-generation could help in this. There was an opinion, the control of planning by vocal minorities, is preventing the UK from meeting European wide targets. So, local areas are not contributing towards a fair share of renewable electricity generation Pykett (2013).

6.10.5 EIA

Objectors claimed ES's were inaccurate, contradictory, late, or inaccessible for a general audience Griffiths (2014b). Whereas, supporters praised the process of EIA, but questioned the validity of assigning scientific value to landscape impacts or assessing negative impacts without assessing positive

ones.

6.10.6 Developers and landowners

Comments towards developers and landowners, focus on how the only beneficiaries are the developers and landowners at the expense of local communities. They highlight the lack of trust in how a wind developer performs, the lack of job creation or the power of the wind industry to shape planning policy Robinson (2014). Representations about developers and landowner's actions are based on perceptions of profit for the few at the expense of the many. They critique the financial health and morals of companies, challenge assessing economic benefits and energy companies as having power over planning policy. Supporters stressed the importance of rural diversification to local farmers and landowners and the benefits that this could have on local economies. Landowners and farmers can receive rental income for the land use, but also support existing farm businesses with low cost energy provision. Local energy provision could also rebalance profit levels achieved by the 'Big Six' McCoy (2015b).

6.10.7 Impact equity

There is concern for the unequal sharing of impacts; a lack of a strategic spatial approach from government policy, on an unequal benefits allocation, or on discrimination towards specific community members Ware (2014). For supporters, the counter argument to a proliferation of micro residential schemes. Is that one medium to large-scale commercial farm in an area has less visual impact than many micro to small-scale residential generators. Some respondents felt their towns had not contributed towards the national and European targets and it is their duty to share impacts equally. Other comments focused on unequal impact assessment processes where the negative is not balanced by the positive impacts of a proposal. Many respondents quoted the need for their communities to act locally and think globally. Others mention the trade-off for communities to pay with loss of visual and landscape character, as a small sacrifice for limiting the effects of climate change and reducing fuel poverty Jackson (2014a). Impact inequality

strongly links to issues of environmental justice. Responses include discussion on location of schemes and concern that areas were already hosting industrial infrastructure Robinson (2014). For supporters, environmental justice was not an issue. Representations from objectors also felt effects on their Human Rights because the imposition on their peaceful enjoyment of life Baird (2015b). Access to legal representation concerns focus on the cost of campaign groups to employ representation and expert witnesses to launch an appeal Mellor (2014a).

6.10.8 Renewable technology and subsidies

Written representations in support of wind farm proposals mainly relate to the benefits of renewable technology. The threat of climate change and the irrationality of climate change denial; leads to solutions for dealing with finite resources and a commitment to sustainability. By reducing consumption of fossil fuels, the UK can lessen carbon emissions and ensure energy independence and security. By having a mixed energy system, the UK can compete with its European counterparts Pykett (2013). Subsidies considered a taxpayer burden which if removed would prevent further onshore wind developments. Subsidies support developers profit margins for ineffectual technology, caused fuel poverty and widened the inequality gap Robinson (2014). Respondents backing proposals felt that government subsidies offered a means to taper reliance on fossil fuels. Deciding that no new investment needed because subsidies for fossil fuels would reduce for investment in renewables. Supporters argue that as the technology improves the costs of wind energy will lessen, thus no longer needing government aid Jackson (2014d).

6.10.9 Government integrity

Government integrity is the trust local communities have with government agencies. Objectors did not trust the local authority to check impacts and questioned the effectiveness of any mitigation efforts. However, they did put their trust in the LA, that conditions of Localism Act (2011) would be enacted

Baird (2015b). For supporters, of greatest concern was the mixed messages local communities and planning departments are receiving about renewable energy from central government during the coalition years. Respondents considered LPAs as irresponsible in rejecting planning applications when the priority should be to support the science of climate change and proposals that mitigate against it Major (2015).

6.11 Personal and Property Rights Impacts

Personal and property rights in SIA, is 'whether people are economically affected, or experience personal disadvantage which may include a violation of their civil liberties.' (Vanclay, 2003: 5-11). Figures 36 and 37, show the biggest apprehension from respondents was towards impacts on tourism, local businesses and property values. For supporters, most comment was on the positive impacts a proposal could have on the local economy, businesses and employment levels. Tourism; horses, riders and stables; aviation and reversibility costs are new social impacts drawn from the coding for objectors, but these codes deleted for supporters as they did not raise comment.

Tourism Property Values Horses Rides Stables

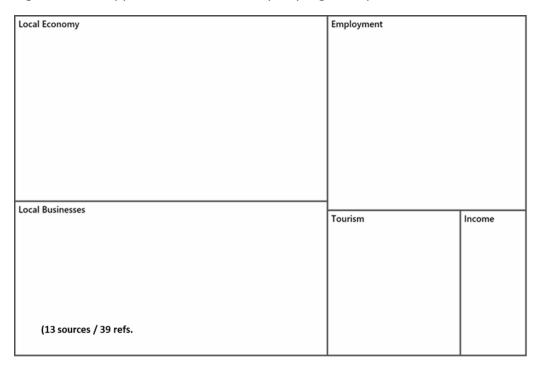
Local Businesses Aviation Local Economy Employment

[34 sources / 328 references) Reversibility Costs Income

Figure 36: In Opposition to Personal & Property Rights Impacts

Source: Own design (2015)

Figure 37: In Support of Personal & Property Rights Impacts



6.11.1 Tourism

Representations felt the impacts on the appearance and character of the landscape would negatively impact on the local tourist economy by creating an area unappealing to visitors Jackson (2014c). Supporters, rebuked this position stating there is no evidence that wind farms impact negatively on tourism. That farmers and landowners need support to make their nontourism businesses viable within landscapes managed by modern farming methods. Others wrote to confirm the siting of a farm in a location would not stop their enjoyment of the area Graham (2014). Closely linked the impacts on visitor numbers, is the impact on local businesses that serve the tourist industry but also other existing industries such as farming Mellor (2014a). For supporters, local businesses like farming, would be able to uphold the economic viability of the business offering the opportunity to expand and create new jobs and apprenticeship schemes. Lessening costs through cheaper energy bills Jackson (2014a).

6.11.2 Property values, aviation and equine impacts

Decreases in property values or problems with selling because of proposals, was of concern Mellor (2014a). The operational wind-farm threat to horse and riders being able safely ride in proximity to a farm. If a location viewed as unsafe for riders, then this would impact on the viability of stables and livery businesses Graham (2014). Beyond the planning conditions and lack of objection from statutory aviation consultees, concerns remain for aviation impacts. Alarm that aviation impacts are often neglected or would prevent use of existing aviation infrastructure Baird (2015b).

6.11.3 Local economy and income levels

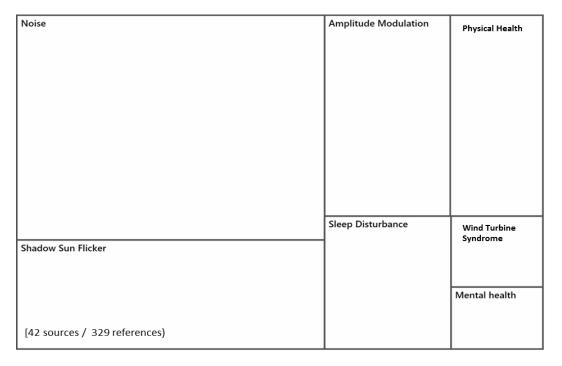
The local economy discussed in the social impacts of local businesses and tourism also raised concerns for wider economic development issues by preventing any potential capitalisation or underused local assets. For supporters, the impacts on the local economy were beneficial, to invest in regional economies and provide economic opportunity throughout the supply chain. There was also concern for the inadequately assessed economic benefits Jackson (2015). Supporters stressed the potential job creation through construction, restoration works and maintenance contracts. Outlining how jobs and community funding from the development can lever in added investment, match other grant sources or continue existing social and community work that aims to create employment opportunities. The impact on income levels raised through concerns that communities would have to pay for decommissioning costs Graham (2014). For supporters, there was a positive impact on income levels because renewable energy supplies ensured lower fuel costs. Lower fuel costs would take families out of fuel poverty and community benefit funds would provide choices for income giving social projects, throughout the lifetime of a project.

6.12 Health and Well-being Impacts

In SIA, identifying health and well-being impacts means, 'Health is a state of complete physical, mental, social and spiritual wellbeing and not merely the

absence of disease or infirmity.' (Vanclay, 2003: 5-11). Figure 38, shows noise, amplitude modulation, sun and shadow flicker, sleep disturbance and wind turbine syndrome are new social impacts drawn from the coding. For supporters, health impacts were not an issue (8 sources/14 references) unless towards the bigger concerns of health impacts from climate change.

Figure 38: In Opposition to Health & Wellbeing Impacts



Source: Own design (2015)

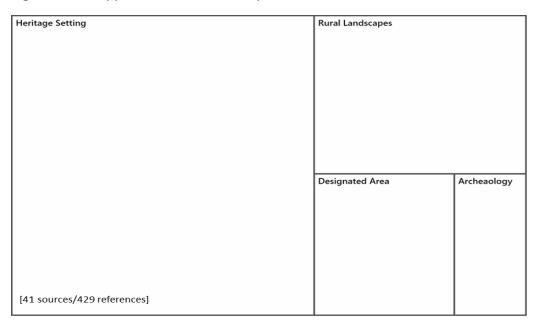
The biggest concern is noise impacts, followed by the impacts from shadow and sun flicker. Amplitude Modulation (AM), impacts on physical health and sleep disturbance raised fears, with less alarm assigned to wind turbine syndrome and impacts on mental health. Complaints about potential noise impacts directly link to the proficiency of the current measuring standards, or the accuracy of completed noise assessments by the developer during the EIA Braithwaite (2014). Supporters pointed out that existing infrastructure such as electricity pylons, mobile phone masts and roads (pollution and traffic) are of equal risk to human health. That climate change is a higher risk than turbines to human health and well-being Major (2015). Objections based on shadow and sun flicker were raised because of the visual impact, the lack of mitigation, but also as a health impact Graham (2014). Amplitude

Modulation was an added health concern, linked to physical and mental health conditions as well as sleep disturbance and 'wind turbine syndrome'. Objectors call for a set proximity distance within local planning policy Mellor (2014a). Existing physical health conditions acerbated because of the operations of turbines and anxiety that living conditions would become difficult if proposals approved Robinson (2014). Closely linked to the noise and AM impacts, is sleep disturbance, which has longer term impacts on physical health because of stress and irritability Woolcock (2014a). Mental health conditions linked to turbines causing stress, sleep deprivation and associated depression Baird (2015b). The symptoms described coalesce to use Pierpont's position on wind turbine syndrome. Concerns were for the health of the villagers and for the potential to increase existing health conditions Jackson (2015).

6.13 Cultural / Heritage Impacts

Cultural impacts in SIA means changes to or impacts on 'Shared beliefs, customs, values and language or dialect' (Vanclay, 2003: 5-11). Figure 39, shows rural landscapes, designated areas and archaeology are new social impacts gained from the coding. For supporters, most comment was on the impacts or changes to English rural landscapes, with some response on historic setting and heritage assets (11 sources/26 references). No comments made by supporters of proposals, about designated land or archaeology.

Figure 39: In Opposition to Culture Impacts



Heritage setting or historic assets gained the most representation from interested parties within the appeal process. There is disbelief that renewable energy should take precedence over the need for protection of listed buildings, considered locally significant Jackson (2014a). As with the impact on landscape character and appearance there was concern that changes to English countryside and rural landscapes would have impact on local cultural identity Hill (2014b). Concern about impacts on designated areas even when not of regional or national significance, but on local conservation areas as well as formal planning matters such as the Green Belt policies Watson (2014b). Disturbance to potential archaeological sites raised fears of poor quality archaeological assessments and the lack of incorporating local knowledge into the assessment process Woolcock (2014a).

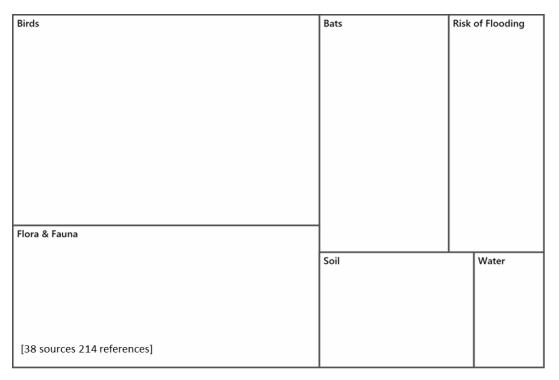
Only one comment made by supporters, about the impact on historic settings. Arguing that income from the windfarm would restore a listed building and to argue the historic setting of the building had no negative impact because of other landmarks in the landscape Jackson (2014b). For supporters, the comments closely relate to the impacts on visual and landscape appearance in the community code set. Responses offered a rebuttal to the arguments

that wind farms deter tourism and the observation that other tourist infrastructure exists in the landscape. There is a long history of developments in the area, like farming practices that have shaped the landscape. Many talk of windmills grinding flour of the past and how they have become part of the English rural scene Jackson (2015c).

6.14 Environmental Impacts

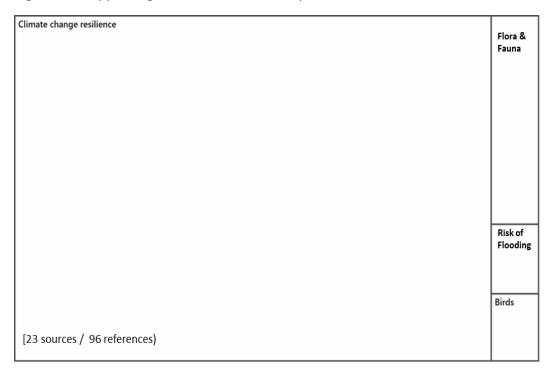
Identifying *environmental* impacts in SIA means, 'The quality of the living environment' (Vanclay, et al. 2015: 5-11). Figures 40 and 41, show birds, bats, ecology and risk of flooding are new social impacts gathered from the coding, with impact on birds gaining most content. For the supporters, beyond any other issue climate change resilience, a new code, was of the greatest benefit. There was no mention of bats, soil and water by the supporters.

Figure 40: In Opposition to Environmental Impacts



Source: Own design (2015)

Figure 41: Supporting the Environmental Impacts



6.14.1 Ecology

Unease towards any impacts on locally found bird species, the robustness of the assessment process and its mitigations measures as well as the lack of using local knowledge to support assessment Jackson (2014d). The impact of bat species raised some upset when assessment was incomplete or European guidelines not followed. Impacts on the wider ecological system was a subject of concern, such as the impacts on bees, voles and moth populations. Negative impacts on ecology perceived to be from low frequency vibrations during operations or disruption of ground conditions during construction. On the risk of flooding, misgivings voiced over the impact of turbine foundations on ground conditions and drainage. This linked to the fear over flooding risk is the impact on soil and water conditions from contamination or loss of valuable existing land uses Baird (2015b). Supporters sent representations detailing how local species specifically horses, had no adverse effect or to state, for example, that cats are a bigger threat to birds than turbines. Respondents were encouraging of environmental stewardship or habitat creation schemes as results of community benefits investment or Section 106

Agreements. Reiterated that renewable energy reduces climate change and so lessens the threat of flooding. There were no comments on impacts to water, air, soil and bats.

6.14.2 Climate change resilience

Objectors to proposals did not comment on the need for communities to be climate change resilient. As a code, climate change resilience, strongly links to renewable technology code in political system impacts. Supportive representations argue for diverse energy suppliers as the rational way to reduce dependency of fossil fuels and so reduce carbon emissions. They defend wind energy and the technology to harness it. Climate change resilience links to the other socio-economic benefits that green, clean technology can bring. They support the aims of sustainability and believe the UK can be a world leader in the industry. The UK has responsibilities towards environmental protections and legislation. Supporters urge detractors to place visual and landscape impacts in context of the wider issues of climate change. They consider CO2 emissions as the greatest environmental threat of our generation. They sense that those who object to a wind farm on visual landscape impacts are climate change deniers Jackson (2014a).

6.15 Fears and Aspirations Impacts

In SIA, fears and aspirations means, 'Their perceptions about their safety, their fears about the future of their community and their aspirations for their future and the future of their children.' (Vanclay, et al. 2015: 5-11). No new social impacts identified during coding. Figures 42 and 43, show for objectors the greatest concern relates to their feelings about the project, whereas for supporters most content relates to their aspirations for the future.

Figure 42: In Opposition to Fears & Aspirations Impacts

Feelings about Project	Personal Safety & Hazard Exposure	Perceivo Violenco	ed Crime & e
Community Cohesion	Stigmatisation		Future Aspirations
[11 sources / 170 references)	Perceived Health		

Figure 43: In Support of Fears & Aspirations Impacts

Aspirations for the future	Feelings About the Project	
	Community Cohesion	
		=
		satio
13 Sources / 63 Refs.		Stigmatisation
		Stig

Source: Own design (2015)

Opposing feelings about the project are diverse and encapsulate unfounded

fears about change. For example, a farmer thought impacts would risk his cattle's fertility, or a mother feared impacts would negatively affect her autistic son, to the point the turbines would make him display violent behaviour Robinson (2014). Realising impacts on community cohesion, included concerns that families were continually forced into protecting their environment or developments would destroy local networks Graham (2014). Personal safety and hazard exposure, is the same as impacts on health and safety, outlined in the community impacts section on concerns from equipment failure, collapse or explosion and blade and ice throw. In this domain, the impact potentially effects the individual as well as the community Mellor (2014a). There was an opinion by respondents that incidences of crime through theft, speeding and fly-tipping, would increase if the proposal succeeded Pykett (2013), Graham (2014). Stigmatisation or labelling of an individual links to impact equity in political system impacts and impacts on human rights Graham (2014). For the representations in opposition of proposals their aspirations for the future associate with the need to protect the landscape from industrialisation for future generations Pykett (2013).

Supporters, respond that what the opposition predict will happen with negative impacts, has not happened, and those objectors have not put forward alternative solutions. People should be encouraged to live low-impact lives and reduce their consumption patterns. That climate change exists and it is objectionable that people who disbelieve the science of climate change are controlling local decision making Jackson (2014c). Supporters, reiterated that farmers wanted to site turbines for the good of their family, their business but also the local community, if it was damaging then they would never have submitted the proposal. Lack of community benefits and the impact this will have on local communities that reside in areas of multiple deprivation. Other planning policy tells us that we should be developing sustainable and healthy communities. One case discussed the work currently achieved which could continue, if they received community benefits funding Jackson (2015).

Fears and aspirations, for supporters means their hopes for the future, their general feelings about the project and about perceived impacts on community cohesion. As not mentioned by supporters, the codes are deleted for health and safety, crime and violence and perceived health. Supporters showed concern for the toxic waste legacy, left for their children and grandchildren to manage. They understand there is a great need or energy security when energy supply is in crisis and costs are intensifying. They believe there is a need for global solution, as this is anthropomorphic climate change which will affect all human health and human futures. Supporters caution that delays to approving proposals will aggravate future environmental challenges. Action today, judged by future generations; as such we have a responsibility to act quickly. The socio-economic benefits of income into the town through community benefits funding at a time of increasing fuel poverty, austerity measures and welfare cuts; which have seen communities lose grants for social infrastructure and services. Onshore wind farms are a solution for increasing opportunities for young people and raising aspirations for the future and increasing the life chances of the children in the area. Overall, they view turbines as a symbol of change for the better, which identifies their town as one in the 21st century Major (2015).

6.16 Way of Life Impacts

Identifying way of life social impacts in SIA means, 'How people live, work, play and interact with one another on a daily basis.' (Vanclay, et al. 2015: 5-11). This domain gathered the least amount of content. No new social impacts identified during the coding. Figure 44 and 45, illustrate the apprehension for social conflict and differentiation for raises most comment from objectors and community identity and cohesion for supporters.

Figure 44: In Opposition to Way of Life Impacts

Social Tension & Violence	Community Identification & Connection	Community Co	hesion (actual)
Social Differentiation & Inequality	Social Networks		Spiritual Needs
[12 sources / 54 references)	Family Obligations		

Figure 45: In Support of Way of Life Impacts

Community Identity	Social Inequalities	Family Obligations
		' '
Community Cohesion (actual)	Social Conflict	Social Networks
(13 sources / 39 refs.)		
i	1	

Source: Own design (2015)

Anger expressed about the conflict caused within a community among those

that supported or those that opposed a wind farm application Griffiths (2014b). Whereas, supporters concerned about levels of intimidation or disinformation circulated by opposition groups. Deciding the real issue at stake is a dislike of change. Concerns raised include the impact on a town's identity and reputation, the importance of rural locations in shaping community identity and the impact on countryside businesses and networks Mellor (2014b). Supporters, felt the developments should bring civic pride to an area through its contribution towards climate change mitigation. Or discussed how income from community benefits funding could reinforce existing networks and offer new opportunities for social connection for people currently excluded from the mainstream Jackson (2014d).

Social differentiation and the impact on community cohesion described as unequal power in decision making, because of the costs of objecting to a proposal Jackson (2015b). For supporters, current inequalities and high levels of multiple deprivation could be bridged by local people involved with leadership of community investment programmes Jackson (2015).

The impact on spiritual needs mainly coded to the impact on heritage settings and assets, namely listed churches, but also a concern that industrial structures desecrate natural contemplative and spiritual environments Jackson (2015c). Obligation to family and ancestors raised as a concern when describing changes to historical family farming activities or impacts on business and income levels Graham (2014). Whereas supporters felt the development could ensure the future of family businesses allowing for diversification and new ways of working Jackson (2014a).

6.17 Conclusion

The analysis of the data from the Recovered Appeals shows that the Secretary of State went against the Planning Inspectors' recommendations because of visual impacts on landscape character (culture) and historic assets (culture), as well as the visual amenity of living conditions (community). Even though the impacts, for many proposals, were from projects of less than two turbines and on brownfill sites. Localism and historic settings, is reprioritised by the

Secretary of State and mitigation measures suggested by Inspectors overturned. In one case, the Secretary of State, gives weight to the issue of cumulative tourism impacts, regardless of any research to evidence this.

Overall, objectors submit much more comment (50 sources, 2504 references) to proposals than supporters (30 sources, 682 references). For objectors, impacts in the community domain are followed by impacts in the political system domain. This is reversed for supporters. Although comment on the impacts to historic setting does gather content from objectors, this is not as much content as issues found in political system impacts. The political system domain creates a different set of codes for supporters and objectors. Supporters, discuss renewable energy technology, targets and subsidies whereas objectors focus on localism, participation, and developers and landowners. This is the crux of the reweighting in the planning balance; renewable energy provision is devalued as localism and participation is heightened. Visual impacts are extended from the living environment to the landscape character and the protection of the views of historic assets within a landscape.

In the personal and property domain, objectors fear for the impacts on aviation, even if there has been no objection from statutory consultees. Concerns for impacts on property values, tourism and horses remain high regardless of lack of research to support this. For supporters, the lack of community benefits funding and the impact on local economies, causes the most concern. In health and wellbeing, very little comment was gathered from supporters, unless to rebuke opposing arguments, to the codes of noise, amplitude modulation, sleep deprivation or impacts from sun and shadow flicker. In environmental impacts, objectors were concerned mainly with the impact on birds, whereas supporters overwhelmingly commented on the need for communities to be climate change resilient. In fears and aspirations impact domain, fears about the immediate project was of greatest concern to objectors, but supporters aspire to a future with energy security and climate change protection. In the way of life domain, objectors are concerned for the community conflict caused by a planning proposal, whereas supporters, see

opportunities for an improved community identity.

The analysis of the Recovered Appeals through social impact identification codes, illustrates the polarised debate between supporters and objectors of proposals. This dichotomy, capitalised on by the Secretary of State as a response to the backbench campaign and in the lead up to the general election as a new policy direction. That is, the cuts in subsidies, the demotion of renewable energy and promotion of localism and impacts on heritage assets, in the planning balance. This is discussed further in chapter nine. In chapter six, the content from the websites of onshore wind developers will be analysed against the code sets for participation and SIA tasks. The content from the action group campaign websites will be analysed against the codes sets for participation and social impact identification.

7.0 Introduction to Chapter

Analysis of the content of the developers' websites uses the code sets for SIA tasks: understanding the issues, prediction and assessment, operational strategies and monitoring programmes and participation activities; informing, consulting, involvement techniques, collaboration and empowerment activity. Analysis of the content from the action groups' websites uses both the social impact identification: community, political, personal and property rights, health and wellbeing, cultural, environmental, fears and aspirations and way of life, and the participation code sets. The survey responses from developers and action groups are summarised to support this analysis.

7.1 Developers Websites

As discussed in chapter five and pictured in figure 20, *Coding Structure for Participation Activity*, from the IAPP stages of participation and the TSG best practice participation techniques. Figure 46, *Developer's Participation Matrix*, consolidates the content from each website against both code sets. A comparison of each developer's participation activity offered in summary, before discussing each stage of the IAPP spectrum in detail, with an illustration of the content with hierarchal tree maps.

Most content is within information sharing, 17 websites offer information on climate change and wind energy, an equal number of websites offer location project maps. Sixteen developers promote community benefits packages as part of their participation activity. Within involvement activity 13 developers discuss the regular involvement techniques that they use. Eleven of the websites discuss publishing the EIA non-technical summary as a method for information sharing and 11 provide links for frequently asked questions. Eleven websites also promote their company's efforts towards renewables research and development innovations, which code to the empowerment

stage of the participation spectrum. Eight company websites offer information on the development cycle of an onshore farm. Eight developers consult on their CSR policies and eight companies offer regular involvement techniques, with the same number of companies offering capacity support to landowners. Seven developers state that they hold community discussion groups as a method for regular involvement. Six companies distribute leaflets, newsletters or brochures to inform communities about project proposals and six developers organise public exhibitions and displays and discuss their role in community benefits funding. Five developers publish their sustainability policies and the same number state they hold formal public meetings. Of the total number of developers, four companies offer advice on community energy or shared ownership. Three companies discuss local procurement approaches and partnership models. And three companies reiterate the general support for wind energy from public opinion polls. Two developers publish their environmental policies, with the same number stating they use local media to publicise project proposals. Two companies have responded to government calls for evidence on the issue of onshore wind farms and one developer, Scottish Power, is the only developer to use social media to encourage participation in project development.

Figure 46: Developer's Participation Matrix

		Inform Information Sharing					Consult					Involve Regular Involvement				(Collab	Empower							
							CSR Events				Сар					oacity	Community Energy								
	SCI/ EIA NTS	Calls for Evidence / Research	Leaflets / Newsletters	Local Media	Climate Change / Wind	Project Website / Site	Development Stages	FAQ / Links	Environmental Policy	Sustainability Policy	CSR	Exhibition Displays / Events	Public Meetings	Public Opinion Surveys		Arts / Education Outreach	ent		Community Benefit Funds	Local Procurement	Advice to Landowners	Partnerships	Shared Ownership	Advice / Support	
						•		•								, -			•						
Airvolution					•																			<u> </u>	Ļ
Banks Renewables							•												•					<u> </u>	Ļ
Blue Energy	•						•																	<u> </u>	Ļ
Broadview Energy	•		•		•	•		•				•	•			•	•	•	•						
Community Wind Power Coriolis Energy	•	<u> </u>	•		•	•	•	•				•						•	•				•	•	Ļ
Coronation Power	•	<u> </u>	•			•						•	•				•	•					<u> </u>	<u> </u>	Ļ
Ecotricity		<u> </u>			•				•	•	•								•				•		
EDF	•	<u> </u>	•	•	•	•		•				•	•			•	•	•							L
Energie Kontor		ļ!			•		•																		L
Enertrag		-			•					•	•														
Con					•						•			•		•	•		•						-
Green Energy								•																	Ļ
nfinergy	•				•	•	•	•						•		•			•					•	L
infinis			•		•						•	•	•				•	•	•						Ļ
Natural Power						•											•	•	•	•					Ļ
Peel Energy		-				•										•			•						Ļ
Prowind						•													•		•	•	•	•	
ure Renewable Energy							_	_								_			_		•			_	F
Renewables First	•	 			•	•	•	•								•	_		•		•	•	•	•	L
RES	•	\vdash			•	•	•			•	_						•			•	•	•		-	
RWE Power	-				•						•				_				_						
Scottish & Southern Energy	•	•	•	•	•	•	•		•	•	•				•	•	•		•						
Scottish Power Renewables		\vdash	-	•		•	•		•	•	•						•		•						H
Seneca Global Energy	•	\vdash			•			•									•		•		•		_	_	
CI Renewables		•			•			•		•	•			•			•			•	•		-	_	
attenfall	\vdash	+			-	•				Ť	Ť						-								H
olkswind	•	\vdash			•	•		•				•	•			•	•	•	•						H
Vest Coast Energy	Ť	\vdash				•		_								-	•	_	_		•			_	H
Vhirlwind Renewables	H	\vdash				•		•									_				•				H
Vind Direct	-	+			•																			\vdash	

Source: Own design (2015) Adapted from developers' websites full list in appendices 6 & 7, List of Developers and Action Groups

In summary, the participation matrix shown in figure 47, identifies that most developers (29) use informing content on their website. Equal coverage is given to collaborating, involving and consulting activity. After informing activity most developers (20) are engaged with collaborating tasks, half of these activities were coded to community benefits funding. Following this, involving techniques, where most developers (17) used regular involvement techniques. The same amount of activity is assigned to consulting with developers (15) mainly discussing their corporate social responsibility policies in relation to the outcomes of community benefit funding. The least number of developers (13) engaged with empowering activity, where most of the activity was coded to research and development innovations.

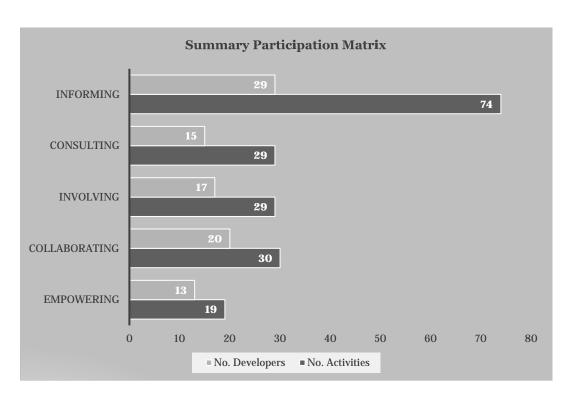


Figure 47: Summary Participation Matrix

Source: Own Design (2015)

Continuing this summary, a simple weighted score applied to the participation activity of each developer as shown in Figure 48, *Weighted Activity Score*. Each informing activity gains a score of one, each consulting activity gains a score of two, involving activity as score of three, collaborating

activity, a score of four and each empowering activity a score of five. The higher scores have been applied to the activity that offers decision-making power within participation spectrum.

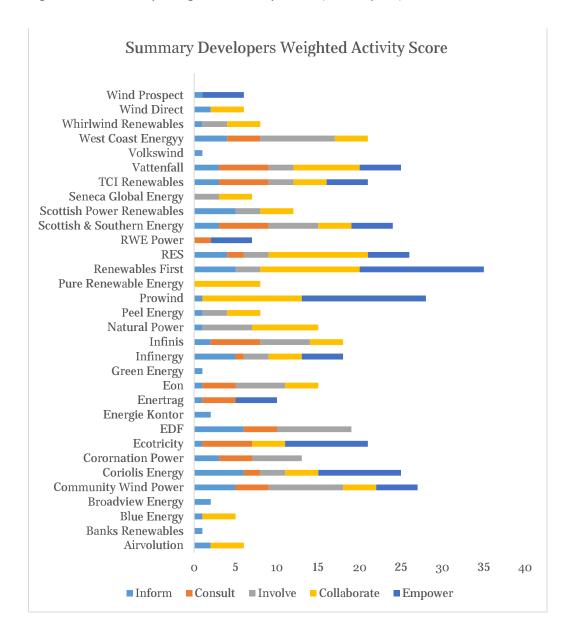


Figure 48: Summary Weighted Activity Score (Developers)

Source: Own Design (2017)

Renewables First and Prowind score the highest because of the number of collaborative and empowering participation activities, neither of these developers engaged with consultation activity. Vattenfall, TCI Renewables,

Scottish and Southern Energy, RES, Coriolis and Community Wind Power have equal scorings for each group of participation activity. Volkswind, Green Energy, Energie Kontor, Broadview and Banks Renewables only engaged with informing activity which scored the lowest. The detail of the participation activity is discussed through figures 49 to 55.

Figure 49, Developers Participation Activity Coded by IAPP Spectrum, explains the websites mainly inform on issues of climate change and the development stages for an onshore wind farm proposal. The development stages also coded by SIA tasks. The collaboration efforts are offering community benefits funding, advice to landowners and providing opportunities for local supply chains. Defining consultation efforts through CSR policies, holding community meetings and to a lesser extent the EIA and statutory consultation processes. Involvement for developers are the techniques used to ensure participation. Defining empowerment through advice offered to support community energy projects or research and development innovations in renewable energy provision.

INFORM COLLABORATE CONSULT Climate Change CSR **Development Stages Community Benefits** Community EIA Landowners Local Suppliers Education Statutory Other INVOLVE EMPOWER Techniques **Community Energy R&D Innovations** FAQ Links

Figure 49: Developer's Participation Activity coded by IAPP Spectrum

Source: Own design (2015)

7.2 Informing Activity

Examining the informing stage of the participation spectrum pictured in figure 50, *Developers Informing Activity*, the information offered on climate change concentrates on the benefits of wind energy. The need to meet targets and the access to subsidies to achieve that aim. Developers outline how UK policy supports, decreases in the use of fossil fuels, which can offer a fuel mix and so energy security. Many of the developers provided links to other sources of information and a website section on frequently asked questions (FAQs). Developers inform readers of the development stages for a wind farm, which has also been coded to the SIA tasks in figure 51, *Developers SIA Activities*.

INFORM Climate Change Links Targets Fossil Fuels UK Policy Wind Energy Purchasing Subsidies **Fuel Mix** Energy Security **Development Stages** Impact Assessment **Location Maps** FAQ Feasibility Planning

Figure 50: Developer's Informing Activity

Source: Own design (2015)

Some of the websites offer a description of the how the physical kinetic process works, reminding readers there is a long history of wind energy development. Outlining the role of developers in that history of bringing the technology to market. Other developers discuss the types of turbine

technology, potential energy outputs and related income levels. However, most content relates to the benefits of wind energy as a free resource, capitalised on with the most cost-effective renewable energy technology Ecotricity (2015). Developers discuss carbon emission levels and targets for fossil fuel cuts. They state their commitment to the Kyoto Protocol and highlight the cross-party consensus on European targets, which aid the UK in meeting its climate change policies Coronation Power (2015)⁶. On subsidies and purchasing, developers discuss the history subsidies from NFFO to ROs and FITs. They inform customers about how they will buy renewable electricity for export to local consumption. The process for setting up a legal agreement with local producers or how electricity as a commodity is auctioned on global markets Coriolis Energy (2015)7. Developers discuss how the energy sector is the biggest user of fossil fuels but the dependency on nonrenewables is not sustainable and resources are finite West Coast Energy (2015).8 They list and summarise the different UK policies and planning guidance that support renewable energy with an emphasis on the Climate Change Act (2008). They outline the importance of a portfolio of energy supplies that contributes towards energy security for the UK. They warn that an overdependence on imports of fossil fuels will make communities vulnerable to power cuts and so weaken the economy. They call for a British energy independence, for example,

'The UK used to be fairly self-sufficient in energy, in Oil, Gas and Coal. But that's changed recently as the North Sea reaches depletion (of Oil and Gas). Globally, we now depend increasingly on unstable parts of the world for our energy supplies. We're also exposed to the global energy markets and commodity speculators.' Ecotricity (2015)⁹

Developers provide sections on their websites that offer links to other sources of information. Links include government department websites, renewable energy policies and planning policies, wind energy associations and

⁵ (https://www.ecotricity.co.uk/our-green-energy/our-green-electricity/from-the-wind/why-wind)

⁶ (http://www.coronationpower.com/)

⁷ (http://www.coriolis-energy.com/wind_energy/policy_global.html)

^{8 (}http://www.westcoastenergy.co.uk/why-wind/)

⁹ (https://www.ecotricity.co.uk/our-green-energy/energy-independence/an-energy-independent- britain)

environmental NGO websites such as Greenpeace and Friends of the Earth. Many of the websites offer a section on frequently asked questions. Questions they predict and answer include: technology efficiency, capacity factors, payback times and income levels; health and noise and tourism impacts, and the public support for wind energy.

7.3 Developers Informing content coded to SIA Activities

Developers informing activity also includes explaining the development cycle for an onshore wind planning application. Figure 51, *Developers SIA Activities* shows the website content in this informing section coded to SIA tasks. Mainly, activity is through operational strategies for community benefit funding, advice to landowners and local suppliers. Followed by information on understanding the issues through feasibility assessment, providing project location maps and describing the planning system and the development process. Offering content for the prediction and assessment of impacts through the EIA. Monitoring programmes link to operational strategies, so coded together.

Figure 51: Developer's SIA Activities

Source: Own design (2015)

7.3.1 Operational Strategies

Developers outline how they will offer community benefits funding, discussing managing funds, whom the beneficiaries will be or the types of projects the income will fund. They discuss the creation of habitat management plans as part of a planning application and offer case study examples of previously funded schemes Scottish Southern Electricity (2015: 18¹⁹). Advice offered to landowners on how developers can support them during the operations of a farm. They describe how they will work with a landowner post planning approvals to ensure the discharge of planning conditions and what these are likely to be. The process for negotiating terms for land leases, income levels from the farm and any impacts the development will have on existing rural businesses. They promote wind farm developments as a way for landowners to lessen operational costs of their farms and meet social responsibility objectives. They outline the process for site preparation for installing turbines and associated infrastructure, the construction and the site access requirements once a farm is operational EDF (2015)²⁰. The information published on local procurement and the use of local supply chains outlines the potential job creation for project team members, contractors, building material supplies, catering and accommodation services. They discuss how they offer local apprentice schemes and uphold considerate construction principles Peel Energy $(2015)^{21}$.

7.3.2 Understanding the Issues

Twenty developers offer interactive location maps for their project sites describing each wind farm's capacity and stage of development. Equal coverage offered on feasibility tasks that a developer will undertake to screen a location for a potential wind farm. The websites describe the testing for wind resource at a location, using planning permission for wind mast installation. Descriptions given of the types of technical studies (grid access, wind resource, transport and access, site context and environmental constraints, turbine selection and residential amenity) undertaken during the

feasibility Natural Power (2015)²². Closely linked to understanding feasibility, is information on the local planning system for onshore wind proposals and the development life cycle. Renewables First, describe the elements of a Planning Sensitivity Assessment, which focuses on the planning sensitivities of a location linked to ecology, cultural heritage and landscape issues, which defines the need for an EIA Renewables First (2015)²³. Development described in five main stages: site assessment and feasibility; EIA, consultation and planning; construction; operations and decommissioning and restoration. Some of the websites also offer information on project financing and the subsidies regime.

7.3.3 Predict, Assess the Impacts

The least amount of SIA activities coded in the developers' websites is that of prediction and assessment of impacts. Where discussed it describes the EIA. The typical tasks of an EIA outlined and the developers specify whether this is completed in-house or externally EDF (2015)²⁴.

7.4 Consulting Activity

Within the spectrum of participation, content on consultation links to wider work on CSR. Figure 52, *Developers Consultation Activity*, shows how corporate social responsibilities are placed within policies on sustainability or the environment. Next content on community consultation, followed by statutory consultation and consultation efforts from the EIA. Lastly, consultation activity links to educational and research innovations and involvement in wider consultation forums and networks.

¹⁹ http://sse.com/media/309084/KeadbySustainabilityImpactReport.pdf

²⁰ (http://www.edf-er.com/OurApproach/Workingwithpartners.aspx)

²¹(http://www.peelenergy.co.uk/communities-1/)

CONSULT

| Sustainability | Education | Education | Community | Other | Other

Figure 52: Developer's Consultation Activity

Source: Own design (2015)

Wind developers incorporate consultation on CSR initiatives with that of consultation on community benefits for onshore wind farms. CSR defined in different ways by different developers. Infinis, promote their achievements in winning awards for CSR and their anti-corruption and bribery policies. RWE, project their role as good corporate citizen and neighbour by setting up a charitable foundation. Scottish Power, aims to promote a global culture of social responsibility throughout its group structure and publishes its Stakeholder Relations policy outlining its principles. SSE, set up an employee volunteering programme for employees to support local NGOs. West Coast Energy, discuss their approaches to sustainability using sustainable materials and building methods for their corporate offices. Community Windpower, publish their environmental policy which has embraced the results of community benefits for onshore wind farms as integral to their policy.

²² (https://www.naturalpower.com/project-phase/feasibility/)

²³ (https://www.renewablesfirst.co.uk/windpower/windpower-feasibility-study/planning-review-pr/)

²⁴ http://www.edf-er.com/OurApproach/Howwedevelopwindfarms.aspx

Ecotricity, have launched an Environmental Management System (EMS), to ensure compliance with environmental law and prevention of pollution. Following from this is content describing community consultation approaches for specific project proposals. Most of the websites discuss how consultation is proactive and starts at an early stage of the development TCI Renewables (2015)²⁵.

Developers discuss the process for statutory consultation in line with consultation through the EIA. Some developers list the likely statutory stakeholders, for consultation and some list the topics the EIA is likely to cover Scottish Power Renewables (2015)²⁶. Consultation efforts by developers occurs through education and research outreach. Some provide links to publications about specific projects and arrange educational site visits or discuss the outcomes of green initiatives funded through community benefits Community Windpower (2015)²⁷. Developers discuss compliance with the Localism agenda or pre-planning consultation and the NPPF guidance on early consultation. Larger global developers outline their commitment to and endorsement of international networks and forums on renewable energy and sustainability issues Vattenfall Group (2015)²⁸.

7.5 Involvement Techniques

The involving participation techniques used by developers use codes from figure 20, *Coding Structure for Participation Activity*. Most of the content from the websites on participation techniques falls within collaboration, followed by consultation, informing and involvement, the least amount of content given coded to empowerment techniques. Figure 53, *Involvement Techniques* explains that regular involvement techniques such as meeting with local community groups, education outreach for young people and meeting with Parish Councils and neighbourhood forums are popular methods of participation techniques. The use of public events through community conferences and exhibitions are conducted with formal public planning meetings. To a lesser extent content coded to techniques using face-to-face meetings, conflict resolution, social media and opinion surveys.

INVOLVE **Public Events** Regular Involvement Interactive **Education Outreach for** Community Conferences & Displays & Seminars Young People Parish Councils & Neighbourhood Forums Exhibitions **Meeting Local Community Groups** Social Media **Discussion Groups** Conflict One to One Meetings **Public meetings** Resolution Opinion surveys (21 Sources / 45 References)

Figure 53: Involvement Techniques (Developers)

Source: Own design (2015)

Developers confirm that they are proactive about meeting with residents and businesses, and community groups. Formalised through the structures of parish or neighbourhood councils. Several of the developers offer education outreach as a method to engage local communities in the decision making for their projects. Community Wind Power have established energy advice centres to support community members in reducing emissions and fuel poverty and increasing energy efficiency. They also offer a student placement scheme in collaboration with local colleges to support young people who wish to train for a career in the renewables industry. Other developers such as Peel Energy support the education site visit as a method to engage local communities Peel Energy (2015)²⁹.

 $^{^{25}} http://www.tcirenewables.com/downloads/owners_pack.pdf$

²⁶ http://www.scottishpowerrenewables.com/pages/developing_renewable_energy_responsibly.asp

²⁷http://www.communitywindpower.co.uk/communities/student-placement-schemes/10.htm

²⁸ https://corporate.vattenfall.com/sustainability/society-and-stakeholders/dialogue/

Developers are using public consultation events as a method to engage with communities. This includes formalised public meetings, exhibitions, presentations and launch events to publicise their proposals. These events attended by project team members to answer questions and concerns raised by the local community and gather local opinion for project design decisions. Developers are also organising discussion groups and one-to-one meetings with community members to respond to specific concerns. Renewable First, warn potential community developers that regardless of community participation techniques, for some community members concerns are never alleviated.

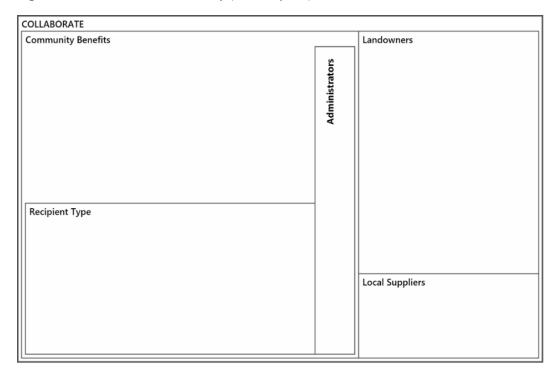
There is nothing that divides a community like wind turbines, so be prepared and ready for some (hopefully not too many!) arguments. One person's vision of progress, responsible energy generation and setting the right example for the next generation is another person's blight on the landscape from a subsidy-grabbing monstrosity that doesn't even work. Good community consultation ensures that the community has the facts about the project and the developer can engage with the community to demonstrate the benefits of the project and to mitigate genuine concerns.' Renewables First (2015)³⁰

7.6 Collaboration Activity

Participation activity through collaboration illustrated in figure 54, Developers Collaboration Activity. Community benefits funding, the recipients, levels of income and fund administration, offered as the strongest technique for participation activity. Collaboration by developers is offering landowners advice and lease rental payments on providing land for potential developments. Coded within collaboration is any commitment by developers to ensure local supply chains benefit from any new proposal.

²⁹ http://www.peelenergy.co.uk/communities-1/

Figure 54: Collaboration Activity (Developers)



Source: Own design (2015)

Within collaboration, developers' techniques mean community benefits funding. Most sites promote the results for recipients of the funding or describe the administration for the project funding. Administrating community benefits from independent trusts, set up as part of the project life cycle and managed separately from the daily operations of the wind developer.

Community Windpower, promotes its work on education outreach by appointing local Education Rangers and Energy Advisers. Ecotricity, discuss their Eco bonds scheme and Infinergy, hand the decision-making power for funding outcomes to local trusts, representing local people and the LA. Infinis, employed Energy Ambassadors to support primary schoolchildren in devising methods for energy reduction for a countywide competition. Scottish Power, discuss their research collaborations in conservation work. SSE, describe their job fairs that encourage local suppliers to tender for contracts and jobs during the construction stage of the development. The use of community benefit funding as leverage for added match funding from other sources for wider regional or strategic objectives.

³⁰ https://www.renewablesfirst.co.uk/windpower/community-windpower/community-consultation/

West Coast Energy, describe how funding from community benefits goes to support to work of existing local NGOs.

Most of the websites provide an online form for enquiries from landowners. They outline the information needed from a landowner to assess their land, the development process and the impact a development will have on daily operations of the land. The content on advice to landowners, focuses on farmers and agricultural land and the ability to preserve agricultural activity, as well as diversifying incomes by accessing subsidies. Pure Renewable Energy, offers a build and operate package for any landowner who already has planning permission for a single turbine. Renewables First, offer a bespoke site finding, screening, feasibility, consenting and development service which is accessible by potential investors at any stage of the development lifecycle depending on acceptable risk levels. That is, a higher cost of buy-in if an investor contributes at the post feasibility stage of development, rather than lower costs at pre-feasibility. They also provide an online wind assessment tool that helps potential developers in assessing the potential of a site, for an onshore wind proposal. TCI Renewables, promote onshore wind developments as a method for investors to meet their own CSR policies. Wind Direct, advertise the benefits of low cost and reliable energy supplies with long-term budget certainty during the operations of the farm. With the added benefit of making a positive sustainability impact and so image for the landowner's business. Wind Prospect, detailed each stage of the site assessment and turbine installation. Offering the total land measurements needed for turbines, substations, access during construction and access during operations.

Collaboration techniques include a commitment to local supply chains during development, construction, operations and decommissioning. Peel Energy, call this their 'local first' approach. Natural Power and Scottish Power, manage liaison events with local business before development. For example,

'During construction, we invite local companies to meet with us to find out more about the type of contracts being let and to find out how they can get involved. At our existing windfarms, we have used a variety of local business and suppliers for services such as ground clearance, catering, accommodation, fencing and decorating.' Scottish Power $(2015)^{31}$

7.7 Empowering Activity

In figure 55, *Developers Empowering Activities*, participation is coded to advice and support offered by a developer towards communities that wish to set up their own community energy proposal. Or undertake a partnership through shared ownership with the developer. Developers have offered advice on their website for types of funding packages and constraints to developing onshore wind. Included in the empowerment stage of participation is research and development innovation in renewable energy.

EMPOWER

Community Energy

Funding Sources

Constraints

Off the shelf

Degal Structures

Legal Structures

R&D Innovation

R&D Innovation

Figure 55: Empowering Activity (Developers)

Source: Own design (2015)

Airvolution, reference the government's Community Energy Strategy (2014), to gain feedback by an online questionnaire, from residents and community groups, on the interest in shared ownership choices for the farms they have

in development. Coriolis, promotes the work of Energy4All, explaining how an energy cooperative works. Green Energy, offer free shares in their company to new customers switching to their provision. SSE, promote their response to the Government's Call for Evidence on community energy. Prowind, offers custom-made packages to any potential investor wishing to buy any completed renewable generator, from a biomass plant to a single turbine.

Renewables First, offer the most content and advice on community energy. Outlining in detail the available funding streams, the funding constraints on match funding from private and public sources, eligibility for subsidies, the development stages, the different legal structures that community wind organisations can work within and they explain the difference between community energy and community benefits funding. They reference Germany, Sweden and Denmark as exemplar cases for community energy provision. Renewables First, also reference the aims of the Community Energy Strategy (2014) Renewables First (2015)32. Innovations endorsed by developers as a means to achieve environmental sustainability, freedom from energy insecurity and elimination of fuel poverty. Ecotricity, announce their 'Merchant Wind Power' and 'Eco-labs' schemes. The former encourages big electricity consumers (over 1Gwh each year) to switch to green supply for less the cost of brown electricity, the latter a research hub for new ways to produce energy Ecotricity (2015)³³. Enertrag, are developing a hybrid power plant and radar technology to reduce the need for turbine collision lighting. Renewables First, have developed a Planning Sensitivity Assessment to help with the consenting process for impacts and cumulative impacts. RWE, have set up an innovation hub that connects start-up companies from Silicon Valley in the US, Berlin and Tel Aviv to source renewable energy solutions. SSE, stresses its work with universities and research centres with a focus on carbon capture storage and reducing the costs of offshore wind energy storage. TCI Renewables, discuss their Merchant Wind package as a method for companies to meet their CSR objectives. Commercial companies use their brownfield sites to develop wind farms, for example, developing the land owned by the utilities company, Anglian Water, for wind farms to power their own operations. Wind Prospect, have developed sound detection and ranging

technology that is available for hire to assess wind speeds remotely without the need for mast planning permission. Vattenfall, are concentrating their research efforts into operational reliability, improving the technological capabilities of wind turbines to increase their maximum capacity and reduce the need for maintenance. Innovations by Vattenfall include, decentralisation of network grids, viewing customers who produce their own electricity as 'prosumers' and they call for a European integrated electricity market so electricity interconnects across European administrations Vattenfall (2015)³⁴

7.8 Developers Survey

A survey created using Survey Monkey³⁵, an online software survey builder which delivered the questionnaire by email, to the 32 identified developers. This produced one returned response, so hardcopies of the survey were distributed to the onshore wind developers' and consultants, presenting at the Renewable UK annual conference in Manchester in November 2014. This produced an extra nine anonymised responses, a copy of the survey is available in appendix 8, *Developers Survey*.

Of the ten respondents, one answered abolishing subsidies would prevent their company from continuing to develop onshore wind farms in England. However, none of the developers had abandoned developments due to appeal costs.

'No, if the site was viable from a wind resource point of view it is unlikely to be abandoned but it adds to the costs' (respondent no. 6) and

'No, we factor appeal costs into our project budgets now' (respondent no. 10)

The responses pictured in figure 56, identifies key social impacts as those on the landscape, heritage and culture, and the local economy. Followed by impacts on leisure and recreation services, social infrastructure, employment opportunities and cumulative impacts.

 $^{^{32}\,}https://www.renewablesfirst.co.uk/windpower/community-windpower/overview-of-community-wind-projects/$

³³ https://www.ecotricity.co.uk/about-ecotricity/eco-labs

Legal / Political Health & Well being (incl. noise) Community Identity & Cohesion Fears & Aspirations (risk perceptions) Cohesion of development in its surroundings Aesthetic / Landscape Values SocialImpacts Heritage & Cultural values Leisure & Recreation Demographic statistics Community facilities / social infrastructure Access & Mobility Housing / Accommodation Property values / tourism **Employment** Local economy None 7 No. Respondents

Figure 56: Social Impacts Identified by Developers

Source: Own design (2015)

Of the ten respondents, one company had commissioned an SIA for a proposal in Scotland. This project gained consent for planning permission. Of the total respondents, six agree that SIA could aid in developing onshore wind farms,

'yes, bring out the positive effects allowing decision makers to balance positives and negatives' (Respondent no. 3)

However, four respondents disagree, believing that socio-economic impacts area already discussed in the ES, it would make the planning process more difficult or it would increase the number of objections to a proposal.

³⁴ https://corporate.vattenfall.com/about-energy/the-future-of-energy/

³⁵ Survey Monkey available at [https://www.surveymonkey.co.uk/]

'no not really. The planning system is so unpredictable I'm not sure we would gauge SIA as a worthwhile cost - we already anticipate each project going to appeal, where more objective and less political planning assessments are made.' (Respondent no. 10)

Four of the respondents suggest that SIA should be part of the EIA, three respondents see no value in undertaking an SIA and three respondents consider SIA to be undertaken separately to an EIA.

'No value in undertaking a SIA, windfarms will always be opposed locally, but green energy is demanded nationally. It is too important to leave at the whim of local communities.' (Respondent no. 10)

The developers were asked 'who had responsibility for engaging with communities?' Eight of the respondents replied. Two respondents placed responsibility for community engagement within three teams: project management; planning, consents and legal, and EIA (nos. 3 & 9). One respondent answered, with the project management team and the technical, engineering and construction team (no. 1). Two respondents, assigned these tasks to the project management team alone (no. 7 & 8). One respondent, placed this duty with the company directors (no. 2). One respondent, answered that this was the duty of a specific community engagement team (no. 6) and one respondent, stated this was the role of the public relations, communications and media team (no. 10).

Figure 57, pictures the SIA activities the respondents use to engage with host communities. Mitigation of impacts through the EIA, working with communities to understand the local historical context, assessing cumulative impacts and developing alternatives are the key forms of engagement. None of the respondents supported communities in developing community energy projects.

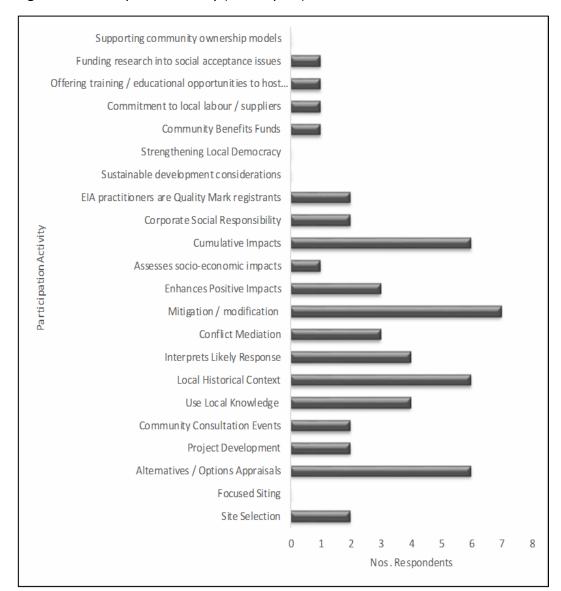


Figure 57: Participation Activity (Developers)

Source: Own design (2015)

When asked what the biggest threats to developing onshore wind farms in the UK, the responses are diverse with respondents placing reasons for constraints to development with social acceptance issues, political and planning procedures and the British media.

'Public opposition - there is absolutely nowhere in this country that you could site a wind farm without public complaint' (Respondent no. 1),

'The Conservative government' (Respondent no. 2),

'Land ownership, high levels of land designation and lack of strategic planning guidance' (Respondent no. 3),

'negative and unfounded views held by anti-windfarm groups and the media like the Daily Mail' (Respondent no. 6)

'radar, aviation, landscape, residential amenity and heritage' (Respondent no. 8) and

'Where to start? Short termist (sic) national governments, incompetent local councils, gutless planning officers, vocal opposition minorities, poor or improperly implemented planning policies, right wing media...' (Respondent no. 10)

7.9 Conclusion

The content from the developers' websites, coded to participation activity illustrates that most activity is informing. The best performing companies used twelve different techniques from a possible twenty-five types (the code set) of participation activity, although five companies simply stated they used participation techniques, without any further detail. Collaboration activity, remained high because of advice offered on community benefits funding, which was reflected in empowering activity, due to support and advice offered on community energy models.

The informing participation activity, focuses on the benefits of wind energy, challenging climate change, divestment from fossil fuels, energy security and subsidies, therefore policy support to meet targets for emissions reduction. The developers reiterate the global, European and national policy portfolio that supports their industry. They present their companies as agents to deliver the aims of the Kyoto Treaty and the Climate Change Act. They call for a British energy independence to strengthen the economy. Within information sharing, they undertake myth busting around impacts on health, noise, tourism and reiterate the public support for wind energy.

The developers link their monitoring programmes to their operational strategies, which involves habitat management plans, land lease terms, local procurement and SIMPs for community funding. They use all to support their environmental, CSR and sustainability policies. In understanding the issues, content is coded to feasibility studies that test wind resources, grid access, transport and access, environmental constraints, site context and residential amenity. However, there is less content on participatory processes and community profiling at this stage of the development lifecycle. There is little content coded to prediction and assessment of impacts. Where it is discussed, the EIA process is outlined.

Many developers use their websites to promote their CSR initiatives, which are the outcomes of community benefit funding. The initiatives are innovative and diverse and not specific to renewable energy; anti-corruption, good citizenship, charitable foundations, sustainability action and pollution prevention. The CSR initiatives incorporate consultation activity, many developers stating that this occurs at an early stage of the development. For developers, this is not during feasibility, but during pre-application consultation or EIA consultation on prediction and assessment of impacts. Coding to involving techniques, shows that regular meetings through Parish and neighbourhood councils and public events and exhibitions are popular methods of engagement for developers. The developers are prepared for division within a potential host community, but aim to alleviate genuine concerns and promote the benefits of a scheme.

Developers are using collaboration and empowerment activity because of community benefits funding and community energy, respectively. Four companies go beyond offering advice to devising shared ownership programmes for community energy. Eleven of the developers promote their research and development programmes, which is coded to empowering activity as they aim to achieve environmental sustainability, freedom from energy insecurity and elimination of fuel poverty.

From the survey responses, only one company thought the abolition of subsidies would prevent them from undertaking any further development in England. None of the respondents had abandoned a proposal because of an appeal, one confirming that a fairer hearing would be given during an inquiry. The developers predicted the biggest concerns for communities, were the impacts on landscape, heritage and culture and the local economy. Only one respondent stated the responsibility for community consultation was undertaken by a specific community engagement team. The other developers, placed this duty with company directors, engineers, media and PR and the EIA project team.

The abolition of subsidies or the increase rate of appeals, did not deter the developers, instead the greatest threat to development was social acceptance issues played out in a hostile media, lack of political will and strategic policy guidance as well as land ownership and designation constraints. However, only one developer had commissioned an SIA to assist in uncovering these issues, which had resulted in project approval. Most respondents agreed with the added value, an SIA could bring to the process, as a method to weight positive benefits in the planning balance. Some developers suggesting that an SIA would be best placed within the EIA, others that it should be undertaken separately. However, four respondents did not believe an SIA would assist in local decision making as they believed socio-economic impacts are already assessed as part of the EIA. It would slow down the planning system, increase the number of objections to proposals and leave planning for renewables to vocal minorities. The analysis of the developers' websites and survey responses are discussed in further in chapter nine.

7.10 Action Groups Websites

Opposition campaign groups start as a response to a specific windfarm planning proposal for example, Save Our Marsh Block Rural Exploitation (SOMBRE) in Romney Marsh, Kent. For a defined area, such as, Friends of Rural Cumbria's Environment (FORCE) where action is against several planning proposals. Or are landscape protection groups set up to protect an

area from any form of capital development, such as Save Maers Hill, in Staffordshire. One website, Cumbria Wind Watch (CWW) provides support for other Action Groups to campaign against onshore wind farm proposals. The content pictured using hierarchical tree maps in figures 58 to 66. In section 6.2.9, the Action Groups' techniques of participation coded against the IAPP spectrum of participation discussed in a matrix in figure 67. *Action Group's Participation Matrix*.

Political System

Community

Personal and Property Rights

Health and Well Being

Environment

Culture

Way of Life
1

Figure 58: Action Groups' Reasons for Objection

[1. Fears and Aspirations] Source: Own design (2015)

The review of all coded content against social impact codes falls within the *political* domain as explained in figure 58, *Action Groups' Reasons for Objection*, followed by *Community* and *Personal and Property* impacts. To a lesser extent content falls into issues on *Health and Well-being, Culture* and the *Environment. Way of Life* impacts and *Fears and Aspirations* combined because of a lack of content.

7.11 Political System Impacts

The impacts pictured in figure 59, *Political System*, shows most content

coded to technology, this given additional coding in figure 60, *Political System (Technology)*. Before returning to outlining content on *Political system* impacts beginning with localism and developers and landowners, followed by content on government performance and EIA. To a lesser extent content is coded to access to legal representation, government integrity, human rights and impact equity.

Figure 59: Political System (Action Groups)

(1 Impact Equity) Source: Own design (2015)

7.11.1 Technological Impacts

The content on technology explained in figure 60, *Political System, Technology*, stresses the inefficiency of the technology, the opposition to subsidies and the preference for alternative renewable energy. Followed by renewables targets, preferences for the use of fossil fuels and nuclear power. Campaign groups assert the technology threatens energy security and contributes to climate change. Limited amount of content coded to the impacts of reversibility, the truth of public opinion polls and the lack of grid connection.

Figure 60: Political System, Technology (Action Groups)

Source: Own design (2015)

The websites question the technology as an effective producing power especially in times of increased wind storms in England, which can put the machinery at risk of failure and debris throw. The intermittency of wind supply and the need for diesel generated back up, regarded as making the technology expensive, inefficient and so ineffectual at reducing CO2 emissions (SOMBRE)³⁶. Developers are peddling propaganda to what amounts to a 'wind farm scam' and readers offered links to John Etherington's (2009) publication *The Wind Farm Scam: An Ecologist's Evaluation* (ARM), (BLOT), (BOLT) and (RATS). In it, Etherington puts forward the argument that onshore wind technology causes more environmental, social and economic problems than it solves. Etherington, is a retired Reader in Ecology from the University of Wales in Cardiff, and former technical adviser to the organisation Country Guardian³⁷. Country Guardian set up in 1990, as a campaign and lobby group to stop wind farms in Britain.³⁸

³⁶ Available at http://www.sombre.org/

³⁷Booker, C. & North, R. (2007) Scared to Death from BSE to Global Warming How Scares are Costing us the Earth (p. 407)

³⁸ Available at http://www.countryguardian.net/ [last accessed 19/11/15]

The perceived expense of the technology links to the cost of subsidies to the public purse. The poor value for money, as landlords and overseas developers make vast profits, funded by the British public through the subsidies regime. Subsidies for onshore wind technology viewed as a threat to jobs in the fossil fuel industry (ASWAR)³⁹. Content on subsidies links to renewable energy targets (KHG)⁴⁰. Developers seen as profit makers rather than offering environmental solutions and politicians are supporting an enforced European subsidy regime that increases electricity costs and causes fuel poverty.

Clearly the websites did not support onshore wind energy, but none of them put forward support for offshore wind either. Instead, alternative suggestions focus on nuclear, clean coal, other renewables or improved methods of insulation. Many of the websites reference the experiences of Germany and Denmark as leaders in wind energy, asserting the need for these countries to back up the renewable electricity supply with coal-fired power stations (ASWAR)⁴¹.

The websites oppose the government policies that aim to meet European targets on renewable energy or disagree with the target level set in a Local Plan. Other sites argue the UK has already met, or will meet with current planning applications, the nationally set targets. Or that local targets are already met (ASWAR)⁴². There is concern the need for meeting targets has meant the UK is now behind the US in supporting a shale gas revolution, which poses a risk to national energy security (ASWAR)⁴³.

The Action Groups take differing positions on the issue of climate change. Some state they have no official position on the human causes of climate change (CWW) (ASWAR)⁴⁴. Some agree there is global warming but do not

³⁹ Available at http://www.aswar.org.uk/sites/default/files/ASWAR-Initial-Reaction-to-McAlpine-RES-Application.pdf (page 2)

⁴⁰ Available at http://www.keephampshiregreen.org/news.html

⁴¹ Available at http://www.aswar.org.uk/content/low-wind-speeds-increase-financial-losses-windfarm-operator

⁴² Available at http://www.aswar.org.uk/sites/default/files/ASWAR-Initial-Reaction-to-McAlpine-RES-Application.pdf (page 9)

⁴³ Available at Available at http://www.aswar.org.uk/sites/default/files/ASWAR-Initial-Reaction-to-McAlpine-RES-Application.pdf (page 2)

⁴⁴ Available at http://www.aswar.org.uk/content/arguments

think onshore wind is the solution (BLOT) and (BOLT). Or that onshore wind and other renewables can help in slowing climate change, but the inappropriate siting of farms is what they oppose (FORCE). Advice and guidelines offered on how to oppose a wind turbine planning application based on grid connection (CWW)⁴⁵. Urging conditions of approval in planning, based on a clause that ties a financial bond to the developer with the LPA for reinstatement and decommissioning costs. Aiming to prevent repowering and ensure a maximum of a 25-year lifespan (Save Our Stainmore (SOS))⁴⁶.

The Action Groups challenge the methodology behind major public attitude surveys, or use survey data that supports objections to wind farms. Or they point out that surveys were Scottish, not English. Residents Against Turbines (RATS), equate levels of support for onshore wind with financial costs (RATS)⁴⁷. The content from campaigning groups on Localism, calls for support from national and local government, the media and the CPRE (ASWAR) (SWWAG) to ensure local people have power in local decision making. Some sites are critical of a developers' motives for consultation which are a public relations spin on the narrative for purposes of profit (ASWAR). Using localism to call for further planning policy controls such as setting a 2km residential proximity exclusion zone limit (KHG). Calling for a moratorium on all developments in an area, until Local Development Plans change (SOMBRE). Criticising the adequacy of the pre-application consultation techniques (BOLT). Questioning the legality of the Environmental Statement (ES) and its supporting evidence through public opinion polls for social acceptance on renewables. Asking for a review of the ES because of the call to give weight to Localism in the planning balance (KHG). Failure to undertake consultation on alternatives and options

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⁴⁵ Available at

http://www.cumbriawindwatch.co.uk/index.php?title=FELLS_guidelines_for_opposing_wind_turbines&oldid=566#Some_other_things_to_check

⁴⁶ Available at http://www.saveourstainmore.co.uk/what_is_proposed.php

⁴⁷ Available at http://www.r-a-t-s.org.uk/facts.html

appraisals in the EIA, is a planning compliance failure or simply, that it is futile to undertake consultation on mitigation efforts (TAINT)⁴⁸. After technological impacts content coding is to developers and landlords. Action Groups view LPAs as having pro-developer policies, which allow landlords to get rich at the expense of the residents. Subsidies payments go to overseas companies or British companies that are subject to corporate scandals (ASWAR)⁴⁹. Some sites advise participants to contact the landowner directly to put forward local community concerns (CWW). Or to remind landowners that they are stewards of the land who should ensure English landscapes are intact for future generations (SWWAG). The opinion on developers, range from noncompliance with planning matters for example, a lack of information on EAM noise impacts (DBJRG) or offer a warning to developers not to pursue their objectives (RATS) (SOMBRE).

Action Groups view their role as a lobbying one, to ensure participation within the democratic process and influence local and national politicians in changing policy on renewables (ASWAR). They view LPAs and planning officers as the victims of renewable energy policies, which the action groups will fight to defend (BAT) (CWW). They support the reweighting of planning decisions based on Localism and environmental protection instead of renewable energy. They support the Secretary of State for (DCLG), Eric Pickles by calling in appeals and the Conservative Party manifesto aim to remove subsidies. (KHG) (ARM) (SOMBRE) and (SVA).

Action Groups also question the methodology of specific EIA assessments such as LVIA (ASWAR), ETSU 97 (DBJRG) or the lack of assessment of the potential benefits of a wind farm proposal (KHG). Advice from (BLOT) warns that information from academia is inaccessible and contradictory and (CWW) advise participants to use local knowledge to oppose the arguments offered in a weak ES (CWW)⁵⁰.

 $^{^{48}}$ Available at https://www.wind-watch.org/news/2013/09/04/tolpuddle-campaigners-in-no-mood-to-compromise-over-turbine-proposal/

Fifteen of the Action Groups provided links to facilitate donations to their campaigns. In part, to support the actions of a campaign (RATS), or to promote previous successes in preventing an onshore wind proposal at public inquiry (SHOWT). To commission experts (KHG) or to support costs for employing barristers to take proposals to appeal (ASWAR)⁵¹.

Action Groups outline an LPA bias towards developers and question the power a local government can have against the wealth of global corporations (Stop Haversham Windfarm). BOLT, put forward an argument that government officials are doctoring reports to promote misinformation so noise limit guidelines remain unrevised. This would then allow developments that threaten people's health and well-being. CWW, advise participants to warn landowners that collectively, the local community may take legal action against the landowner on noise nuisance and Human Rights. Or to remind developers that they may be sued for the same reasons (ASWAR)⁵².

7.12 Community Impacts

Decreasing significantly, in the content from the websites from issues coded to *Political* impacts with 325 references, to *Community* impacts with 125 references, explained in figure 61, *Community Impacts*. Amenity value and aesthetics or landscape and visual impacts, followed by the impact on residential amenity or quality of the living environment raises most objection. Equal coverage given to cumulative impacts and leisure and recreation amenity. Less content coded to physical infrastructure, community benefits funding and health and safety issues. Little content on impacts to telecommunication and social infrastructure.

⁵⁰ Available at

http://www.cumbriawindwatch.co.uk/index.php/FELLS_guidelines_for_opposing_wind_t urbines#Wildlife

⁵¹ Available at http://www.aswar.org.uk/content/how-help

Figure 61: Community Impacts (Action Groups)

Community Amenity Value & Aesthetics	Cumulative		Health & Safety
Amenity value & Aesthetics	Cumulative	Physical Infrastructure	neatti & Salet
Quality of Living Environment	Leisure & Recreation	Community Benefits Fund	Telecoms
[51 sources / 125 references)			1

(1. Social Infrastructure) Source: Own design (2015)

There is acceptance that beauty is subjective, but if the majority in a village find them an ugly intrusion, then this is a democratic issue (BAT). For many websites, the farms are destroying tranquillity, by enforcing the urban, the modern and the industrial on to rural space (ARM). Dominating turbines will make residents feel claustrophobic (DBJRG). The scale of the development criticised by comparing the diameter of the turbines to the size of a jumbo jet (Save Maers Hill). Or the height as taller than Norwich Cathedral spire and the London Eye (SHOWT). Objecting to a proposal is an act of environmental stewardship for residents, visitors and for future generations (FLAG). Proposals viewed as having a negative impact on other environmental facilities such as country parks, local lakes, and local listed buildings (Stop Haversham). Content focuses on opposing a proposal because of land designations, which if allowed would set precedent for the country (SOS). Or objection, because although not designated, locally the landscape is considered worthy of a designation (KHG)⁵³

Among the websites there is no consensus on the set back distances from

residential proximity for siting of turbines, as they are subject to differing LPA guidance (ARM) (BLOT) and (STOP Woodlane). BOLT, urge LPAs to follow European guidance of 2km and RATS, advise campaigners to involve local councillors to protect individual interests. BOLT, discuss topple distances and closeness to rural roads and the negative impact this could have on road users. KHG, concentrate on the impact on footpaths and bridleways as important leisure and recreational amenity. A local councillor in Tolpuddle, concerned for the impact on the conservation value of the village (TAINT) and Stop Haversham, predict a negative impact on a local woodland (STOP Haversham)⁵⁴.

Impacts on physical infrastructure, discussed, solely about the road and transport network during the construction period. Concerns include, enlarging roads and disruption to local traffic (BOLT), increases in road accidents and deaths (Save Maers Hill), greater risk from noise, vibrations, dust and pollution (Stop Woodlane). CWW, advise campaigners to, check developer's assertions with the Highways Agency and include any potential damage to trees, hedgerows and drystone walls (CWW)⁵⁵. Health and safety impacts are debris throw because of mechanical failure and ice throw from turbines during winter. Concern raised, about nearness of the windfarm to village services and facilities (SWWAG). BOLT, outlined how interference would mean replacement of aerials or installation of cable or satellite infrastructure to preserve telecommunications signals.

Approval of the proposal is setting a precedent for further developments (BAT). BLOT, criticises the ES as being out-of-date and missing information when assessing cumulative impacts. Stop Woodlane, offer illustrations for readers to view the number of wind farms within a 5km radius of the proposal site. BOLT, ask campaigners to view from a specific main road, the number of turbines in position. FORCE, stress how cumulative impacts is of material consideration (FORCE).

53 Available at http://www.keephampshiregreen.org/

⁵⁴ Available at http://www.stophavershamwindfarm.org.uk/howdoiobjectSHWAG.html

⁵⁵ Available at

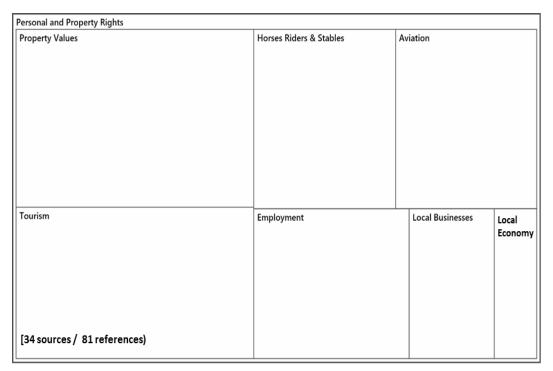
http://www.cumbriawindwatch.co.uk/index.php?title=FELLS_guidelines_for_opposing_wind_turbines&oldid=566#Some_other_things_to_check

The content from websites on community benefits funding, stresses no weight in planning, so funding is bribery, and permission cannot be bought. The funding levels are insignificant compared with the developers' profit and the harm caused to the countryside (BLOT) (SOS) (SOMBRE) and (KHG)⁵⁶

7.13 Personal and Property Rights

In figure 62, *Personal and Property Rights*, the impact on property values and tourism gathered the most content, followed equally by impacts on horses, horse riders and stables and aviation. Less content coded to impacts on employment and local businesses and economies.

Figure 62: Personal & Property Rights (Action Groups)



Source: Own design (2015)

ARM, discuss how locals have paid a premium for houses with uninterrupted views and the impact a wind farm will have on the number of people willing to buy a property (Stop Woodlane). The Action Group websites offer most content on the issue of devalued property prices. ASWAR, use a Lake District case where a judge had ordered the vendors of a property to pay compensation to the purchasers because of noise and shadow flicker impacts.

⁵⁶ Available at http://www.keephampshiregreen.org/news.html

FOWEY, reference a Royal Institute of Chartered Surveyors (RICS) report on devaluation based on proximity. KHG, quote the Valuation Office Agency and property values linked to council tax. SOMBER, use a London School of Economics (LSE), study on the impact on property values based on proximity and cumulative impacts. Stop Woodlane and SVA, quote local estate agents' opinions. CWW, confirm that it is difficult to provide objective data to evidence property devaluation, but assert, 'the intuitively obvious fact that a house value will fall if a very large moving structure is constructed in close proximity' (CWW)⁵⁷

SVA, cite examples where wind farm visitor centres have closed because of lack of interest. Action Groups link the rural economy to tourism and challenge developers' assertions that a development will bring employment to an area, but instead reduce the number of jobs within the tourism sector (SOMBRE)⁵⁸.

The Action Groups argue that horses fear moving blades and shadow and sun flicker putting the horse and rider at risk (ARM). BLOT and CWW, discuss guidance on proximity distances from bridleways. BOLT, widen the impact on livestock from horses, to cattle, sheep and domestic animals. KHG and SWWAG, connect impact on horses and riders to the economic viability of stables and livery yards and in turn the negative impact this will have on the local economy (KHG)⁵⁹.

BLOT, describe the conflict of an approved windfarm with a proposed business opportunity to use part of an existing airfield for temporary runways for light aircraft, gliders and helicopters. SOMBRE, show concern for the impact of turbines on low flying military planes in the area (KHG)⁶⁰. DBJRG, view construction jobs as a temporary benefit, which they 'ignore[d] as peripheral'⁶¹.

⁵⁷ Available at

http://www.cumbriawindwatch.co.uk/index.php?title=FELLS_guidelines_for_opposing_wind_turbines&oldid=566#Quality_of_Life_and_Property_values

⁵⁸ Available at http://www.sombre.org/national-park/

⁵⁹ Available at http://www.keephampshiregreen.org/downloads/khg-objection-to-edf-bullington-wind-farm-6.pdf (page 10-11)

FLAT and KHG, argue the raw materials and skill sets need importing from the US and Denmark. FORCE, believe that other renewables have the potential to create more jobs than onshore wind. However, ASWAR, state the potential loss of jobs in the fossil fuel industry (ASWAR)⁶². The Action Groups outline specific local businesses suffering a negative impact, if a proposal goes ahead, eventually threatening jobs and the wider tourist and agriculture economies.

7.14 Health and Wellbeing

Figure 63, *Health and Well-being*, shows how data has mainly been coded to issues on noise and amplitude modulation, followed by sun and shadow flicker and the link to sleep disturbance. There was slight content on wind turbine syndrome, and impacts on physical and mental health.

Figure 63: Health & Wellbeing (Action Groups)

Health and Well Being			
Noise	Shadow Sun Flick	ser Si	eep Disturbance
Amplitude Modulation	Wind Turbine Syndrome	Physical Health	Mental Health
[27 sources / 69 references)			

Source: Own design (2015)

 $^{^{60}\,}Available\ at\ http://www.keephampshiregreen.org/why-we-object.html\#economic-impact\\ ^{61}\,Available\ at\ http://www.denbrookvalley.co.uk/pages/advantages-vs-disadvantages.html$

 $^{^{62}}$ Available at http://www.aswar.org.uk/sites/default/files/ASWAR-Initial-Reaction-to-McAlpine-RES-Application.pdf (page 10)

Many of the campaign groups challenge the government's noise guidelines, ERSU-R-97, as being out-of-date and controlled by vested interests and manipulated by government officials. They continue by critiquing the methodology used and link the impact of noise to other health conditions such as AM and sleep disturbance (ASWAR) (BOLT) (DBJRG) (Stop Haversham) (Stop Woodlane) and (CWW). For SOS, the noise impact on health is also the decline in peace and tranquillity of an area (SOS)⁶³.

ARM, consider AM to be the cause of more serious noise complaints. They reference another Action Group, that are using constraints on AM levels as the reason to take an approved planning proposal to the High Court, on appeal. BLOT, state ETSU-R-97 as negligent in assessing AM. BOLT, widen out the health impacts from AM on humans to include wildlife and domestic animals (BOLT)⁶⁴. DBJRG, issued a developer with a pre-action protocol Notice of Intent⁶⁵, to ensure EAM noise assessment.

The websites explain sun and shadow flicker and link the impacts to wellbeing concerns from feelings of annoyance and irritability to anger and aggression and physical health impacts such as migraines and epileptic seizures (STOP Woodlane)66. A side effect of the felt health and well-being impacts, is sleep disturbance and the added health problems this can create. The health side effects of sleep disturbance and AM coalesce into wind turbine syndrome for which Stop Woodlane, state the public health system has abandoned the public. Physical health impacts are the potential for ice throw in winter or flicker causing epileptic seizures (BOLT) and mental health issues such as anxiety and depression are a result of AM (BOLT)⁶⁷.

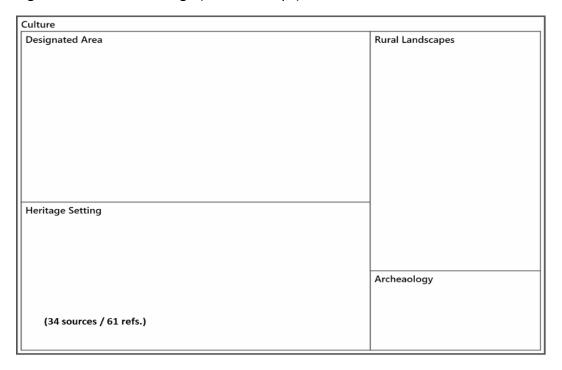
 $^{^{63}}$ Available at http://www.saveourstainmore.co.uk/why_we_say_no.php 64 Available at http://www.birdsedge.co.uk/bolt1%20bad%20thing.htm

⁶⁵ To establish the issues under dispute prior to a Judicial Review (England and Wales) see https://www.justice.gov.uk/courts/procedure-rules/civil/protocol/prot_jrv

7.15 Cultural Heritage

Content coded to *Cultural* impacts as pictured in figure 64, *CulturalHeritage* concerns designated land areas, the impact on heritage setting, rural landscapes and archaeology.

Figure 64: Cultural Heritage (Action Groups)



Source: Own design (2015)

ARM, argue eroding a planned Green Belt designation, which will deter potential tourists and visitors. The impact on Conservation Area designations of specific villages is of concern for ASWAR and BLOT. Closeness to designated areas is a reason for objection, for example, BLOT, state the proposal will be over a mile from an SSSI and RAMSAR site. For DBJRG, the proposal is five miles from a National Park, for FOWEY, KHG and SOS, the proposal sites are in proximity to AONBs. KHG and SSWAG, agree there is no land designation but believe proposal sites have high landscape values (KHG)⁶⁸.

⁶⁶ Available at http://www.stopwoodlanewindfarm.co.uk/shadow.htm

⁶⁷ Available at http://www.birdsedge.co.uk/bolt3%20health.htm

Heritage setting, is describe by the Action Groups as impacts on listed buildings and the local history and heritage of a village and its environment. ARM, describe the manor houses, churches and castles within a 2km radius of the proposal site. ASWAR, describe a 1000-year unchanged relationship between landscape, river and settlement. KHG, highlight local landscape identity as voiced in literature by Jane Austen and Thomas Hardy. Closely related to the impacts on designated areas and heritage setting is protecting rural landscapes. FORCE, set up as an Action Group to object to a windfarm proposal, but developed into a landscape protection group to share their experience of the planning system with other Action Groups. FLAG, KHG and Save Maers Hill, are landscape protection groups currently campaigning against onshore wind farm proposals (SWWAG)⁶⁹. Archaeological impacts viewed as the potential loss of archaeological sites and the contribution to the historical significance of an area. Unrecorded Roman camps and forts, Iron and Bronze Age settlements and deserted medieval villages all under threat from development (ARM) (BOLT) and (SVA) and (KHG)⁷⁰

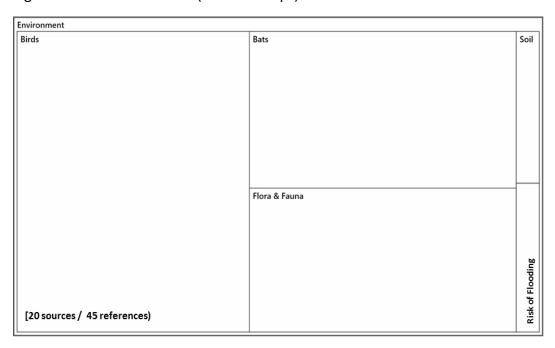
7.16 Environment

Within the *Environment* domain of social impacts, as explained in figure 65, *The Environment*, greatest content is coded to the impact on birds, followed by bats and flora and fauna. One reference coded to impacts on soil and risk of flooding.

⁶⁸ Available at http://www.keephampshiregreen.org/why-we-object.html

 ⁶⁹ Available from
 http://www.sulgrave.org/Wind%20Farm/A%20villager's%20opinions.html
 ⁷⁰ Available from http://www.keephampshiregreen.org/why-we-object.html#cultural-heritage

Figure 65: The Environment (Action Groups)



Source: Own design (2015)

ARM and BLOT, outline the arguments offered by Etherington (2009) in *The Wind Farm Scam* and provide links to extracts to the publication. ARM and SOMBRE, provide links to video footage of birds colliding with turbines. SHOWT, consider turbines to be 'bird shredders'⁷¹ and KHG, do not accept the argument that more birds are killed by cars and cats, as a reason to accept more bird deaths. SOMBRE, argue against the ability for birds to adapt their flight paths (SOMBRE)⁷². Stop Haversham, ASWAR and BOLT, graphically describe the effects of barotrauma on bats (BOLT)⁷³.

 $^{^{71}\}mbox{Available}$ at http://www.showt.org.uk/writing-objection-letters-to-south-norfolk-council.html

⁷² Available at http://www.sombre.org/

⁷³ Available at http://www.birdsedge.co.uk/bolt1%20bad%20thing.htm

SOS and BLOT, concerned for sensitive ecosystems surrounding proposal sites and the potential for destroying important habitats (BLOT)⁷⁴. Stop Haversham, argue the turbine concrete bases and associated infrastructure will impact on underwater springs and a local reservoir, which could reduce water absorption on the site and increase the risk of flooding. Whereas SOS, claim the concrete bases and access infrastructure will damage peatlands which release large amounts of carbon through disturbance and loss of the carbon storage role of deep peat. Thus, cancelling the carbon saving benefits of renewable energy.

7.17 Way of Life and Fears and Aspirations

Impacts on *Way of Life* and *Fears and Aspirations* have limited content, seven sources with eleven coded references.

Figure 66: Way of Life and Fears & Aspirations (Action Groups)

Way of Life	Fears and Aspirations	
Social Differentiation & Inequality	Family Obligations	Future Aspirations
Social Tension & Violence (7 sources / 11 refs.)	Community Cohesion (actual)	Personal Safety & Hazard Exposure

Source: Own design (2015)

 $^{^{74}}$ Available at $\underline{http://planning.southkesteven.gov.uk/SKDC/S15-0862/1039620.pdf}$ (page 42)

Within *Way of Life* codes, ARM and DBJRG, reference the 2011, court case of the Davis family. Forced to leave their home because of the disturbance from turbine noise, which eventually meant they could not sell their property. The case settled out-of-court, but used by the Action Groups to evidence the impact it can have on way of life through inequality and family obligations. ASWAR, argue that inequalities in way of life, because of a subsidy regime which causes fuel poverty. Social tension on way of life, is a concern for ASWAR, who believe the proposal will divide their community. DBJRG, seek full disclosure of information from the developer to enable them to rebuild trust within the community.

7.18 Action Groups' Participation Matrix

The participation techniques used by the 22 Action Groups' websites coded from 106 sources with 245 references, against the IAPP spectrum. The content on techniques from each Action Group in figure 67, *Action Groups' Participation Techniques*. The Action Groups have used a website platform to convey their campaign rather than other forms of social media. Their message target networks of allies for support rather than readers who may be neutral or opponents. Their stakeholder profile is geographically local and site specific, but may link to national and international anti-wind networks. All websites are in English, with links to right-wing mainstream media articles to support that message. The message framed to connect to the core values of their stakeholders, by igniting an emotional response. A response that aims to promote action to prevent a specific onshore wind proposal, by objecting through planning.

Figure 67: Participation Techniques (Action Groups)

Figure 5.43: Action Groups' Participation Techniques

Action for Rural Morpeth (ARM)

Against Subidised Windfarms Around Rugby (ASWAR)

Burton Against Turbines (BAT)

Bozeat and Lavenden Oppose Turbines (BLOT)

Birdsedge and district Opposition to Large Turbines (BOLT)

Cumbria Wind Watch (CWW)

Den Brook valley Judicial Review Group (DBJRG)

Flat Group (FLAT)

Friends Of Rural Cumbria Environment (FORCE)

Fowey Landscape Action Group (FLAG)

Keep Hampshire Green (KHG)

Residents Against Turbines (RATS)

Strategic Alliance Against Lakeland Turbines (SAALT)

Save Maers Hill

Stop Hempnalls Onshore Wind Turbines (SHOWT)

Save Our Marsh Block Rural Exploitation (SOMBRE)

Save Our Stainmore (SOS)

Stop Haversham Windfarm Stop Woodlane Windfarm

Sulgrave and Weston Windfarm Action Group (SWWAG)

Save the Vale Association (SVA)

Tolpuddle Against INdustrial Turbines (TAINT)

				Infor	m					Cons	ult		I	nvolv	е		Collab	orate	Emp	ower
NIMBY Reclaim	Photomontage / Videos	Leaflets / Newsletters	Local Media	FAQ / Links	Etherington, J	Pierpoint N	MP subsidies letter	Advice on how to	Exhibition Displays /	Events Public Maatings	r upine ivreetings	Fundraising Events / Merchandise	High Profile Support	Membership options	Discussion Groups	Social Media (Facebook	Assistance to Other Groups	Commisioning Experts	Representation in court	Planning Refusal / Withdrawal
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Source: Own design (2015)

Coded to *Informing* techniques, is content that rebukes the NIMBY narrative. Websites that provide links to further information or answer frequently asked questions (FAQs). Graphic content in the form of videos, photomontages, newsletters and leaflets and links to local media coverage of a campaign. Links to the work of Etherington, Pierpoint and the original MP's letter on abolishing subsidies coded to informing techniques of participation. A key area of informing activity for the action groups, is offering advice on how to object to the LPA. Consultation techniques, coded by exhibition and events, public meetings and questionnaires. Involvement techniques, coded using fund-raising events and the ability to buy merchandise or download posters to support a campaign. Coded is the use of a high-profile supporter able to gain media coverage. Access to join a campaign through membership choices, or the use of discussion groups and social media to publicise the message. Collaborative techniques, is content that aids other groups who may wish to set up their own campaign and fundraising to commission experts to support their case within the planning system. Empowering techniques, are if an Action Group has argued its case in court and when action has resulted in a planning withdrawal or rejection. Each Action Group's participation techniques are compared against one another within the IAPP spectrum of participation.

Most website content on participation techniques coded to *informing* activity, followed by *involving* activity. To a lesser extent, but of similar score, activity is coded in descending order to *collaborative* activity, *empowering* activity and *consulting* activity. As campaign websites for opposing planning proposals, most content is advice on formally objecting to the LPA. Providing contact details of local development control departments, Parish Council, local councillors, the constituent MP and the Planning Inspectorate, with timescales for submission and templates suggesting reasons to object. Offering guidance on how to write a formal written representation and caution offered on ensuring objections are valid in planning terms. Offering links to the LPA planning application documents for a proposal and any relevant planning policies and guidance.

Followed closely by content using photomontages to show turbines on a proposed site. This is a popular method to picture the visual impact of a proposed site. KHG took this further by flying a barrage balloon at 125-metre height at the proposal site, then uploaded a gallery of pictures on their website to show the visual impact. Common to the websites is content about success stories, where an Action Group has prevented a planning proposal either through withdrawal or rejection of an application. This experience used as a basis to help other potential Action Groups or to continue with action to object to other applications within a local area (FORCE).

The next range of participation techniques by the Action Groups encourages financial support from its audience for which dedicated bank accounts have been set up with links to donate through secure PayPal accounts. Campaign costs include: administration; recruitment of volunteers; graphic design; research; production of leaflets, posters, signs and banners, mugs, t-shirts, badges and pens, and car and recycling bin stickers designed to advertise the campaign. Most of the income received goes towards commissioning experts to support the planning case. Which include planning barristers and lawyers, specialists in landscape and heritage issues, ecologists, wind speed, noise and acoustic technicians and equine specialists. Any surplus donations post planning decision reinvested into new campaigns, granted to local charities or returned to residents. Membership options are often by subscription to increase the contingency fund. Fundraising events link to other general village activities for example, SHOWT, held cheese and wine parties, pub quizzes, cabarets, bingo nights, jumble sales and auctions. TAINT, held viewings of private gardens at the local manor house, specialist plant market, crafts fair, a cream tea event and an open day to listen to expert opinion on reasons to object. Fourteen websites offer links to further information and answer FAQs. Links include access to the publications by Pierpoint and Etherington and the letter signed by MPs to lobby abolishing subsidies for onshore wind farms. Other links include websites of other anti-wind campaigns or anti-wind networks and organisations, such as Country Guardian, CPRE, EPAW and national press articles published by the

Telegraph, Daily Mail and the Times. Thirteen of the Action Groups hold discussion groups, led by the formally set up committee running the Action Group (ARM) (BLOT) (DBJRG) (FLAG) and (SWWAG). Between seven to nine websites use the local media, hold exhibitions and public meetings, produce leaflets and newsletters or have been involved with a court case. Objectors encouraged to contact local papers, radio and television stations to give interviews on why they object to a proposal. Exhibitions and public meetings can include proposal site visits, photomontage exhibitions, guest speakers, presentations and film showings. Public meetings happen in council offices, village and church halls, pubs and local manor houses.

The least used participation techniques include reclaiming the NIMBY narrative (ASWAR) (BLOT) (SOMBRE) (Stop Haversham) and (SWWAG). Action Groups advise campaigners to gain local high-profile support to advertise a campaign or to quote nationally recognised objectors such as, Janet Street Porter (journalist), Griff Rhys Jones (actor), Chris Bonnington (mountaineer), Melvyn Bragg (writer), Bill Oddie (ornithologist) and David Bellamy (botanist), on their websites. The use of questionnaires and social media are not a popular method of engagement for Action Groups. Four Action Groups (BLOT) (CWW) (RATS) and (Stop Haversham) state on their websites that they undertook questionnaires, only Stop Haversham published the results (Stop Haversham)². Only three Action Groups (FORCE), (FLAG) and (Stop Haversham) campaigned with the use of social media sites Facebook and Twitter.

The Action Groups using the most participation techniques (BLOT), (SOMBRE), (Stop Haversham) and (SWWAG) have succeeded in objecting to proposals. These were withdrawn or rejected, preventing the development from going forward. CWW, used the same number of techniques, but as a network facilitator and supporter to campaigners, it has not been directly involved with court action.

² Available at (http://www.stophavershamwindfarm.org.uk/)

7.19 Action Groups Surveys

A survey created using Survey Monkey, an online software survey builder which delivered the questionnaire by email in August 2014, to the 22 identified Action Groups. The email contacts sourced from the contact page on each website. This produced 12 anonymised responses, a copy of the survey is available in appendix 9, *Action Groups Survey*.

Of the respondents, three lived within 500 meters of the development site and one lived within 900 meters. Five respondents lived within 2 km, two within the district and one within the LPA area. All respondents, agreed with abolishing subsidies for renewables, but four of those respondents agreed the abolition should be for onshore wind energy only. Figure 68, Which Types of Energy Generation Do You Support? shows, that most support is for geothermal and hydroelectric energy production, closely followed by solar, shale gas, biomass and tidal and wave power. There are three counts each for nuclear, gas and coal and two counts for electromagnetic waves producing radiant energy. There were no counts for onshore wind, but one for offshore wind generation. Two counts for no support for any kind of energy production.

none listed nuclear compress natural gas shale gas coal geothermal radiant biomass hydroelectric solar tidal / wave offshore / near shore onshore

O 1 2 3 4 5 6 7 8

No. of Responses

Figure 68: Which Type of Energy Generation do you Support?

Source: Own design (2015)

Figure 69, Campaign Funding Sources, shows that funding for the campaign

draws from individual donors and in kind funding from the use of volunteer skills and support. Followed by fund-raising and membership fees. None of the respondents received government funding, charitable foundation funding, other action groups or crowdsourced funding. Of the respondents, seven groups had commissioned independent expert opinion to support their case. Expert advice includes: bat surveys, wildlife survey, landscape surveys, acoustics, legal representation, Expert Planner, advice for written representation to local planning committee, expert advice on birds and environment and noise.

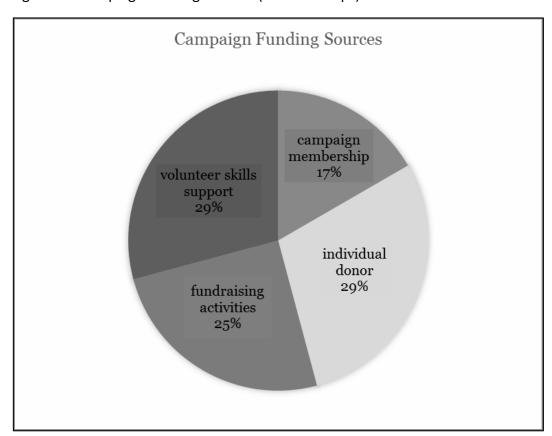


Figure 69: Campaign Funding Sources (Action Groups)

Source: Own design (2015)

Figure 70, *Involvement in Planning Procedures* shows that most respondents are involved with decision-making in planning by written representations to the LPA. Followed by six respondents putting forward arguments at local planning hearings. Four respondents involved in an inquiry. Two respondents have no experience of involvement and one

respondent has taken their case to the Ombudsman. Some campaigns felt their MP could be more proactive, most respondents view of local democratic support from their MP, is positive. Where MPs have attended site and public meetings, written letters of objection or giving evidence at planning inquiries.

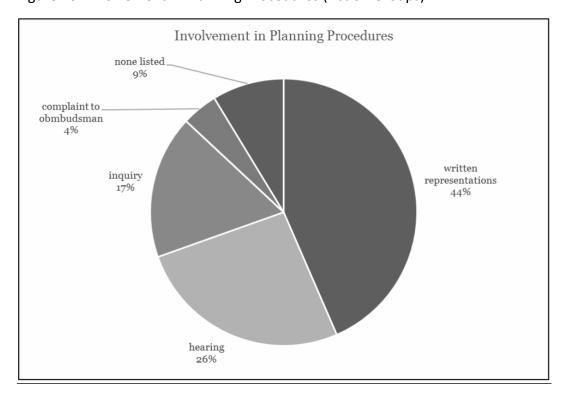


Figure 70: Involvement in Planning Procedures (Action Groups)

Source: Own design (2015)

Most respondents felt that developers were not receptive to their concerns, with one respondent believing the developer had purposely misinformed the community:

'pretended to consult and ignored them. Purely interested in gaining permission and making money' (Respondent no. 2) and

'with disdain and arrogance together with wilful distortion and hiding of adverse information' (Respondent no. 4)

However, three respondents recognised the work on mitigation efforts the developer has undertaken and one respondent believed engagement to be respectful:

'withdrawn first application and re-submitted with fewer turbines to overcome Eng. Her. [English Heritage] And council consultants reservations.' (Respondent no. 5) and

'the present owners have engaged with us on discussions of the noise problems and appear to be making efforts to find a solution' (Respondent no. 7)

Although four respondents felt a lack of support from the planning department, believing officers are pro-developer, most respondents have felt supported in decision-making by their LPAs:

'Strong support and integrated and coordinated its position at the planning enquiry' (Respondent no. 9)

Two respondents recognised the neutrality of the planning department, but did not consider this as support for their case:

'Difficult to answer. They have to be even handed in their dealings with all consultees and they certainly did not give us support-just let us know what was going on within the constraints of the various govt [government] policies.' (Respondent no. 7) and

One respondent, had experienced differing levels of support depending on the planning officer involved, but confirms the planning committee remained neutral:

'Local Councillors have been supportive, planning officers have varied, some dealt with questions professionally, others have appeared to be salesmen for wind developers or appeared resentful of the interference, the committee have listened to our arguments but maintained a public neutral stance' (Respondent no. 11)

Figure 69, *Stakeholder Support* shows the consultees that have supported Action Group campaigns. Most support for the campaigns is from individuals, either members of the public or local intermediaries. Followed by the work of the CPRE and the statutory consultee, English Heritage. The next support is from other community groups and the statutory consultee the Civil

Aviation Authority. To a lesser extent, the Ministry of Defence, Natural England, the RSPB and the Environment Agency have all offered support to an Action Group case for objection.

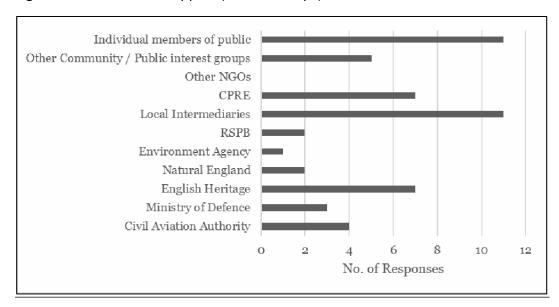


Figure 71: Stakeholder Support (Action Groups)

Source: Own design (2015)

Figure 72, Reasons for Objection explains the reasons the respondents object to a planning proposal in their area. Greatest concern and in descending order, is the visual impact on the landscape, closely followed by the nearness to homes and how that impacts on health and well-being through noise and the effect of sleep deprivation. Matched by a belief in the inefficiency of the technology. The impact of sun and shadow flicker on health and well-being matched by fears for the effects on bat and bird wildlife. The proximity to designated settings and areas of historic, cultural or archaeological areas is of concern. As is the impact on the local economy through a decline in property prices or a negative impact on tourism. Giving equal anxiety to objectors is the lack of trust in a developer and a belief the technology exaggerates its claims for cuts in CO2 emissions. Of lesser alarm, are the threats to aviation safety and safety issues during the construction period, cumulative impacts and the lack of information to help in decision making. The lowest score for reasons of objection is towards the impacts on flora and fauna,

telecommunications and the proximity to social infrastructure (schools) and leisure and recreation amenity (footpaths).

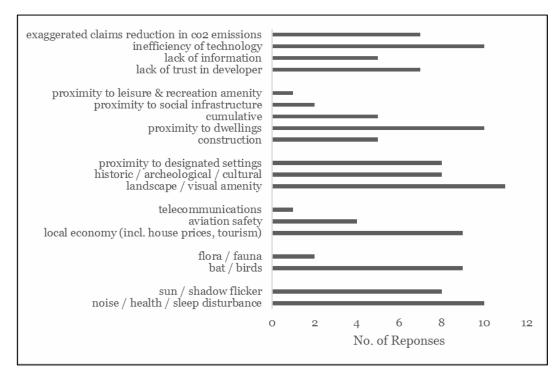


Figure 72: Reasons for Objection (Action Groups)

Source: Own design (2015)

Among the twelve respondents the impacts on landscape and visual amenity gained the greatest objection. Four of the respondents describe their frustration for what they consider to be an expensive and ineffective technology:

'We know these turbines are just a subsidy scam. It is wrong to destroy the countryside for an ineffectual power source that is just a method of drawing subsidies.' (Respondent no. 1) and

'A determination that our quality of life should not be ruined by a development that will provide little benefit in terms of energy security or reduction in global warming.' (Respondent no. 10)

Five respondents commented on the impact of an industrial development on a tranquil rural landscape:

'Anger, frustration, sadness about the attempt to put industrial features in a rural landscape which would not be tolerated for any other type of development.' (Respondent no. 11)

For one respondent, their objection combines the impact on a rural landscape, misinformation from the developer, noise impacts, the closeness to social and community infrastructure and the potential impact on physical safety of the community:

'Total disregard for very quiet open landscape, misleading statements from developer; "babbling streams" do not mask the noise of turbines - there are no "babbling" streams in the locality. Manipulation of proposed megawattage to 1MW over threshold needed to bypass local planning authority. Complete distrust in developer and their concern for local environment. Locality is a very open and quiet landscape; very large wind turbines have a disproportionately large impact in such areas. Proposed development is unnecessarily close to villages and schools - only possible reason is ease of construction, not impact on local people.' (Respondent 12)

Of the responses, only two recognised an opposing pro-wind action group in their area. Eight of the campaign groups responded that they had not experienced conflict within their communities. Of the four that had, two responded,

'A few wanted to be more "militant" against the WTs which most felt would be counterproductive.' (Respondent 6) and

'Yes, Certain groups in the community not talking to others' (Respondent 11)

Figure 73, *Social Impact Identification* shows the social-economic impacts the respondents thought the development would affect. In descending order, the impacts on *health and well-being* scored the highest, followed equally, by *personal and property rights* and *culture and heritage*. The impacts on *community* and equal concern given to impacts on the *environment* and

fears and aspirations. The least amount of response assigned to the impacts on the *political system* and *way of life*.

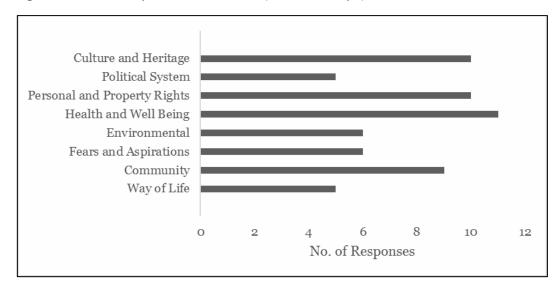


Figure 73: Social Impact Identification (Action Groups)

Source: Own design (2015)

The respondents did not think the developer had used any SIA activities, offering no support for engaging the community in site selection, project development, seeking alternatives, enhancing benefits or using local knowledge. Some of the respondents felt, developers understood the local historical context, how the proposal is received locally and had put forward methods of resolution. One respondent confirmed that a developer had worked with the community on mitigation efforts. Half of the respondents, felt the developer had not attempted any SIA activity and strongly criticise the developers' working practices and motives.

'There has been no serious consultation. The wind farm company use weasel words and clichés but do not care or consider anything put forward by the local community' (Respondent 1) and

'The developers do as little as they possibly can with regard to the above areas. The only things that they do are those required by the planning process.' (Respondent 8)

Figure 74, Enhancing Positive Benefits pictures the objectors view on

different support mechanisms to enable enhancing positive benefits. The objectors supported developers having a commitment to focused siting of wind farms for example, brownfield, sewage works and old mining areas. However, given equal weight the respondents did not support any mechanisms that would encourage increasing benefits from a proposal. There was support for small and micro scale onshore wind development, community benefits funding and developers assessing socio-economic impacts. Some support for developers having local labour and supplier's contracts and in offering training and educational opportunities to host communities. Only one respondent supported community ownership models and no objectors supported developers funding further research into the socio-economic impacts of onshore wind farms.

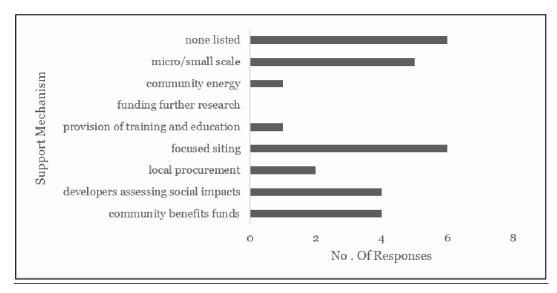


Figure 74: Enhancing Positive Benefits (Action Groups)

Source: Own design (2015)

Figure 75, *Participation Techniques*, shows the objectors engagement techniques used to gain support for their campaigns. Most of the participation activity falls within *informing* techniques with the use of local media and to produce newsletters, leaflets and posters to advertise the campaigns. Collaborative activity, is submitting written representations in objection to the LPA. Providing *informing* activities of location details and links to planning documents and the *consulting* task of holding public

meetings. Followed by the *involving* techniques of networking with other campaign groups and securing high-profile support. Half the respondents provided FAQs, with fewer than half offering petitions, campaign videos and public exhibitions. Some respondents explain the development and planning process and *involving* techniques in one-to-one discussions, door knocking and drop-ins. Three respondents undertook surveys to support their campaign with one respondent using site visits to or video coverage of operational farms.

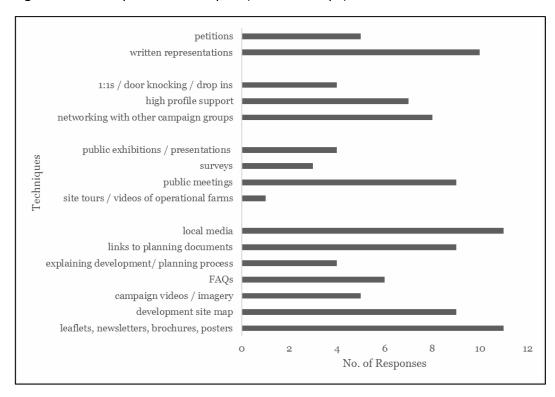


Figure 75: Participation Techniques (Action Groups)

Source: Own design (2015)

Three respondents felt that democratic decision making has occurred locally, with one agreeing it will be if the current application is rejected:

'If the application is rejected then over 1000 local people will have their say.' (Respondent no. 5)

However, seven of the respondents felt that local democracy had not occurred because of lack of involvement with the neighbourhood planning exercises. LPA decisions overturned at appeal, LPA policies favouring developers and

LA planning committees under control of Labour party ideology on renewables:

'No. T[h]ere is an overwhelming (98%) local view that there should be a 2km setback distance for large turbines, but we are not allowed to incorporate that in any planning documentation, e.g. Neighbourhood plan.' (Respondent no. 10);

'No. In fact it is very apparent the developer has taken obvious and documented steps to by-pass local planning authority and transfer decision to central government.' (Respondent no. 12);

'Absolutely not. The wind farm was opposed by 5 parish councils, 2 district councils and 2 MPs but was allowed by the Planning Inspector on Appeal by the developer' (Respondent no. 4) and

'In some cases, where recommendations for approval have been overturned as a direct result of local objections, but that is hit and miss and in many cases, there is no heed paid to democratic decision making, not least on the occasions when there has clearly been about a Labour whip on councillors on the Planning Committee.' (Respondent no. 8)

All respondents said they would take part in any future campaigns. With one respondent qualifying, that they would object, only if the proposal was 'local and unsuitably sited' (Respondent no. 6)

7.20 Conclusion

The twenty-two Action Groups establish their anti-wind action with a call for support through their campaign name, for example, SOMBRE, SOS, TAINT and BLOT. All the groups use a dedicated website rather than social media to communicate their message. They target the converted rather than those that are opponents or remain undecided about a proposal. All links to media articles to support their position are to mainstream right wing media, such as the Daily Mail and the Telegraph. The key message is to prevent a specific turbine proposal, with a lobbying objective to change government policy on renewable energy. Many of the concerns raised on the sites, are inaccurate or

misinterpreted.

The key messages the groups share are contradictory for example, increased storms in England (presumably because of climate change), put the turbines at risk of failure, so becoming a health and safety risk. Are misinterpreted, for example, the technology requires fossil fuel generated back up. Which is a response to turbines not meeting maximum output calculations, not a function of operations. Are inaccurate, for example, the European subsidy regime increases electricity costs, resulting in fuel poverty. Rather than electricity costs being unaffordable because of monopoly control of the market or decreases in family income.

The content from the websites is mostly coded to issues concerning the political system. Within this social impact domain, most content refers to the technology. Content in this domain raises the most inaccurate information. After the coded content in political system, there is a significant drop in the amount of content, the next being community impacts, and the linked issues of visual impact on amenity value and quality of living conditions. They lobby the government for proximity exclusion zones for residential amenity. At the same time proximity to any designated site whether it is one mile or five miles distance from the development site is of concern. For KHG and SSWAG, the surrounding land has no designation, but is has local landscape significance or could hold unrecorded archaeological sites.

As the greatest concerns are political, the Action Groups use the Localism Act to ensure participation in the democratic process. They support the reweighting of planning decisions for localism and environmental protection over renewable energy. They support the increase in recovered appeals by the Secretary of State and the Conservative pledge to remove subsidies in their 2015 election manifesto. They view objecting in the planning system as an act of environmental stewardship for current and future generations. They call for a review of an ES because it has not considered community responses, failed to undertake consultation on alternatives, for lacking the inclusion of local knowledge or criticised for not assessing the benefits of a proposal. At

the same time, they state the futility of working with communities to mitigate against negative impacts, as a proposal is not supported under any design. The groups call for direct action, threatening legal action against developers and landowners, because of the impact on Human Rights due to noise.

Most website content on participation techniques coded to *informing* activity, although some of the messages shared are inaccurate. However, the groups show that they use many participation techniques to argue their case and support other groups to campaign. They are successful in fundraising activity which funds experts to counter ES outcomes. With surplus funds after a campaign reinvested into new campaigns. They combine usual village activities like jumble sales, pub quizzes and bingo nights with campaigning activity. They involve wider anti-wind networks in activities to train residents in learning arguments to object in planning terms. Although they state they have majority support, few groups offer the outcomes of opinion surveys or have a presence on social media, where opposition to their campaign may find a voice. Those action groups that used the most participation techniques; BLOT, SOMBRE, SWWAG and Stop Haversham have all been successful in preventing a development from going forward. The Action Groups are empowered because of their involvement in the planning system, specifically because they represent their case at hearings or inquiry.

All the respondents to the survey, support abolishing subsidies for onshore wind. With two respondents expressing the NIMBY perspective of no energy production within their area. Most of the groups had employed consultants to assist with their planning case. With one respondent going as far as a referral to the Ombudsman. As the sample area, is represented by Conservative MPs, most of the respondents felt their MP had been supportive, which offered them local democratic decision making. Half of the respondents had felt the developer had undertaken respectful engagement, listening to their concerns, but half strongly criticised their working practises. They believed the planning departments had been pro-developer and subject to Labour Party ideology. Or where LPAs had been neutral, depending on the case officer

involved, however, this was not considered supportive. Overall respondents felt that English Heritage and the CPRE were the most supportive of their campaign.

Respondents' biggest concerns were linked to visual landscape impacts and the proximity to homes. Which then affects impacts on health and wellbeing. This was matched by the belief in the inefficiency of the technology, then impact on wildlife. Of less concern was the impact on heritage setting unless that impacts on a tranquil rural landscape. Impacts on health and wellbeing was of the greatest concern with political impacts scoring the least.

Part Three

The third part of the thesis has three chapters. Chapter eight and nine are both case studies of the community energy planning proposals. Chapter eight outlines Roseland Community Energy Trust, a planning application subject to a Recovered Appeal. Chapter nine, is a case study of Valley Wind Cooperative, who withdrew their application, but granted an interview for this research. Planning documentation, local planning policy, websites, social and mainstream media are coded against coding sets: participation, SIA activity and social impact identification. Chapter ten, concludes the research and reflects on the outcomes from the data collection and analysis.

8.0 Introduction to Chapter

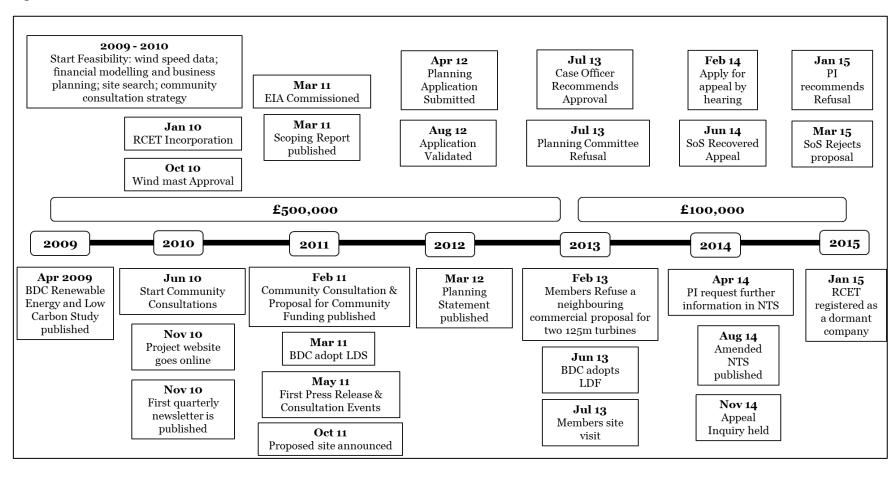
The Roseland Community Energy Trust (RCET) planning proposal for a CE onshore wind farm in Bolsover, East Midlands, England is discussed using the local planning guidance and an outline of a timeline of events. A description of the developer, investment model, funder and baseline profile of the host community. The development site and planning proposal outlined. Participation strategies analysed against the IAPP Participation Spectrum with a summary of the community responses to the proposal. The social impacts identified by the written representations in the Inspectors report, examined against the eight Social Impact domains. The ES reviewed against the main SIA activities, including the benefits of the proposal and the planning outcomes of the case.

8.1 Timeline

Figure 74, Roseland Community Energy Trust, Time and Cost Line, illustrates the key events and costs of the planning application. Feasibility studies begin in 2009, after Bolsover District Council (BDC), Renewable Energy and Low Carbon Study (2009) was published. This study informs the Local Development Framework on appropriate siting of renewable energy developments in the area. RCET was incorporated early in 2010 and started its community consultation by the summer of that year. By the end of 2010, the wind mast application had been prepared, submitted and approved by BDC. In the first quarter of 2011, the EIA commissioned and the Scoping Report published. In parallel to this, the community strategy and funding proposal culminates in the announcement of the location of the project site in October 2011. In March 2012, the Planning Statement was published followed by submission and validation of the planning application by BDC during April to August 2012. Early in 2013, the Planning Committee for BDC rejected a commercial proposal, by Banks Developments, for 2 turbines of 125m height wind farm, on a site neighbouring the RCET identified location.

The reason for refusal was the impact on the setting of historic assets. In July 2013, the planning case officer recommends approval of the proposal, however this is rejected by the planning committee. In February 2014, RCET applies for an appeal by hearing, by June 2014, the Secretary of State calls in the appeal through the Recovered Appeals process and the hearing by Inquiry is set for November 2014. In January 2015, the Planning Inspectorate recommends a refusal of the proposal, which is supported by the Secretary of State in March 2015. RCET winds up operations following the Inspectors decision. Within the timescale of the proposal, RCET had undergone six years of work, the commissioning of seven consultancies (ES Vol. 1: 4) and legal representation, for an aborted cost of £600,000.

Figure 76: RCET Time and Cost Line



List of Abbs:	BDC	Bolsover District Council	NTS	Non-Technical Summary
Source:	EIA	Environmental Impact Assessment	PΙ	Planning Inspectorate
Own design	LDF	Local Development Framework	RCET	Roseland Community Energy Trust
(2015)	LDS	Local Development Scheme	SoS	Secretary of State

8.2 Baseline Profile

BDC is the LPA for the Bolsover District in Derbyshire, in the East Midlands region of England. In 2011, BDC partnered with the neighbouring LA, North East Derbyshire, in a Strategic Alliance aimed at responding to central government austerity measures through its corporate management functions. In August 2013 it was announced that ten local authorities in the area were to establish a South Yorkshire sub region aimed at promoting economic growth LGA (2013). Bolsover DC, at the time of analysis was administered by a Labour majority, with an Independent minority. The district has 20 wards represented by 37 councillors. ⁸² The Labour Party have led the council since the formation of the current administrative boundaries in the 1970s. The MP for the constituency of Bolsover, is Dennis Skinner, who has held his seat for the Labour Party since 1970⁸³.

Historically, Bolsover was dominated by the coal mining industry, the first mine opened in 1890, by the Bolsover Colliery Company, which closed its operations in 199284. The capitalisation of the underlying coal streams in the area led to a settlement pattern of towns and villages around its main centre of Bolsover. The district has four market towns of which Bolsover is one. The architecture is defined by the design of housing for mining families in red brick and Welsh slate built terraces. During the 1960s and 1970s, housing estates were built on the outskirts of Bolsover, but to the East, high quality agricultural land remains, thus making the area predominantly rural. Within the countryside, the location of Bolsover Castle (Stuart mansion), Hardwick Hall (Elizabethan stately home) and Creswell Crags (Palaeolithic caves) offer important regional tourist attractions. Bolsover, is 11 miles from the Peak District National Park and 10 miles from Sherwood Forest in Nottinghamshire. Bolsover town, lies 3 miles from an interchange with the M1, which gives direct links to the nearest regional cities of Sheffield (16 miles) and Nottingham (24 miles). The Local Plan (2000) for the area

⁸² See http://www.bolsover.gov.uk/your-council/voting-and-elections/district-council-election-2015

⁸³ See http://www.parliament.uk/biographies/commons/mr-dennis-skinner/325

⁸⁴ See http://www.bolsovercivicsociety.org.uk/about-bolsover/

focuses development on regeneration, sustainability, conservation of historic assets and making Bolsover District a better place to live, work and visit. In 2014, the BDC confirmed the plan would be updated, which was due for consultation at the end of 2015.⁸⁵

The Office for National Statistics (ONS) reported in 2011, that the population estimates for Bolsover was 75,866 living in 32,801 households. Of the population 35,900 were economically active with an unemployment rate of 6.3 percent (ONS, 2013). Although the unemployment rate in 2013, is below the national average of 7.7%, by 2014, Bolsover had the highest percentage (33.7 percent) of jobs in the UK, paying less than the living wage (ONS, 2014). One of the biggest employers, whose headquarters are in Shirebrook, is Sports Direct, the discount sports retailer who in 2015, where revealed to be engaging in exploitative working practices, with 80 percent of their employees on zero hour contracts⁸⁶. The district has been ranked 26th out of 406 local authorities with 32.6 percent living with household debt (DPF, 2014). Children living in poverty ranks at 20.9 percent in 2011 (DPF, 2014) and fuel poverty is at 9.9 percent (DECC, 2014), which equates to 3310 households. Within financial exclusion statistics, this means the Shirebrook North West ward in Bolsover, rates as being in one of the worse 1% nationally.

8.3 Local Planning Policy

At the time of the proposal, the Local Plan for BDC was in the process of being replaced by the Local Development Framework (LDF) as a response to the changes to the planning system from the NPPF. To support the development of policies in the framework, BDC commissioned a *Renewable Energy and Low Carbon Study* (2009) known as the RELCS Report, which was endorsed by the council in 2009.

⁸⁵ See http://www.bolsover.gov.uk/planning/new-local-plan

⁸⁶ https://www.theguardian.com/business/2015/dec/09/how-sports-direct-effectively-pays-below-minimum-wage-pay

'This reflects the recognition at local level that there is a pressing need to increase renewable and low carbon energy capacity in the district.' (RCET, 2012: 25)

The study identified five possible sites through constraints mapping, which had capacity for four or more turbines. The location selected by RCET, was one of these sites (RCET, 2012: 26). The other key local planning policy for material consideration was *'The Setting of Hardwick Landscape Evaluation'* (2005) known as the Mott MacDonald Report commissioned by the National Trust. This evaluation identifies the conservation boundary for the Hardwick estate, for which landscape and visual impact should be protected from inappropriate development. The RCET site lies outside of the conservation area as defined in the report.

The proposal was considered by the planning case officer, as being in accordance with the NPPF and compliant with policy ENV2 *Protection of the Best and Most Versatile Agricultural Land and the Viability of Farm Holdings* as well as the aims of policy ENV3, *Development in the Countryside* of the Local Plan. Yet he concluded,

'However, there are several material considerations which need further consideration including the Secretary of State's recent statement which seeks to readdress the balance between the need for renewable energy, environmental protections and the planning concerns of local communities.' (Ball, 2012: 62)

8.4 Developer and Investors

Two local charities, the Local Enterprise Organisation Derbyshire and Nottinghamshire (LEO) and the Bolsover Community Voluntary Partners (BCVP), joined forces to coordinate a programme of socio-economic improvement across the region by developing a CE wind farm and using the profits to support their work. LEO, is a partnership between Bolsover, Ashfield and Mansfield District Councils, established to support business enterprise within those local authority areas and is funded by the Local

Enterprise Growth Initiative (LEGI) programme. The programme was due to cease in 2013, the 40 percent of the income from the RCET development aimed to fund continuation of the service (RCET, 2012: 6). BCVP is an umbrella group representing the voluntary and community sector in Bolsover. Sixty percent of the income from the farm to be used to forward their mission to address issues of poverty, social exclusion and deprivation by empowering local people to participate in the decision-making process in policy, planning and service development.

The charities were successful in securing £77,300 for at risk feasibility funding from the Community Generation Fund set up by the FSE Group⁸⁷. An arms-length, group of fund managers providing financial support for early start SMEs. During the feasibility stage, RCET was established and the Chief Executive, John Hudson appointed. Hudson is a member of Community Energy Investments, who specialise in creating private investment opportunities for community energy developments. ⁸⁸ The £20 million construction costs sourced from commercial and specialist lenders based on a business plan that forecast a maximum income from the development of £18-20 million (Ball, 2012: 19). Also, share proposals offered to the local community through an Industrial and Provident Society structure. Ensuring that each shareholder has one vote on the management of the organisation and funding distribution. All profits put back into the organisation and so back into the local community.

8.5 Landlord, Development Site and Proposal

The site identified is 7.27 hectares within the Chatsworth Estate, 2.5km southeast of Bolsover, near the villages of Stoney Houghton, the nearest turbine is 500m north, Palterton (800m east west), Scarcliffe (850m south west), Glapwell (1.4km north east) and Shirebrook (900m west). Figure 77, *RCET Wind Farm Location and Boundary Map* offers the turbine locations

 $^{^{87}\,}http://www.thefsegroup.com/wp-content/uploads/2013/08/Roseland-Community-Wind-Farm-Our-Story.pdf$

⁸⁸ http://cei.uk.com/about-us.html

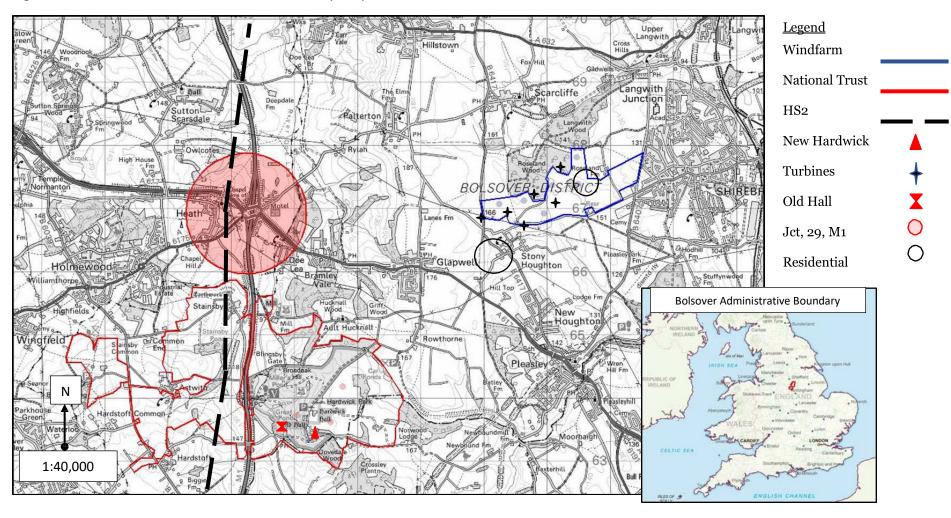
and site boundary, nearest residential dwellings and illustrates the proximity of the National Trust land, the location of Old Hall and Hardwick New Hall. The map shows the location of junction 29, a major interchange on the M1 motorway and the proposed route of the High Speed rail line (HS2). The HS2 is a major government planned infrastructure scheme to connect London, West Midlands, Leeds and Manchester by a high-speed train network. The site is comprised of agricultural land neighbouring 57 hectares of Roseland Woods. The proximity to residential properties includes Roseland Farm, 465 meters east of the nearest turbine, Plumbing Station House, 500 meters to the south of the nearest turbine, Elm Tree Farm, 650 meters south and Houghton Bassett Farm, 640 meters south of the nearest turbine. Located within the countryside of Bolsover District, is the Grade I listed and Scheduled Monument (SM), Sutton Scarsdale Hall (5kms west); the Grade I listed and SM Bolsover Castle, with its Grade I Registered Park and Garden (4kms north-west) and the Grade 1 listed Hardwick Hall and Grade 1 listed and SM, Old Hall with their Grade 1 listed Register Park and Garden (4.7kms south-west). The north-east side of the park and garden are nearest to the proposal site.

Chatsworth Estates are owned by the 12th Duke of Devonshire, who had been approached by several wind developers to site potential proposals on his land.

'However, Chatsworth [Estates] would only consider leasing their land where was the prospect of a significant proportion of the benefits from the scheme going back into the local community. The RCWF [Roseland Community Wind Farm] proposal aligned very closely with Chatsworth's desire to see the benefits materialise in the local community. Options and agreements have accordingly been concluded and signed.' (Ball, 2012: 21)

The land was offered under lease to RCET, with conditions to ensure reversibility at the time of decommissioning.

Figure 77: RCET Windfarm Location and Boundary Map



Source: Adapted from DEFRA (2015) Magic Map Available at http://magic.defra.gov.uk/MagicMap.aspx [NT: National Trust, WF: Windfarm, Jct: Junction]

In 1893, the eighth Duke of Devonshire commissioned a hydro-power system for Chatsworth House, in the Peak District, Derbyshire, which continues to produce electricity for the mansion. Today, the current Duke, has introduced a biomass boiler and a CHP system, fed with timber from the estate. The aim, to provide 97 percent of Chatsworth's annual electricity requirements. Following this commitment to renewable energy and in addition to the RCET windfarm application in Bolsover, the Duke gave permission for Kelda Waters to apply for a two-turbine farm on his estate at Bolton Abbey, in the Yorkshire Dales. However, as with Bolsover, this application was refused. The Duke of Devonshire's ancestors owned the Hardwick Estate, until Hardwick Hall, was transferred to the National Trust in 1959⁸⁹ and Old Hall was placed under English Heritage (government statutory consultee) guardianship.

The proposal of six turbines, 126.5 meter to tip, and maximum capacity of 15MW. The development would provide enough electricity for between 7,900 and 9,200 UK homes, or about 9% of the Bolsover DC population (Jackson, 2015: 4). The aims of the proposal to build the largest community energy cooperative in England, so that all profits could benefit former coalfield communities, by tackling issues of poverty and social exclusion.

'In this way, it is hoped to communicate and continue Bolsover's proud heritage and association with power/energy production and the communities associated with it.' (Ball, 2012: 19)

The benefits from the income include:

- Supporting food banks and healthy living schemes
- Funding community gardening programmes
- Tackling social exclusion and fuel poverty through home insulation and micro renewables
- Teaching, supporting and developing social enterprise
- Providing small community grants, the Community Sector Forum identifies investment priorities and manages the grant system

http://www.english-heritage.org.uk/visit/places/hardwick-old-hall/history/

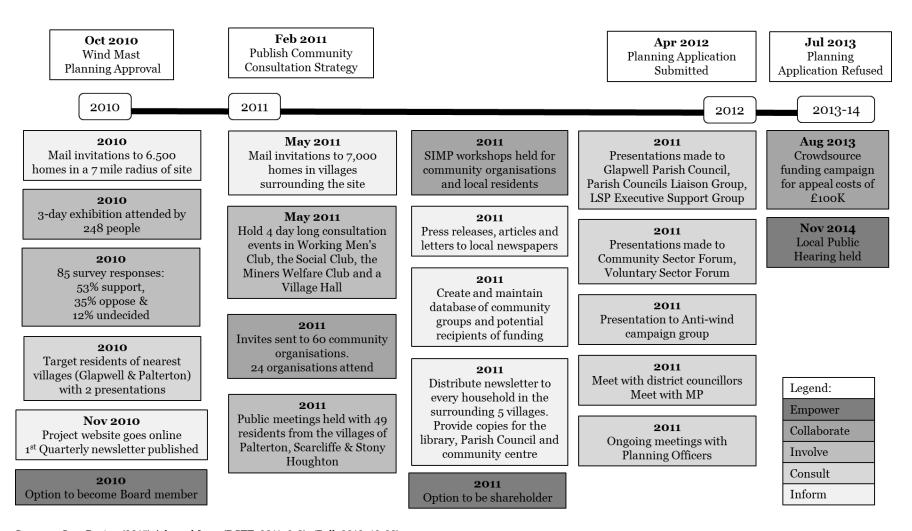
- Raising aspirations and creating opportunities for young people through apprenticeships and work placements during construction and maintenance stages of development.
- To maximise local procurement opportunities throughout the supply chain
- Undertaking school programmes about renewable energy with engagement strategies during both construction and operations of the farm.
- Continuing the work of two important local charities, LEO and BCVP.
- To move away from dependency by supporting communities to act and influence decision making. Encouraging community cohesion, confidence and capacity.
- To create the largest community led renewable energy wind farm as an exemplar for other communities in the UK (Jackson, 2015).

8.6 Participation Strategies and the IAPP Participation Spectrum

Figure 78, *Timeline of RCET Participation Strategy*, shows the community participation strategy for the development. Participation activity begins with consultation on the planning application for the erection of the anemometer mast in 2010. This confirms the site location, the support of the landlord and the lead charities involved in the development. The approach to the consultation strategy was to explain the difference between a commercial and a community owned wind farm. To achieve this, the strategy was divided into consultation for communities, planning application and EIA consultation and public debate and wind farm visits. The feedback from each event shaping the next round of engagement techniques.

'It is RCET's contention that the better informed local people are and the more engaged in the decision making process the less likely that

Figure 78: Timeline of RCET Participation Activity



Source: Qwn Design (2015) Adapted from (RCET, 2011: 3-8), (Ball, 2012: 19-23)

there will be resistance to the development partly because of better understanding for the need for renewable energy, partly because local people will understand the considerable benefits a community owned wind farm can bring to the community and partly because of a genuine sense of having their views heard and taken account of in the planning, development, implementation and operation of the wind farm project.' (RCET, 2011: 6)

Coded to informing activity, is the large-scale mailing lists for invitations to consultation events to the households in the five villages surrounding the proposal site. The distribution of a quarterly newsletters keeping audiences abreast of progress, complimented with regular local media coverage through press releases, articles and interviews. The online publication of the project websites and the management of a database holding relevant information of potential recipients of funding from the profits of the farm.

Within consulting activity, RCET undertook presentations on the proposal plans with residents, local community groups, community and voluntary organisations, Parish Councils and the Local Strategic Partnership for the area. A presentation and meeting was held with the anti-windfarm campaign group. Ongoing meetings occurred with the planning officers, parish and district councillors and a meeting was held with the constituency MP.

Involving activity, included a series of workshops, public meetings, exhibition and displays and questionnaires and surveys. The workshops were held with residents to discuss the windfarm design and the social impact management plan (SIMP). That is, offering the opportunity for residents to design how and to whom, the profits from the farm would be distributed (RCET, 2011: 6-7).

The collaboration activity, expands upon the involving activity by undertaking opportunities to engage with potential recipients and distributers of funding. Using workshop methods, ideas were explored with community organisations as to how RCET would be structured and how

effective community representation could be ensured. Also, developed through this method was how to ensure local people would be represented in the decision making for the grant making process. Participants were also called on to propose how community shares would be offered. When the planning application was refused locally, this led to a crowdsourcing campaign for funding the planning appeal costs, targeting the supporters that RCET had secured during its participation activity.

The empowering activity, aside from community ownership of energy production, includes the options for local community residents to become a Board member of the trust and offers to buy shares in the wind farm. Lastly, because the application went to appeal, there were options for community members to participate in the appeal hearing process.

8.7 Community Responses and Social Impact Identification

At the time of the planning application for the anemometer mast in 2010, RCET held a 3-day conference and exhibition outlining their ideas to 248 local people. The survey gained 85 responses with 53 percent support, 35 percent opposed and 12 percent undecided (RCET, 2011: 3-8), (Ball, 2012: 19-23). RCET used the pre-application consultation work with communities to discuss the RCET organisational structure and the level of involvement from local community members in that structure. The funding distribution of profits, the geographical coverage, funding priorities and the grant application and decision-making processes. Lastly, they worked with local communities to identify the types of activities that could receive funding. The activities fall into three main areas: social and community; economic and environmental with a focus on heritage, health and the elderly. Also, confirmed were activities that would not be funded 'political activity, quick fixes and statutory provision' (RCET, 2011: 12).

During the consultation of the EIA process, the case officer summarised that the proposal had be advertised in the local press, 12 site notices had been posted, 355 neighbours had been notified. The response to this was,

'36 letters of objection; 7 letters of support/no objection. Further letters of objection and representation have been received since the report was first drafted (taking the total to 85). In addition, a supportive petition and further letter of support have also been received.' (Ball, 2012: 58)

The written representations received are coded against social impact domains in table 5, *RCET Windfarm Written Representations*.

Table 5: RCET Windfarm Written Representations

Social Impact	Objs*.	Impact	Description
Political System	38	Technology	Inefficient, not cost effective, Production of turbines creates carbon emissions
	5	Decommissioning	Reversibility costs to be legally assured
	3	Alternatives	Wrong site/location
	1	Targets	East Midland targets met
	1	Associated infrastructure	Design and location
	48		
Personal and Property Rights	26	Local Economy	Discouraging regeneration, new house building and business start up
	6	Bridleways	Horses and horse riders
	6	Property	Loss of property value due to proximity
	4	Agricultural land	Loss of productive agricultural land
	4	Local Economy	Tourism
	1	Aviation	Flashing lights impact on dwellings and traffic
	47		
Community	29	Visual	Blot on the landscape, Interrupts views Dominance of scale
	16	Residential Amenity	Proximity to housing
	15	Cumulative	Continuous line from Glapwell to Rotherham
	12	Community Funding	No benefits to the local community
	8	Road infrastructure	Unsuitable road network, Increase in traffic and access threat to health and safety
	5	Health and Safety	Noise, pollution road safety during construction
	3	Shadow Flicker	Distraction to drivers
	88		

Health and Wellbeing	47	Noise	Proximity housing, Impact on wildlife
Social Impact	Objs*.	Impact	Description
	13	Noise	Mental stress
	3	Physical safety	Ice and blade throw, risk of fire
	1	Shadow Flicker	Residential proximity
	64		
Cultural and Historic	26	Historic assets	Listed buildings, Conservation areas, Hardwick Hall, Bolsover Castle, St. Leonards Church
	9	Landscape Character	Loss of beauty
	5	Local History	History of the woods for visitors
	1	Designation	Dominate rural environment
	41		
Environmental	27	Wildlife	Bats
	1	Soil and hydrology	Damage to natural ground drainage
	1	Flora and fauna	Ancient hedgerows and nearby (2km) SSSI at Pleasley Park Wood
	29		
Fears and Aspirations	2	Community image	Threat to the improving area image
	2		
Way of Life	2	Human Rights	No minimum proximity to dwellings in planning guidance and no respect for family life, destroys communities
	2		

Source: Adapted from Ball (2012) [*Objs. Objections]

The written representations from the objectors mainly fall within the domain of *community impacts*. This is headed by landscape and visual impacts related to the proximity of residential and recreational amenity and the wider cumulative impacts from operational and in planning developments. Twelve objections, relate to a rebuttal of community funding as offering benefits locally. *Health and wellbeing impacts* raised the next amount of objection mainly related to noise from proximity to housing, mental stress and impacts on wildlife. The *political system impacts* concern the inefficiencies and cost effectiveness of the technology and a perception that the manufacturing of the turbines and support infrastructure causes carbon emissions. This is closely followed by the impacts on *personal and property rights* through the impact on the local economy by discouraging regeneration efforts, tourism,

new housing development and business start-ups. *Cultural and historic impacts* follow with concerns over the impact of the historic settings of Hardwick Hall, Bolsover Castle and St. Leonards Church. Concerns for the *environment* is the impact on wildlife which is mainly related to a bat colony located close to the site. *Way of Life* and *Fears and Aspirations* impacts raises minor objection, about the negative image of the area and human rights impacts due to proximity of the turbines affecting family life and community cohesion. The case officer surmised that,

'It is clear from the later letters received that several pre-prepared letters have been circulating in the area and that some objectors have sent more than one. The 84 objections come from 69 addresses, 3 of which can be considered to be from the wider area (Creswell, Chesterfield and Duckmanton) while 3 objectors gave no address.' (Ball, 2012: 58)

During the EIA consultation process, only six letters were received in support of the application and a two-page petition of names and addresses supporting the development. The key reasons for support included tackling climate change and the reduction in carbon emissions, community benefits funding and the community activities that can be funded from the profit of the farm, energy efficiency and financial sustainability and the environmental impact would be beneficial to the area and not detract from the natural beauty.

After the planning proposal was rejected, a crowdsourcing site was set up to raise funds for the appeal. The site received many comments from both objectors and supporters of the application⁹⁰. Key comments have been selected to summarise local community feelings about the proposal and RCET's aim to take the development to appeal and the final planning outcome.

The objectors' concerns include economic inefficiency, opposition to the subsidy regime, mistrust of RCET and its aim to provide community benefits, a preference for using fossil fuels and the role of localism serving local democracy.

⁹⁰ All comments see https://www.spacehive.com/roselandcommunitywindfarm#/idea

'The community have now voted and so have the council TWICE and no one wants these turbines. In fact if you do the maths they are economic lunacy...... Any investor in another application will be throwing good money after bad. They have already wasted £500,000 so far.' Jayson Whittaker;

'What a complete load of cr*p. Where's your cash surplus going to come from when the Government cut the subsidy in 2015? This project will no longer be able to stand on its own two feet, as with the Chelker and Menwith windfarms which have been covertly demolished. They didn't even make enough money to cover the maintenance costs. Sorry to p*ss on your parade, but the numbers for wind don't stack up and the community are being sold a red herring. You'll more likely end up with a bill rather than a cash cow.' Scott Goring;

'I live in one of the villages that would be blighted by these monstrous devices, that have been proved again and again to be of little benefit to the local community, and of little use in providing sustainable energy on demand. To provide for the energy needs of Britain you would need a mix of always on energy sources, such as nuclear, and a balanced on tap peak demand provided by gas oil or coal fired power stations, or on stored energy solutions, such as hydroelectric pump storage. No one seems to understand that the local communities will have very little benefit, but areas fifteen miles away will tap into profits (if there are any profits...) I do wonder what the defined benefit of the organisation, and its aims and objectives are.' Darren Webber

'It is with great delight that I can tell you the planning inspector upheld Bolsover District Council decision. Planning still refused. Thanks to all the members of the community and the National Trust and English Heritage who pulled together in objecting to this. The community have spoken on this supposed community windfarm' Jayson Whittaker

For the supporters of the proposal comments included viewing RCET as a role model for other developments, the importance of local economic

investment, belief in renewable energy production, concern for the power NT and EH have over the planning system and annoyance that protecting a view was considered more important than providing community benefits.

'What a fantastic project, I hope every community in our country is able to complete a similar project giving sustainability to our countries [sic] social aims.' David Spencer

'I...wonder why the planning application was turned down given the, huge benefits of the scheme and the fact that acceptance was recommended. Surely a whole area being given a much needed economic boost is more important than the view from the roof of Hardwick Hall.' Julie Baugh

'You rate tourism over renewable energy which will actually benefit and enhance the area. Many people don't see wind turbines as eyesore, but see the beauty in them as well as appreciate them for the benefits of clean energy. I recently visited Cornwall and loved how many more wind (and solar) farms there were, and we actually enjoyed passing them, like landmarks! I have been through huge wind farms in Wales and Po[r]tugal and it just feels so much more positive with renewables all around.' Lucy Sparks'

'With respect to the comments of Hardwick Hall and Bolsover - both of these are near 'eyesores' anyway and this is the motorway! Also, who gives a monkeys what Chat[s]worth⁹¹ think about the project anyway - I didn't think that 'anyone' could actually 'own' a view! so if Bolsover Planning rejected it on that basis then that's a farce. The people behind the project presented to BRAG (Blackwell Residents Action Group) of which I am secretary, and it was a great presentation and many members of the Blackwell group are totally behind the project as villages like Blackwell and the surrounding once previous pit villages will benefit and let's face it, these villages and communities absolutely need a boost so I'm fully on board with this. These villages need some improvement, and they need the money more than people visiting

⁹¹ Chatsworth Estates own the land for the windfarm site, National Trust own Hardwick Hall.

Hardwick Hall (by the way I love Hardwick Hall, it's just that I think improving people's lives are more important than the supposed impact of the view from Hardwick if/when the turbine is built!). Lastly, p[l]ease note that the noise from the motorway when walking in/around Hardwick Hall is more intrusive than any proposed view of a wind turbine...' Jane Cooper

[M]y membership [to National Trust] is cancelled too for exactly the reason that you state, [t]hey have no right to interfere in the communities around them - they put virtually no money into the community around them it all goes into their pockets - none of the 1,000s of visitors to Hardwick Hall add anything spendwise to the local communities either, Hardwick depends upon volunteers rather than provide employment for locals'. John Siddell

8.8 The EIA and SIA Activities

RCET commissioned Rider Levett Bucknall (RLB), a property and construction specialist, to prepare the planning application and provide project management function. RLB also compiled the socio-economic section of the ES. The ES was compiled by ECUS Ltd, an environmental consultancy who completed the sections on ornithology, ecology, hydrology, archaeology and cultural heritage, and land use and agriculture. ECUS employed additional technical support from Aeolus Renewable Energy for project design and assessment of telecommunications, aviation, air quality and health and safety. Liz Bowman Associates, for landscape and visual assessment. NoiseAssess Ltd, for noise impacts, Turvey Associates for traffic impacts and The Energy Workshop, for shadow flicker assessment.

The original ES for the RCET proposal was submitted in four volumes, the first giving the main findings, the second, the figures to support the assertions made in volume one, the third, offering visualisations of the development and the fourth collates the appendices. An NTS was submitted at the same time, along with the Community Consultation strategy and funding proposal. The planning application was supported by drawings,

plans, press and site notices, a design, access and planning statements, statutory consultee responses and public written representations. Volume one, of the ES totals 383 pages in length, most content devoted to the assessment of landscape and visual impacts with 115 pages, this is followed by the assessment on archaeology and heritage with 53 pages. Ecology has 33 pages of content, followed by noise impacts with 23 pages of content.

The section on socio-economic impacts totals 3 pages in length. This section is divided into six, the first discussing public attitudes to wind energy, using data from a Scottish poll taken in 2003 and 2006 for all Great Britain. A IPSOS public poll from 2003, highlighting the support for government targets and a 2007, UK wide study, illustrating supportive attitudes to alternative energy sources (ECUS/RLB, 2012, 1: 365-366). The next point, discusses employment creation and business support by giving assurances that RCET will adopt local procurement strategies and create jobs during construction and in operations, to support the local economy. No technical data is offered to support these assumptions. The third point, is a paragraph stating that RCET will be an education resource for local schools and colleges. The fourth point, states that the site is not within an area of high tourist numbers and offers examples of research that debunks tourism impacts. The fifth point, discusses community benefits, stating that RCET is a community owned development redistributing 100 percent of its profits back into the local community. It predicts an income of £18.75m over the life of the project which is equal to £750,000 per annum (ECUS/RLB, 2012, 1:367). This point, offers one sentence to list the range of activities that will be funded beyond the provision of renewable energy. The final point, is one sentence on mitigation, that states the socio-economic impacts are positive so do not require mitigation. In volume four, of the appendices a corporate structure for the SIMP is attached ECUS/RLB (2012, 4:1.1).

The content of the ES and associated planning and planning appeal documents, have been coded by using the 26 Tasks of SIA activity. To *understand the issues*, RCET undertook a participatory process of consultation with community members to inform them of CE and the

benefits it can bring to a local area. The participation processes encouraged community members to put forward ideas for grant spend,

'small grants scheme (for example to support youth activities, sports, dance, art, lunch clubs, trips, environmental improvements, history and heritage activity); initiatives to tackle poverty and social exclusion (for example budgeting and debt reduction, supporting food banks, community gardening schemes, improving transport, tackling fuel poverty through home insulation and small scale renewable installations); helping local people to create new businesses, support apprenticeship; raising aspirations, skills and creating opportunities for young people.' (Ball, 2012: 71)

The origins of RCET, founded by two existing charities meant it could lease the land from the Chatsworth Estates and raise commercial funding for development costs. The land would not have been available unless social and community objectives were assured and this was part of the lease undertaking. The appointment of a CEO, with experience of sourcing private funding for CE assisted in clarifying a lead role and figure head for the development. This also opened the possibility of encouraging local investment in shareholding options of the farm. Residents not in need of support from BCVP or the LEO were also able to benefit from profits made. Whether as lower energy bills or as electricity sold back to the utility companies, through the subsidies system. Its corporate structure through a Community Interest Company (CIC) ensures the profits from the farm are redistributed back into the local communities that the charities currently support. Included within the CIC business plan was a legal promise that RCET's assets were only ever to be used for social objectives. The case officer, suggested planning measures to support this assurance,

'the nature of the developer and operational company, i.e. a Community Interest Company, and the nature of the proposal, which offers substantial social and economic benefits to the area by returning all the profits back to the community, this is considered an (wholly) exceptional situation. In these circumstances, if planning permission is granted, it would be appropriate to ensure that this remains the case by including a condition, or an appropriate S106 Planning Obligation, which ties the permission to such terms.' (Ball, 2012: 72)

The combined knowledge and experience of these charities gives them an advantage of having a full understanding of the profile of the communities within their social area of influence. Baseline data about the recipient communities should have been accessible to the charities that use this knowledge for current delivery of services and resources. However, although this local knowledge was used to undertake the participatory decision-making process, this was not reflected in the ES.

The *prediction and analysis of impacts* in the assessment process, concentrated most content on the landscape and visual impacts and the historic environment. Specifically, the impact of the turbines on the historical significance of Hardwick New and Old Halls. The NPPF defines *substantial harm* to historic assets as,

'Where a proposed development will lead to substantial harm to or total loss of significance of a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss' (NPPF, 2012: 12, 133)

The estate is an Elizabethan Prodigy house, built between 1590 and 1597 by Elizabeth Cavendish, the Countess of Shrewsbury, known as Bess of Hardwick (1527-1608). Hardwick New Hall is famed for having more glass than brick and designed to take advantage of the panoramic views from its landscaped setting, especially to the west (note that the wind farm site is to the north-east). The banqueting house was set in a turret to afford a rooftop walk.

'the process of banqueting involved the delights of drunken vertigiousness both on the way to and back from the banqueting house; with the journey being taken up with enjoying the views and the delights of looking down from a great height'. (NT in Ball, 2012: 43)

Bess of Hardwick, invested in expensive glass windows so that she could have 'the best intervisibility that was possible at the time.' (Ball, 2012: 43). This ability to achieve uninterrupted viewing over the estate is,

'being part of the political and cultural raison [sic] for siting the building where it is — the turbines would interrupt this important aspect of the cultural purpose of the heritage asset'. (NT in Ball, 2012: 43)

Hardwick Hall received over 200,000 visitors in 2015, ranking it 123^{rd} most visited attraction in the UK 92 and considered as a flagship property of the National Trust. However, due to public safety issues the access to the roof area is restricted to special groups. Hardwick Old Hall is staffed by local volunteers with an entry fee of £6 per adult, Hardwick New Hall and gardens costs £13.10 plus £3 parking fee, joint hall and gardens £19.10 or a family ticket for £48.35. Although membership of the NT costs £63 per annum, per adult, which gives free admission to any of their properties. Putting the costs into context for the local community, if you are unemployed, seeking work and over 25 years of age you are entitled to a social security benefit of £65.45 per week 93 .

The ES, confirms that there will be *moderate/substantial harm* to the setting of the Hardwick Estate, moderate harm to the setting of Bolsover Castle, moderate/substantial harm to St Leonards Church and moderate/substantial harm to Stony Houghton, Scarcliffe and Palterton CAs. Figure 79, *Impact of the Turbines on the Setting of Hardwick Hall* illustrates the view from the rooftop of Hardwick Hall of the proposed turbines. The wire line drawing was created by Liz Bowman Associates, the landscape and visual impact consultants as part of the ES.

⁹² See http://www.alva.org.uk/details.cfm?p=423

⁹³ As of 2014/1

The Heritage Conservation Manager for BDC, concluded that the proposal would cause *harm* to the setting of heritage assets,

'The harm arises from the scale and visual dominance of turbines on the ridge and in the context of the human scale of other heritage assets affected. It is a matter of judgement as to whether this collective harm is outweighed by the public benefits of the scheme.' (in Ball,2012: 51)

The Development Control Archaeologist for the district found *substantial harm* to the assets,

'The environmental, social and economic benefits of the wind farm. Although these are undoubted, I do not feel that the applicant has demonstrated that the benefits of the scheme outweigh the cumulative impact of the substantial and less than substantial harms...including harms to two of the country's most iconic heritage assets. I therefore recommend that the application be refused' (in Ball, 2012: 40)

The statutory consultee, English Heritage and landlord the National Trust assessed that there would be *substantial harm* to the setting of Hardwick New Hall,

'Its design rationale would be seriously undermined in views towards and out of the Hall, harming its historic and architectural significance. The public experience of the Hardwick assemblage of assets would be seriously degraded for a generation...what would permission say about how the UK values its heritage? It is clear that valuing heritage featured very little in the decision to promote this scheme. Happily, the law and national policy, properly applied in this case, can ensure that extraordinary investment which the nation has in its cultural capital in this part of the country can be properly husbanded.' (NT in Jackson, 2014: 42-43)

Figure 79: Impact of Turbines on the Setting of Hardwick Hall

Roof top view from Hardwick Hall, looking towards the proposal site



Wireframe view of the scale of the turbines from roof top of Hardwick Hall

Hardwick Hall

Source: Adapted from (ECUS/RBL, 2012: Vol.3), National Trust (2014) available at https://www.nationaltrust.org.uk/hardwick/features/introducing-bess-of-hardwick [last accessed 22/12/16]

However, the Principle Planner for BDC found,

'The nearest turbine is over 4 km away from the Hall and is located beyond the associated historic parkland. Although the scheme can be observed from the rooftop there is a clear sense of distance and separation between the heritage asset and the scheme so that the degree of harm to the setting of the heritage asset is reduced and the historical inter-relationship between the hall and park is not affected. There is no clear indication that views towards the proposed scheme from the roof top were of particular significance as a component of the setting of the heritage asset and the introduction of the turbines into this view given the degree of separation is not considered to reduce the historical significance of the New Hall as a heritage asset. It is not considered that the impact of the scheme on views from the New Hall will result in substantial harm to the Hardwick asset group.' (Ball, 2012: 53)

In addition to the impacts on the historic environment, localism was used to oppose the proposal as a community supported development.

'Cllr Sandra Peake thinks that the community benefits claimed for the development are spurious and would not be as much as the appellant suggests. She suggests that the landowner and manufacturer would benefit more than local communities. The supporters of the project do not live locally. Whatever happens to the turbine scheme, local support organisations will still exist and continue.' (Jackson, 2015: 43) and

Derek Chappell was until recently Chair of Scarcliffe Parish Council and is still a parish councillor. He read passages from Hansard which state the view of the current Government relating to wind farms, the thrust of which is that local voices have to be heard in the process and that local people need to have a say in the process. Scarcliffe Parish Council objected unanimously to this planning application and the vast majority of local people object (as demonstrated by the turnout at this appeal throughout this enquiry) to the erection of the enormous

wind turbines.' (Jackson, 2015: 47)

The policy position on the historic environment and localism was challenged by arguments supporting renewable energy, community led and owned energy, regeneration and local economic development.

'Lorna Wallace is Chief Executive of (BCVP), The real 'catastrophe' facing Bolsover is not these, or indeed any, turbines. But that Bolsover is ranked 58 out of 354 local authorities in the Indices of Deprivation 2010 and that 27% of Bolsover's neighbourhoods are among the poorest 20% in Britain. Whilst significant progress had been made in tackling many of the issues facing disadvantaged people in the district the impact of welfare benefit reform, economic recession, low pay and reductions in public sector services at a time of increasing demand is at best stalling and at worst reversing these gains. Bolsover district continues to experience significantly higher levels of deprivation and child poverty than both Derbyshire and English National averages approximately 3,200 children in Bolsover live in poverty. She says that the nature and extent of the challenge facing Bolsover's communities is not lost on them — they are acutely aware of the impact of poverty and deprivation on individuals and their communities. [B]CVP's extensive engagement activities have identified a range of shared priorities which form the basis of the Roseland community investment priorities' (in Jackson, 2015: 47-48) and

'Paul Davies is volunteer Chairman of the Local Enterprise
Organisation (LEO) and a holder of the Queen's Award for Enterprise
Promotion. He says that the Roseland project will have a huge positive
impact on the aspirations, the personal development opportunities
and the well-being of people of all ages across Bolsover
District...Austerity measures have cut back on the means to support
and develop our communities. Through this initiative, the LEO will be
empowered to develop and deliver support programmes that will help
large numbers of Bolsover people over a 25-year period. It will have
the ability to work in partnership with local authorities, health

authorities and other local organisations to leverage in other local, regional and national funds to maximise the impact and benefit that will be realised through this project. With support from the Roseland project, the LEO will help to improve the lives of people in our communities, consistently, reliably for the next 25 years.' (in Jackson, 2015: 47-48)

The Regeneration department of BDC stated,

'Proposed inclusion of community benefits through future profit from the generation of power is strongly supported; potential community benefits could well raise the opportunity for a wide number of community and economic output related projects which could benefit the wider economy of the area.' (in Ball, 2012: 47)

A key letter of support was submitted by the Derbyshire and Nottinghamshire Chamber of Commerce (DNCC), which confirmed that there were no objections from any of the local businesses and the

'concept of [the] proposal has a synergy with enterprise support and spin-off aspects such as the active participation of apprentices. Any likelihood of funds being reinvested into a former mining area at a time of acute economic pressure is a welcome development. DNCC firmly committed towards carbon reduction of the business community. Endorses the proposal.' (in Ball, 2012: 58)

The EIA process developed the design of the wind farm through a series of *mitigation exercises* to respond to the comments on impact on heritage setting. Three versions of the design were assessed, version one, included eight turbines at 125-meter tip; version two, in response to the impacts on Palerton and Scarcliffe CAs and the intervisibility between Hardwick Hall and Bolsover Castle, were repositioned and the number of turbines reduced to six, but increased in size to 126.5 meter tip and the final version, the six turbines were micro-sited to reduce any amenity impacts on two nearby properties. The EIA also designed *monitoring strategies* through the development of a Stony Houghton Conservation Area Fund of £200,000 for the mitigation

payments for the impact on the CA. A tree planting payment of £10,000 for replanting of trees within the grounds of St Leonards Church. A decommission bond for £5,000 per megawatt installed capacity for reversibility costs. The main monitoring strategy was through the SIMP for RCET through its community benefits work.

8.9 Planning Outcomes

Using the outcomes of the EIA the planning judgement was balanced on the impact on historic assets, the benefits of renewable energy, the community benefits and the views of local people. Although the Principle Planning Officer for BDC recommended approval, in July 2013, the BDC Planning Committee refused the application, because of the significant harm to the Hardwick Estate.

In January 2014, RCET, appeal this decision and employ the legal firm Eversheds, to represent them at an Inquiry Procedure with the Planning Inspectorate (PI). The grounds of appeal based on the need for renewable energy sources to contribute towards deployment targets, environmental benefits and the significant community benefits that the CE proposal offered. The harm identified towards the heritage assets beyond the appeal site, does not amount to substantial harm and the benefits of the proposal outweigh this harm. The harm reversed at point of decommissioning of the project. RCET argued, that BDC had not given appropriate planning balance in consideration of the proposal and had not offered a positive strategy towards renewable energy deployment in its area. (Smith, 2014:12)

Between February and November (the month of the scheduled inquiry), the PI requested further information on Landscape and Visual Assessment with associated visualisations to support the findings. RCET employ two expert witnesses for proof of evidence, to support their appeal, on issues of Cultural Heritage (Simon Collcutt) and Planning Policy (David Bell). BDC employ counter expert witnesses for proof of evidence on Historic Environment (Andrew Croft) and Planning Policy (Steve Arnold).

8.9.1 RCET Argument

Collcutt (2014), found that English Heritage (EH) had made an immediate assumption at scoping stage before assessment had been undertaken, that there would be an 'objectionable' negative impact on the heritage assets of Hardwick (2014: 2). He concluded that EH,

'consultation response to the ES was based largely upon generalisations, unexplained assertions and even patent exaggerations.' (2014: 2).

Collcutt, found that the Development Control Archaeologist, like EH, had strong opinions prior to assessment, finding 'more widespread "substantial harm" even than English Heritage.' (2014: 3). Collcutt, questioned the precise degree of harm on the assets of Hardwick Hall, finding this to be 'uncertain' (2014: 3). He concludes that 'English Heritage are hostile to the very idea of a windfarm in this District.' (2014:3) When Collcutt, examined the National Trust's (NT) position, he found that the list of assets at risk of 'less than substantial harm' and those at risk of 'substantial harm' had been grouped together, thus the group of assets as a whole had become at risk of 'substantial harm' (2014: 5).

In his evidence, Bell (2014), begins with the need for planning presumption in favour of sustainable development. He found that the proposal is in accordance with the Community Energy Strategy (2014) and as such should be given significant weight in the planning consideration. The proposal contributes towards reduction of carbon emissions and assists in tackling climate change. It offers new sources of renewable energy, offering diversity of supply and contributing to meeting the UK's targets. Bell, continues by outlining the contribution the proposal can make to a nationally important industry and the impact this can have on the national and local economy both directly and indirectly (2014: 7). Bell concludes that,

'the predicted adverse effects of the proposed development would not outweigh the benefits, when assessed against the Framework as a whole. Furthermore, I do not identify any policies of the Framework which indicate that the proposed development should be restricted. (2014: 6)

8.9.2 BDC Argument

Croft (2014), on the Historic Environment argued that the time limit of 25-year life span of a wind farm development cannot be considered temporary, as such it is capable of creating substantial harm (2014: 3). He reasoned that the offer by RCET to establish the Stony Houghton Historic Environment Improvement Fund, was not mitigation payments, but compensation, and did not give any weight to this in his assessment (2014: 8). Croft (2014), confirmed that the difference of opinion was on the scale of harm on the setting of historic assets, but where it is 'less than substantial harm', then this also needs special consideration and great weight applied and where substantial harm exists then the proposal should be refused (2014: 6).

Croft (2014), concludes that there is an important historic relationship between Bolsover Castle, Sutton Scarsdale and Hardwick, creating an 'unusual and important collection of designated heritage assets and that the impact on these assets needs to be considered in its totality' (2014: 6). So, the benefits of the proposal do not outweigh the

'combined impact of the scheme on this concentration interrelated assets. Given the density and importance of these assets it is my view that the development site is unsuitable, in historic environment terms, for a development of this scale and prominence.' (2014: 6).

Arnold (2014), in his evidence on planning policy outlines how the distribution of profits and the recipients of funding has not been evidenced by RCET. That BDC, do not have a local renewable energy policy and community benefits and community ownership cannot be given any weight in planning terms. The historic environment fund for Stony Houghton lacks detail and so cannot pass any planning tests. Overall the impacts on heritage assets would be greater than if assessed separately and even if the development is temporary, harm would still occur for 25-years, thus reducing

the quality of the visitor experience to the Hardwick Estate.

'The public benefits are therefore not substantial. The harms are not necessary to achieve what are, in any event, not substantial public benefits which do not outweigh such harm. Planning permission should be refused on this basis.' (Arnold, 2014: 5)

In June 2014, the appeal was recovered by the Secretary of State. In November 2014, the Planning Inspector, Paul Jackson led the Inquiry into the case. Jackson (2015), confirms that the main considerations of the case is the effect on the settings of designated heritage assets and whether the environmental and economic benefits outweigh the harm (2015: 57). Jackson, reiterates the importance of renewable energy and onshore wind technology contribution to the sector. Emphasising the core planning principles of the NPPF is a transition to low carbon economy, so that climate change can be challenged. Jackson (2015) discusses how the provision of renewable energy technology is a responsibility for all communities to contribute towards. That the wind industry is an important national economic growth driver that can assure energy security and reductions in CO2 emissions. Jackson (2015), continues by acknowledging that community benefits are not of material consideration, but the community led model of delivery, should be supported.

However, Jackson (2015) outlined to the Secretary of State that the impact on Bolsover Castle, Stony Houghton CA, Sutton Scarsdale Hall and St Leonards Church is minor or not substantial harm. The effect on the settings of Hardwick Estate was, not of substantial harm, but Hardwick Estate is of international importance and the local knowledge and experience of the Hardwick Estate by the views of heritage officers, statutory consultees and landowner, should be considered. As such, Jackson recommends refusal of the project. In March 2015, the Secretary of State agrees with the Inspector and refuses RCET's proposal. In February 2015, RCET is registered as a dormant company.

BDC, has no experience of approving a proposal, a previous commercial development on a neighbouring site had been rejected in 2013, because of the impact on heritage assets. However, the planning officer recommended approval for a CE scheme because of the benefits it could bring to an area of multiple deprivation. A community led scheme, by organisations that represent the voluntary and community sector in the district. Enabling the LA to meet regeneration targets and economic growth. A LA with a long history of Labour party control, on a site within three miles of other major infrastructure such as the M1 and the HS2 rail proposal site. However, at the time of the proposal BDC was in a policy vacuum as its LDF was being replaced. Although previous studies had identified possible sites through constraints mapping exercises, of which the proposal site was one. Another study confirming the site was outside of set conservation area boundaries.

The proposal was an innovative approach to meet the challenge of austerity measures and continue the operations of key agents from the voluntary and community sector. One key outcome to increase the participation of community members in the planning system and local decision making. RCET were only able to sign a land lease with the Chatsworth Estate because of this focus. As was the receipt of at risk funding from the FSE Group because of the applicant's charitable status. However, RCET did not evidence the level of support for the project, with only 85 responses from 248 people offering 53 percent support and 35 percent opposition. The objections to the proposal are mainly coded to health and wellbeing followed by political system impacts with impact on heritage assets scoring lower. Objectors believed the negative impact on the economy would prevent new house building, regeneration and business start-ups. Or simply, community funding would be of no benefit to local communities. However, the planning case officer did note that some of the objections were duplicates or from the wider area. Unfortunately, only six letters and a petition in support were received by the planning department.

RCET employed a property and construction company to project manage the

proposal, who were also the authors of the socio-economic technical paper. A section in the ES, three pages in length, compared to landscape and visual impacts of 115 pages. The information given in the socio-economic assessment is based on out of date data or taken from Scottish public perception studies. Assumptions are made on employment creation and other social benefits, but no evidence offered. The case officer, instead emphasises the substantial benefits that can be made as a 'wholly exception situation'. The baseline profile data should have been accessible to the two charities leading a participatory proposal, but this was not reflected in the ES.

Supporters of the proposal, question the economic trickledown effect of tourist visitors to Hardwick Hall, on the rest of Bolsover. Whereas objectors use Localism to oppose a community led scheme. Within the LA, the Chamber of Commerce and the Regeneration department are polarised against the Heritage Conservation and Archaeology departments. The expert witnesses at appeal, continue this dichotomy by arguing over the significance of harm to heritage setting. However, the Planning Inspector does confirm the community led aspect to the scheme should weigh in the balance. Yet, as part of the micro management by the Secretary of State, to reject applications because of impact on heritage assets (although Hardwick Hall is over 4km away), the application is refused. For RCET, six years of work, the commissioning of seven consultancies and the cost of £600,000 was wasted.

Chapter Nine: Valley Wind Cooperative Case Study

9.0 Introduction to Chapter

Valley Wind Cooperative were approached initially by email and then by telephone, for this research in November 2014. This is the period after VWC had known the case officer was going to recommend a refusal for the proposal, but before the deferred decision date and the subsequent decision to withdraw, in June 2015. Two of the founders of VWC, the chair of the Board, Steve Slator (SS) and the treasurer, Diane Green (DG) agreed to an interview, only if they could have the interview questions in advance. When asked why they had agreed to the interview, they responded,

'We were quite impressed with the fact that [SS: 'Well every question that we raised Tara had an answer for'] Also the questions you are asking, you are allowing us to have a good old whinge for a start, to somebody else [laughs] [SS: 'yes its good therapy '[laughs]] But also you sort of, well we were impressed by the detail and the breadth of the questions you were asking and we thought, well whatever happens maybe if we can inform you a little bit on your research, then your research may also make a little bit of difference. So, that's why we are here.' (DG, 2/1.32.50)⁹⁴

The recorded semi-structured interview took place in Marsden, at a local community pub and lasted for three hours.

The Valley Wind Cooperative (VWC) originated in 2006, by a group of Colne Valley, West Yorkshire, residents to develop a CE project. A timeline of key milestones for the planning proposal from inception to withdrawal of the application in 2015, is outlined from before summarising the baseline profile of the area. Key planning guidance is discussed before detailing VWC's organisational structure and financial model. The development site,

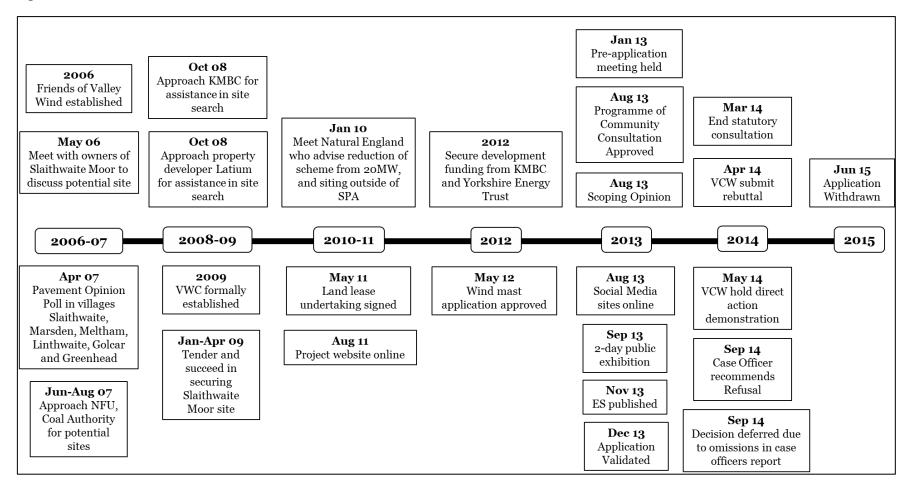
 $^{^{94}}$ Denotes speaker and time in transcript (SS: Steve Slator, DG: Diane Green and TM: Tara Muthoora)

landowner and proposal is discussed, offering a map of the location for illustration purposes. The participation strategies used over the nine years of the development lifespan are analysed through the IAPP Participation Spectrum. The community responses to the proposal are coded using the domains of social impact identification. The EIA is discussed, by given a description of the project team and the key outcomes identified in the ES. Reviewed in further detail against SIA activities are the impacts on ecology, landscape and visual impacts, recreational and leisure amenity, the socioeconomic and political impacts and the rebuttal by the applicant. Mitigation and enhancement strategies are summarised before concluding on the planning outcomes, where the case officer recommended a refusal to the development and the applicant withdrew the proposal.

9.1 Timeline

Figure 80, *Valley Wind Cooperative Timeline* illustrates the key milestones in the development. Local Colne Valley residents set up an informal group called the Friends of Valley Wind in 2006. Their objective to investigate the possibility of setting up a CE organisation to combat climate change in their area. The group used local knowledge to source an appropriate site for a potential onshore wind farm. The Friends undertook a public perception survey in each town and village of the Colne Valley, to evidence the level of support or opposition to such a proposal. The overwhelming support received for the idea of a CE development propelled the group into continuing to search for potential sites for the project by requesting assistance from the private and public sector. By 2009, three years after the group formed, they formalised their organisation by setting up the Valley Wind Cooperative (VWC). At the same time VWC tendered for a site on Slaithwaite Moor, which was equidistant from the two villages that were to be served with renewable electricity, Slaithwaite and Marsden, in West Yorkshire.

Figure 80: VWC Timeline of Events



Source: Own design, Adapted from Wakefield (2014), SLR (2013), SLR (2013a) SLR (2013b)

During 2010 and 2012, VWC met with Natural England to discuss a larger scheme of 10 turbines with 20MW maximum installed capacity. Following the NE response, the scheme was drastically reduced to three turbines with a 6-7MW maximum installed capacity. The lease on the site was signed, in parallel with the project website going online. Following this, VWC could secure at risk development funding from their local authority, Kirklees Metropolitan Borough Council (KMBC) and the Yorkshire Energy Trust. This funding enabled VWC to apply for a wind mast application to undertake feasibility studies at the site and to complete the legal work on the land lease. They gained permission from KMBC to erect a mast in 2012.

At the beginning of 2013, VWC met with KMBC for pre-application consultation. The case officer stated in his report that he advised,

'the significant negative environmental impacts associated with this proposal would outweigh any positive benefits' (Wakefield, 2014:1)

However, when interviewed VWC responded:

"...that was not what was said at all [DG: 'they are not being consistent at all']...The actual wording was "it is considered likely that the negative environmental impacts of the proposal would be too significant to outweigh any positive aspects which were noted as community benefits and renewable energy" So there is a similarity but they are not the same. If they had said look there is no way and other people had backed that up we would have gone away, but they didn't say that.' (SS, 2/28.06)

The level of support for the project and the success in finding development funding meant the VWC Board members reasoned the EIA would find solutions to any negative environmental impacts and alleviate any concerns. EIA consultants were appointed and a programme of community consultation started by members of VWC. As part of this programme, VWC set up social media accounts as methods of participation for residents to comment on progress and aide the Boards decision making. The ES was published and the planning application submitted by the end of 2013.

In 2014, following inaccuracies and omissions in reports submitted by statutory consultees that had objected to the proposal, VWC submitted a rebuttal to the planning department. As part of their community campaigning, VWC organised a day of peaceful direct action in the main town centre of Huddersfield to publicise the level of community support for the development. The action was filmed as part of a nationwide campaign to support CE in fighting climate change. By September 2014, the planning case officer had recommended that members refuse the application. However, because of the omissions and inaccuracies in the case officer's report, as well poor weather conditions on the date of the planning committee visit to the site; the decision by members was deferred until June 2015. A week prior to the planning decision, VWC withdraw the application.

9.2 Baseline Profile

Kirklees Metropolitan Borough Council (KMBC) is the LPA for the Kirklees district in West Yorkshire, of the Yorkshire and Humber region of England. Kirklees is one of the six local authorities in the region that make up the West Yorkshire Combined Authority for collective economic decision making. The district has four constituencies: Batley and Spen; Huddersfield; Dewsbury and Colne Valley, the proposal site located in Colne Valley. In 2010, the Colne Valley constituency was won by the Conservatives and represented by the MP Jason McCartney. During the period of the proposal (2006-2015), no political party has had overall control of the local government, although some wards are safe seats for each major political party. The district has 23 wards represented by 69 councillors⁹⁵. Colne Valley constituency has six wards, the proposal site located within the ward also named Colne Valley, which was considered a safe seat for the Liberal Democrats. The Colne Valley ward (2010-2015) represented by councillors: Nicola Turner (Lib), who holds an appointment with the Peak District National Park; Donna Bellamy (Con), who serves on the Planning Committee and David Ridgeway (Lib), who served as Kirklees Mayor (2012-2013).96

⁹⁵ http://www.kirklees.gov.uk/beta/information-and-data/pdf/fact-2014.pdf

Historically, Kirklees was dominated by the textile trade of the industrial revolution, which is reflected in its architecture of gritstone towns with textile mills, chimneys and weavers' cottages. The district's main settlement is Huddersfield, the main settlements in the Colne Valley constituency are Marsden, Slaithwaite and Holmfirth. The southern part of the constituency includes the northern boundary of the Peak District National Park which has a separate planning authority, the Peak District National Park Authority (PDNPA). Colne Valley has reinvented its industrial heritage of valleys and moorlands, canals and reservoirs, converted mills and cottages and the aqueduct, canal tunnel and steam railway system as key tourist offer, with a focus on outdoor activities on the Pennine Moors.

The district is bordered to the north by the M62 and the east by the M1, which offers motorway access to the major regional cities of Manchester (30 miles), Bradford (18 miles), Leeds (24 miles) and Sheffield (28 miles). The M62 travels through the Pennines on the north border of the Colne Valley constituency. The Colne River runs through the valley in parallel to the Huddersfield canal. The area is surrounded by the Marsden Moor Estate, which is 5,000 acres of open moorland, under ownership of the National Trust. Approximately, 70 percent of Kirklees, outside of the Peak District National Park is designated as Green Belt (KMBC, 2001: 6). The valley bottoms have dense settlement patterns, but the moorland plateaus are isolated and remote with far reaching views. The South Pennines are the only upland landscape in England without a statutory designation, although there have been calls for an AONB designation (JMA, 2014: 7). As discussed in section 4.5.2, History of Refused Applications (LPAs), KMBC was identified as an LPA that had never approved an application for an onshore wind farm greater than 4MW capacity, although it did consider an application that was ultimately refused.

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The population of Kirklees district borough was 431,020⁹⁷ with Colne Valley constituency as one of the least densely populated with 109,785 persons in 46,999 households. Of those households 5,556 or 11.8 percent, experience fuel poverty⁹⁸. The Colne Valley ward has 17,369 persons in 7,576 households⁹⁹. There are 9,742 economically active residents and 3,263 economically inactive. The planning proposal aimed to serve the residents of Slaithwaite with a population of 6,549 in 3,034 households and Marsden with 5,532 population in 2,093 households (SLR 2013b v2 c13 9-10). The mean household income for Slaithwaite was £35,291 with 3.3% JSA claimants and Marsden at £33,639 with 2.8% JSA claimants (SLR, 2013b: 387). The average house prices in south Kirklees are higher than the rest of the borough, average detached properties valued at £284,112 in 2014. (KMBC, 2014:10). The low unemployment rate, income levels and house prices indicate that the Colne Valley is a relatively affluent area in Kirklees.

'Yes, pockets of deprivation, here though most people are reasonably well off. All the mills are closed down, so there are pockets of it but it's worse once you go over to the dark side in the Dewsbury area [laughs]. The Colne Valley itself has massive community spirit', [SS: 'there's huge amount going on'] (DG, 2/1.54.28)

9.3 Local Planning Policy

The wider Yorkshire region has commissioned several studies and reports: ME (2010) *Renewable Low Carbon Policy Study*, commissioned by the LPAs of the South Pennines: Burnley; Pendle; Rossendale; Calderdale and Kirklees. A study undertaken by Maslen Environmental (ME) to evaluate the capacity for renewable and low energy development within the partnership areas. It found that Kirklees, the only LA in the partnership, was unlikely at any level (low, medium or high) of take up of renewable energy developments, to meet local notional 2020 targets. (ME, 2010: vii-viii).

 $^{97 \,} http://www.kirklees.gov.uk/beta/information-and-data/pdf/fact-2015.pdf$

 $^{^{98}\,}https://www.gov.uk/government/statistics/2014-sub-regional-fuel-poverty-data-low-income-high-costs-indicator$

AECOM (2011) Low Carbon and Renewable Energy Capacity in Yorkshire and Humber AECOM were commissioned to undertake a similar assessment but for the entire Yorkshire and Humber region. This study found Kirklees had a capacity to host 129MW of commercial wind energy development (2011: 35).

JMA (2013) Landscape Guidance for Wind Turbines up to 60m high in the South and West Pennines, Julie Martin Associates (JMA) were commissioned by the South Pennines Partnership of LAs to provide good practice guidance on the siting of wind turbines up to 60m high on the south and west Pennines. The environmental consultants offer advice for LPAs and developers on issues of cumulative impact, location, siting, layout and design. The VWC proposal includes larger turbines of 64 meter masts or 99.5 meters ground to tip, however, the guidance is used to assist decision making for both the case officer and VWC.

JMA (2014) South Pennines Wind Energy Landscape Study, undertaken by Julie Martin Associates for the South Pennines Partnership to inform the development of their respective Local Plans. JMA, define Slaithwaite and Marsden as a 'settled valley' character type, surrounded by 'high moorland plateau' of the South Pennine Moors, near to where the proposal site is located (2014: 10). High moorland plateau and settled valleys were both assessed as having a high sensitivity to any size of turbine. The consultants conclude that the only area in the borough of Kirklees, where turbines could be accommodated were in the industrial lowland valleys in the north of the borough (2014: 124).

KMDC (2001) *UDP Supplementary Planning Guidance Wind Energy*), offers advice to applicants on assessment of impacts relating to: decommissioning; visual and landscape character; recreation and residential amenity; Green Belt and land designations; character and setting of historic settings; noise, ecology and highways. However, much of this has been superseded by the NPPF and EN3 and KMBC have not replaced or updated their Wind Energy SPG. At the time of the proposal KMBC, had not adopted any specific policies on renewables, wind energy, community benefits or community energy and

no neighbourhood plan had been designed for the area. Which the case officer, Glenn Wakefield in his report to committee noted as,

'Kirklees Council has not adopted any such policies, officers consider that this issue cannot be given significant weight as a material planning consideration in the assessment and subsequent determination of this application.' (Wakefield, 2014: 65)

In the interview, VWC responded to the tension between central and local planning guidance,

'I had a meeting with planners today and one of the issues ...we've been discussing in email for some time now is that we believe they should give weight to the fact it's a community led initiative. You know that's the wording they use community led and evidence of community involvement. The planning officers take on is that as the local authority hasn't adopted a policy it can't give any weight to that. We've said reading the guidance the National Planning Policy Framework, it talks about including neighbourhood plans, in a way you could use neighbourhood plans, but to me that's not a condition that you have a neighbourhood plan in place.' (SS, 1/20.50) ['Were you involved in the neighbourhood planning?' (TM, 1/21.41)]

'Well there isn't any as far as I'm aware, no, no, so what the planning officer is saying is that we haven't got a neighbourhood plan, the local authority hasn't adopted a policy to give way to it, therefore I can't give it any weight. We are saying this isn't right.' (SS, 1/21.43)

9.4 Developer and Investors

Valley Wind Co-operative Ltd. (VWC) is a CE organisation, established by seven residents from the villages of Marsden, Slaithwaite, Meltham, and Newsome, and a representative of Energy4All are directors of the Board, chaired by Steve Slator. The Board member's skills and qualifications include: planning, law, teaching, community development, environmental management, and accountancy. For Steve Slator, his interest in the project was based on his work experience, but also his personal values,

'Yes, personal values and then my job was setting up a building business that we ended up selling very green building products all that sort of thing, so you know that was to make a living, but it had an environmental bent to it and then I suppose when I had family and kids all that went slightly by the wall and I just got on with my life. I wasn't very active in my life at all, but we were still building houses as insulated as we could do and all that sort of thing. I think the last ten years I've got a bit more head space to do it...Also, climate change has become more and more obvious to me, it's more and more of an issue, it's more and more urgent to address. Twenty years ago, it was pretty obvious, but not that obvious to many people and you were swimming against the tide, you know.' (SS, 1/17.02)

Diane Green's interest in the project was based on the finance and organisation structure, she had been asked by Steve Slator, if she would like to join the project because she had worked in various community roles on previous environmental and conservation projects in the Colne Valley.

'I said right at the beginning of this project, I said, even if there was no climate change I would still be for this project...because its clean energy and it's not taking money away, it's not big corporate business, it's a cooperative structure, so we are all probably a bit left wing and we are all pro the cooperative structure of it, that's very important to us and we are very ethical, if it gets off the ground and we have to have some banking finance, which undoubtedly will, I mean part of it will be pragmatic, but there will also be looking at, is it possible for us to have the more ethical bankers, backing us, so that will be a part of it.' (DG, 1/18.54)

VWC, is an Industrial and Provident Society based on the development and organisational models of Westmill, Fenland and Baywind Energy Cooperatives (see appendix 2, *History of CE Applications*). They are supported by Energy4All, a CE intermediary set up in 2002, to assist the development of CE cooperatives. They offer support in developing cooperative structures, finance modelling, consultation programmes,

negotiate with landowners and maximise community benefits options. Once a CE cooperative is established it then becomes a member of Energy4All, with a one member one vote cooperative system. Energy4All undertook the accounts and VAT responsibilities for VWC for a fee of £60 per month (SS, 2/2.11.25).

'we did talk about a community interest company, the feeling of the group there was a consensus that the cooperative structure was [DG: 'tried and tested'], yes tried and tested and it also meant that you know we could link in with Energy4All because that is all co-ops and we had already used them for free advice, before we set the co-op up, because for three years we were just a voluntary group, so yeah, it seemed sensible to go down that route. We have had other people advise us that a community interest company might be advantageous but it didn't seem to fit either with the way that people would be able to invest from the community and get the benefit of their investment and so on.' (SS, 1/26.20)

VWC Mission is to,

'to build a co-operatively owned, community-based, wind energy project to harness the power of the wind on the nearby Pennine Hills. Valley Wind intends to generate and sell renewable electricity to benefit local communities, particularly in the upper Colne Valley, small investors in the project, and the wider environment". (SLR, 2013: 10)

VWC objective to develop a flagship CE, of 6-7 MW maximum capacity, which is equivalent to powering 4,700 homes in Marsden and Slaithwaite, the two nearest villages to the proposal site. It is predicted that this would offset over 10,000 tons of CO2 per year. To challenge the oligopoly of the Big Six utility companies, whilst offering regular funding for community projects by fighting climate change.

'what is the most that seven people could feasibly manage to do? What is the most that we could feasibly do in terms of climate change? That's

what we came up with. We knew it was really risky, but we decided that because it was big enough it was worth the risk of effort. It won't be wasted we have educated and it's been really interesting. We've learnt a lot' (DG, 1/15.40)

Development risk funding of £165,000 was fundraised from the FSE Group and the Ecology Fund as illustrated in the business assumptions VWC included in their ES, which is reproduce here in table 6, *VWC Local Funding Benefits*. Key to the development is the delivery of a community fund forecast to donate up to £210,450 per year over a 25-year life span totalling £5.2 million at maximum installed capacity. The total cost of the project estimated at £10 million, of which it was planned to source £4 million by bank loan and £6 million in shares. In parallel to the community, ecology and neighbourhood funding is the annual dividend return for individual investors of VWC. Individuals who could invest from £250 to £20,000 with a one member, one vote system, could be expected to receive between six to nine percent per year (VWC, 2014: 16). Income from individual investors, local people offered first option, used to raise development funding.

Table 6: VWC Local Funding Benefits

Planned Local Economic Benefits*	Seed investmen	£/MW	£ pa
	investinen	pa	
Community Fund	90,000	25,000	172,500
Community Fund administration1			35,000
Ecology Fund	75,000	1,500	10,350
Neighbourhood Fund		4,000	27,600
Business Rates			76,302
VWC administration			10,000
Sub total			331,752
Local investor returns Colne Valley (est.)			25,600
Local investor returns Kirklees (est.)			273,600
Total pa			630,952
Seed investment total	165,000		

Notes:

Source: (VWC, 2014: 2, 13-14)

Steve Slator discussed the difficulty in securing development funding,

^{*}All planned economic benefits are subject to project planning approval, development fundraising and project realisation

'It's been from the FSE group who administer the community generation fund, they are a community interest company, which means that you have to make a profit. Basically, the terms are that if we are successful we pay back something like one and a half times the grant. So they may lose a lot if we are not successful, then we do not have to pay back anything. [TM: 'does this include going to appeal?'] Well they haven't given us funding for that yet. Earlier on they said they would look at funding an appeal but now they seem to be getting cold feet because so many have been pulled in by Pickles that they now have a lot of money in projects and nothing coming back in because it's all been held up. So, they must be in a very difficult position I think. CO2Sense which are based in Leeds and the Cooperative Enterprise Hub, which were pretty good but they haven't got any money at the moment. So, I've been going around all the funders again trying to get this Bird Population Study funded. Its only £5,000, but most of them so far are saying they haven't got any money at the moment. Key Fund Yorkshire have been a big financial supporter they are a national body so that's the bulk of it.' (SS, 2/57.20)

Initially, prior to the receipt of development funding the Board had offered their time voluntarily, relying on their fundraising efforts through the Friends of Valley Wind membership subscriptions. However, the funder FSE Group, requested that a paid project manager was in post for six months,

'That was a condition of the loan...it's a high-risk loan that we don't have to pay back if it doesn't happen, but it's a high interest rate if it goes ahead. So, it's sort of 'gambling rich environmentalists' [laughs], but we couldn't have that loan unless Steve got paid for it, they wouldn't allow us to have it. (DG, 1/24.59)

They wanted someone in place who was paid, they didn't just want to rely on someone, you know because they have had a bad experience just relying on volunteers, understandably because they were putting forward over £100,000, they wanted to make sure there was someone they could get in touch with, pretty much at any time.' (SS, 1/25.29)

The Board agreed that the best person for the job would be the founder and chair, Steve Slator, as they believed he had the most knowledge of the project,

'It's been a process all the way and we are all very admirable of Steve who has put in massive amounts. The rest of us are all working and we do other things. The solicitor on the board is a practicing Quaker, she does all sorts of things and pulls me into sanctuary suppers for asylum seekers we all do all manner of other things. We have jobs, we have grandchildren, children, lives to lead. We like to go to the pub and have a drink, go dancing, go to the cinema we are normal people as well. [laughs] We don't talk about wind turbines all the time.' (DG, 2/2.03.02)

Income from the development in the community and neighbourhood funds to be used to support health, education and social initiatives: reinstate vital services lost to the community such as public toilets and school crossing patrols, support existing services such as healthy meal services to the elderly or create new services such as renewables education programmes to local schools and colleges. Income from the development for the Ecology fund will prioritise new CE proposals, energy conservation projects, research into other local renewable energy sources, and protection and conservation of existing habitats and local environment (SLR: 2013: 12). The final SIMP to be decided once planning granted, in consultation with residents.

However, the case officer for the application commenting in his report to members that community benefits funding is not of material consideration,

'this is not Government Policy nor a requirement of the planning process, it is a scheme promoted by the renewables industry and therefore a voluntary offer being made by the applicant and whilst such an arrangement could potentially provide substantial benefits for local community groups, it is not a material planning consideration nor given any weight in the assessment of this planning application' (Wakefield, 2014: 60)

VWC, felt their project would offer more in community benefits than a

commercial scheme.

'Historically companies have [given] about £1-2000 per MW for community funds. So, ours is giving 6.9 MWs so that's over £170 grand a year. The average commercial scheme is £10,000 a year. When you look at the details of it, well when you can find them they are often secret or at least they are not widely available, but what I've seen of it a lot of it is time, cash in kind, it's not really cash to a community. They say, OK well you want the village hall refurbished and this that and the other. And you wonder how good value this is for them? You know the benefits have been pretty small. The government is trying to set up this, well they've recommended that it should be £5,000 per MW installed but it's only a recommendation.' (SS,

1/41:19)

Wakefield (2014), continues to recommend caution on the neighbourhood fund, where households would be eligible for access to an annual payment of £27.600.

'the applicant has made this offer; the Council would not be able to require such payments and has no say in the funding arrangements of the scheme. Consequently, such arrangements could potentially change following any grant of planning permission without further reference to the Council.' (2014: 61)

VWC, responded to this by suggesting some form of planning condition, like a Section 106 Agreement, is applied to any permissions.

'We put a Section 106 in, but when he said it was voluntary, this amount of money you will be offering, you might not deliver on it. So then he said you can have it under a Section 106 Agreement so it will be binding. Today he said 'oh that's wrong you couldn't offer this under a Section 106, because that has to be specifically about offsetting damage' for example, if you're doing a housing estate you're going to overload the local school so you could offer to extend the school under a Section 106, he said 'what you should be doing is...' something under some other wording, I forget, but now its six weeks since we did that

and we haven't had any communication from them, if they had notified us of what we needed to do to allow them to take account of it...you know we just get nothing from them.' (SS, 2/15:47)

In his report, the planning officer focused on the inappropriateness of a Section 106 Agreement as a condition,

'However, officers disagree. Planning obligations via section 106 agreements must only be sought where they meet the policy testsThere is a strict principle in the English planning system that planning proposals should be determined based on planning issues. Furthermore, Local Planning Authorities are prevented from specifically seeking financial contributions where they are not considered necessary to make the development acceptable in planning terms. Such contributions would normally relate to things such as the upgrading of existing or the provision of new offsite infrastructure. It is therefore clear that in determining this application the proposed community benefits put forward by the applicant do not meet the tests outlined above and could not therefore be legitimately secured via a section 106 agreement.' (Wakefield, 2014: 61)

Wakefield (2014), did not suggest any other form of planning condition that could be made to ensure the neighbourhood fund, such as covenants on the lease undertaking for the site, or conditions of operation that are applied to an Industrial and Provident Societies organisation.

9.5 Landlord, Development Site and Proposal

The proposal was for three wind turbines of 2.3MW installed capacity each, with a maximum capacity of 6.9MW. The turbines were 64 meter masts or 99.5-meter ground to tip in height, producing electricity for 4,700 homes in the villages of Slaithwaite and Marsden. The identified site was on Slaithwaite Moor, off New Hey Road, Scammonden, near Huddersfield in West Yorkshire. Figure 81, *Valley Wind Cooperative Location Map*, for illustration purposes show the location of the site in context of Slaithwaite and Marsden. The proposal site totals 3.8 hectares, within a larger site under lease to VWC. The site has a boundary with New Hey Road (north), a PROW (east), Cupwith

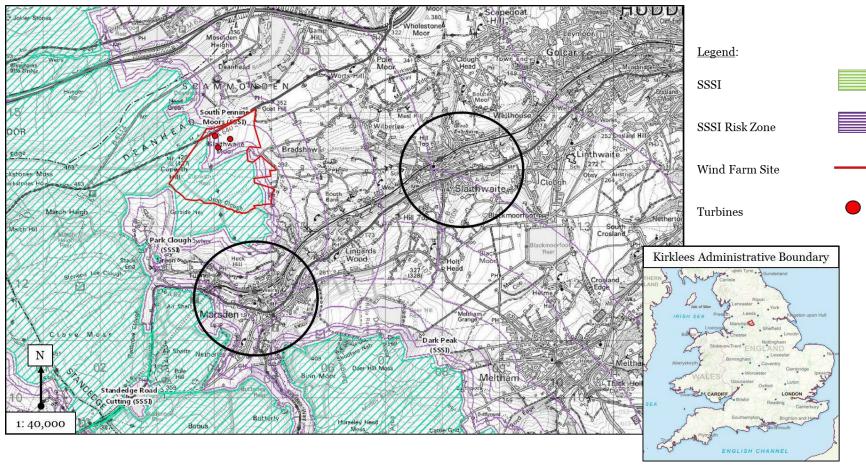
Reservoir (100m south-west), Deanhead reservoir (440m north) and Scammonden Water reservoir (1.2km north east) (SLR, 2013: 6-7). It is approximately 3km north of the village of Marsden and 2.7km south east of the village of Slaithwaite.

The EIA process did not find any sensitive land designations on the project site, such as SSSIs, National Parks or AONBs (SLR, 2013: 7). However, it is adjacent to South Pennine Moors (south) of wet and dry heaths and bogs habitats and a SPA for Merlin, European Golden Plover and Dunlin bird species and SSSI (west) for unenclosed moorland and blanket bog that supports moorland breeding bird habitats. Also, the northern edge of the Peak District National Park is 3.6km (south). The area is identified in the Landscape Capacity Study for Wind Energy developments in the South Pennines (2014) as High Moorland Plateau (SLR, 2013: 7). The site is open moorland, bog and grasslands, allocated as Green Belt in the UDP and used for walking and the grazing and shooting livestock. The nearest properties to the site as calculated through the EIA are Watermans House, 395 meters (north), Reaps Farm, 405 meters (south-east), then there are five properties over 700 meters to the east and north east (SLR, 2013: 6-7).

The site on Slaithwaite Moor was identified by a commercial developer as early as 1993/94 as a potential site. At the time, the Countryside Alliance (CA) called a community meeting to establish an opposition campaign. The CA, brought many people to the meeting who were not from the area,

'[they] had brought in loads of people you didn't even recognise who were talking all sorts of, all the myths you could ever think of were being promoted. (DG, 1/4:21)

Figure 81: Valley Wind Cooperative Location Map



Source: Created with DEFRA (2015) Magic Map Available at http://magic.defra.gov.uk/MagicMap.aspx

The CA were surprised that the local community were supportive of the idea,

'a well renowned solicitor and local historian, gave a very passionate speech for wind turbines one of...my daughter's friends stood up, and I was almost in tears I was so proud of her, she stood up and said [err] "I don't understand how you can be saying this, I am totally and utterly amazed. You're telling me that...there's people trying to save a chimney at the bottom of the road. A chimney that used to belch out smoke that was a symbol of Victorian textiles, child labour and pollution and people are trying to save it. It serves no purpose whatsoever and then you lot are trying to stop a wind turbine saying they are ugly and vile and all this sort of stuff." She said, "you know for a baby born tomorrow it will be just normal just like that chimney is normal to me" and "it's not your world, you are all old" [laughs] (DG, 1/5:06)

As long-term residents of the Colne Valley, the Board members knew the area well and began approaching big landowners, the National Trust, Yorkshire Water, the National Farmers Union (NFU) and KMBC, for potential sites,

'we had discussions with both of those which were not fruitful, Yorkshire Water said "if we have any land suitable we will be developing it ourselves", National Trust said "no and we don't like them, and over our dead body, we hate them." (SS, 1/30.47)

The NFU, circulated the information to the all their members,

'we got a flyer out, we met with one or two farmers and we had discussions with a few more, but again nothing came of it. Often just because they didn't have enough land' (SS, 1/31.41)

KMBC, Environment Unit, were unable to assist with finding a site, but did offer funding for drawing up the land lease,

'we are going back a long way, 2006 I think, when they had a different person working there, a different boss and everything, they offered to

help, but they couldn't come up with anywhere, they produced a map. That's the long and short of it they could not come up with an alternative site. They did help, we applied for funding, when we did get agreement on the site we applied for money for the legal work and at the third attempt, the first two where rejected without much explanation, then we preserved and we were award £7,500 to do the legal work on the option agreement. So now we can [laughs] put 'supported by Kirklees Council'. But that was when we were still below the radar.' (SS, 1/34.49)

VWC, continued their site search with the aid of wind atlases, but reasoned that they did not want to move too far from the Colne Valley area, as they believed the negative impacts of the scheme should be a burden of the recipient community.

'Yeah, so we wanted it to be reasonably near to where we all lived, so that makes it a stronger sense of we're not NIMBYs ourselves by putting it in the Holme Valley. "Oh, no we don't want it in the Colne Valley, even though we all live here [laughs]", but we have been accused of that anyway.' (DG, 1/32.42)

However, the constraints on land use for an onshore wind farm, meant that there was a limited supply of available land,

'the constraints are enormous, you start looking for a site for a turbine, even for one turbine you pretty much need a kilometre square with no houses in it, because your nearest house, well we are managing to get the noise limits are OK at 400 meters. OK, so you need about 800 meters square, when you've got three turbines you need a bigger square so when you start looking at the map for areas of that size with no houses and a landowner willing to work with you, and enough wind speed and not too many footpaths crossing the site you've got to leave the height of the turbine plus a bit, all sorts of constraints then there is hardly anywhere. It mustn't be within a National Park, it can't be on National Trust land, it can't be on Yorkshire Water land, it can't be in the Special Protection Area although we did consider that, we are on

the edge of it now. So, once you take all those areas of land out, which are all upland areas anyway with the best wind speeds, you are only left with the margins really. Then you get into the more populated areas and settlement patterns with very scattered houses which used to be small holdings. So, the area that we put it is literally the only site we've been able to find within quite a way that would be suitable.' (SS, 1/33.15)

VWC, spent three years attempting to secure a site for their proposal (see section 8.1, *Timeline*), but believed this site would be equidistant from both villages, thus both villages sharing not only positive benefits but also any negative impacts through an agreed trade off. The site offers good wind resource, so is commercially viable as well as good grid connectivity. Northern Power Grid confirmed that energy generated would 'likely' supply residential properties from Marsden to Milnsbridge Douglas (2014). So, residents would be able to directly use the renewable electricity they were generating.

Slaithwaite, was historically part of the Dartmouth family's estate. The landowner of the site is Rosscroft Ltd, which is owned by the family of Lord William Legge, Earl of Dartmouth. William Legge, at the time of the proposal was an MEP for United Kingdom Independence Party (UKIP), which had a policy of opposing both onshore and offshore wind development. A local anonymous blogger called 'Autonomous Mind' 100 obtained a letter from Legge's solicitor, stating how Legge had transferred the site to Rosscroft Ltd at nil cost in February 2011, so he did not own the land. The directors of Rosscroft Ltd are based offshore in Monaco and the Bahamas. The local paper the Huddersfield Examiner, as well as the national papers, the Telegraph and the Huffington Post published the story in May 2014. Legge, confirmed that he did not own the land, would not benefit financially from the development and would be objecting to the planning application in line with UKIP policy. The Huffington Post reported the story as Legge, confirming that Rosscroft Ltd, and so the land, was owned by his family,

The UKIP MEP, was accused of "total hypocrisy" amid claims that he could make £60,000-a-year from three 300ft wind turbines being built on land he was linked to on Slaithwaite Moor near Huddersfield, even though UKIP is fiercely opposed to them as a party...William Legge, who is better known as the Earl of Dartmouth, stated his opposition to new wind farms in his 2010 election leaflet and said that an "obsession with carbon emissions hinders sensible measures to protect our environment" like nuclear power.' (Bennett, 2014)

VWC, response to the article,

'[An opponent] has come up with all manner of myths that she could possibly think of. Strangely enough I... [was sent an email] I went onto a link about the ownership of the land, basically it was a letter to Nigel Farage from someone called X who is one of the, well she says she is not a member of SMOGIT [opposition action group] but she might as well be. She had written this letter which was on a blog and she had signed it and she had said, "I, myself and my neighbour so and so, we applaud your stand against wind turbines, unlike all the other mealy mouthed politicians" and "did you know about your MEP, Lord Dartmouth? This needs to be dealt with, as his son is to benefit etc. etc.", and it was signed by her...I made it apparent to her that I knew, [SS: 'that she was appraising UKIP'] that is when she backed off a bit.' (DG, 1/49:17)

'SMOGIT had their letter to Nigel Farage, I can't believe it, I mean it was taken off the site the day after and they denied all knowledge of it and that it was anything to do with them. That made national news, briefly because it was the Euro elections and they timed it to do that. They must have been really peeved off that we didn't actually care. It's nothing to do with us we just rent it from Rosscroft, end of story.

 $^{^{100}}$ See (https://autonomousmind.wordpress.com/2014/04/06/the-ukip-mep-family-land-a- windfarm-application-a-party-denial-and-eu-money/)

'Their other secret weapon was they had Professor Cywinski?¹⁰¹ He's called Thorium Bob, he's even been to Glastonbury, talking about his renewable energy. What you need is thorium, nuclear energy, and he lives up there [by the site]' (DG, 2/12:02)

'But actually, the struggle to get a site was massive, wasn't it? When you think about it any landowner, why would they hand it over to a community? Most of them wouldn't, its only because the site had been used before in an application. He knew it was a difficult site, which is proven by all the work we have had to hand in. So, handing it over to us was not a bad move, because if it works he gets a new car and we've done all the work.'

'So for other communities there just aren't going to be many opportunities. It took us four years to find the site and five years before we got it all signed up. Unless the government introduced some kind of zoning from Europe or something. We argued for it in the local development framework, back in 2007, for zoning for renewables and a percentage of that must be for community, then you may have more of a chance. The system is against you, they have fine aspirations around the community and renewables but the stuff isn't there on the ground, unless you want to do really small things like a few solar panels here and there, but you can do those anyway.' (SS, 2/2.17.53)

There is little history of planning activity in the area, except for the temporary 50-meter meteorological mast for the wind speed assessment for this development which was approved in 2012.

 $^{^{\}rm 101}$ Professor Robert Cywinski, Huddersfield University and founding member of the Thorium Energy Amplifier Association

'We have already had to do a planning application for the met mast, which was chopped down after six weeks that was when we came out. When we got planning permission for the mast and we erected the mast on site, we then had a proper come out, when was that? [SS: 'December 2012'] and within six weeks of us being public and the mast up, a story in the Examiner, people bored through the massive steel cables and toppled it. We thought 'God we are stuffed now'.' (DG, 1/35.56)

The insurance covered the costs of the £20,000 of damage (DG, 1/37.01), VWC had been expecting opposition to the development because of the formation of SMOGIT, but they had not expected sabotage.

'But once we had the social media, the website was out and everything like that all out there, we then did hear that, it is suspected that it's the national anti-wind farm campaign, lobby type people that are behind it. More recently you've got the UKIP people who are totally against onshore wind, but they do actually go around and topple met masts.' (DG, 1/38.13)

'No one knows about it, that it's happening. We decided not to publicise it because we didn't want them to have the satisfaction really, but we did think we were stuffed for a while, we could get the money back from the insurance, but we weren't able to do the met mast again because they would just bring it down again and they would no longer be covered by insurance unless we had something like a guard there.' (DG, 1/39.02)

The insurance company informed VWC, that they could no longer guarantee the mast unless the site had 24-hour security with someone employed on a full-time basis. Which would have been the end of the application, however, at the same time the Met Office had progressed with their virtual met mast data. This data was acceptable to the VWC funders. Yet the low profile that

VWC had wanted to maintain prior to announcing the outcomes of the feasibility studies and legal confirmation of the site was now breached,

'We knew there was going to be some opposition and the point was, we were all working then, I was working, we were all working, we had no site we just didn't need it. That was our whole thinking on it. Do we want to spend the next few years while we still keep looking for a site [DG: 'and organising ourselves'] whilst dealing with a lot of opposition? You know from what you've seen of the opposition has done in the past, how they raise spurious arguments, they never let go and actually we just didn't have the time, we thought that wouldn't be a good use of our time in managing our days. So maybe not quite as democratic as if we had just gone to the village and said this is what we are planning to do? Maybe more people would have supported us, we got forty but then again what could they have done, that was our other thinking, no site again.' (SS, 1/28.50)

9.6 Participation Strategies and the IAPP Participation Spectrum

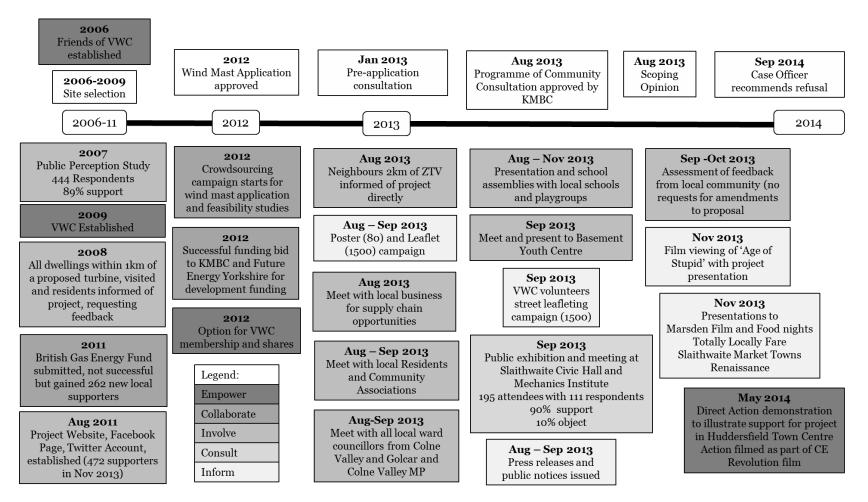
Figure 82, VWC Timeline of Participation Activity coded against IAPP Spectrum illustrates the participation strategies that VWC undertook to engage with the local community. As VWC, are a community led organisation, its Board membership from residents, undertaking the development role for their project, all activities can be coded to empowering techniques. However, for the purposes of analysing the type of techniques used, activities have been coded with the IAPP Spectrum.

In 2003, a group of residents had been involved with the SDC, dCARB-UK project. A project designed to support initiatives in reducing carbon emissions. Members had been concerned that little action was occurring so together they set up the Friends of Valley Wind in 2006. Its aim to evidence the level of support for and feasibility of a locally owned wind energy development. The encouragement that the Friends group received resulted in the formal establishment of VWC Limited in 2009. Between 2009 and 2012,

the founding members of Friends of Valley Wind, encouraged other local community members to voluntarily contribute towards the scheme, by offering skills, time and knowledge. During this the founding members who had become Board members of VWC, had self-learnt key technical, financial, legal and planning requirements of the project. Identified a site, secured funding, submitted and achieved planning permission for the wind mast and had commissioned and reviewed preliminary feasibility surveys.

'Basically, we've been professional and been friends, we are busy people, we've all got jobs, so we are quite quick really, but supportive of each other. We've sadly had a member die of cancer during the time, but we feel as though...he was so devoted to it...so all that sort of bonding together and friendship. So, it's not onerous because we all get on, we did have someone who started, but then left us because he was too impatient, he had a political agenda, his agenda was much more political than ours [SS: 'well I'd say some of us are quite political'], well yes political, but he wanted to do it now and be up on a soap box and he wanted us out in the open.' (DG, 2/1:30) 'He was more into having public meetings and trying to get a mass movement going, which I don't think any of the rest of us where up for, to be honest.' (SS, 2/1:22)

Figure 82: VWC Timeline of Participation Activity coded to IAPP Spectrum



Source: Adapted from (SLR, 2013b vol2 ch 13: 6-11), (SLR, 2013: 12)

By 2012, VWC had opened its membership scheme, charging £20 for a subscription which gave members regular updates of progress, a role in the decision making for the proposal and first option to invest in shares for the farm. Prior to the due date for the planning decision in September 2014, VWC opted to engage in direct action activity in Huddersfield town centre. Supporters created a human formation of a wind turbine and the figure '70 %', to illustrate the level of support they had received for their project. The action was filmed by the group, Campaign Against Climate Change as part of a film on CE¹⁰². The footage to be used in a film promote the benefits of Energy Democracy.

'When its mutually beneficial we have cooperated, we worked with the people who took the films, we have a PR officer, who isn't on the committee, but she is a keen supporter and she is brilliant. She is all Greenpeace and that sort of thing, so she had a film crew up from London. So, we did a human 70, to represent the 70% of people that support wind energy and it got a lot of publicity. It was a special day, some national windy day or something, so we all met outside Huddersfield station in St Georges Square and did a human windmill and Greenpeace put in online. They were filming from a cherry picker so you could look down on this human formation. If we had did it, it would have been filmed by someone standing on a chair, it wouldn't have had the same effect [laughs]. It was fun and we got a good bit of publicity.' (DG, 2/1.33.42)

'It gave the antis something to moan about' [DG: 'yeah they were at the station handing out SMOGIT leaflets they didn't actually dare come down to the square.'] (SS, 2/1.36.02)

^{102 (}see http://campaigncc.org/ValleyWind)

'My community work background has been voluntary, it's not been a job, well it's been a mixture really. I don't have a formula for community work I'm not trained in community development. I just think that if you are enthusiastic about something then that enthusiasm can rub off. If it's a sensible project, then you can give logical and sensible reasons why it's a good thing. I work in libraries at the moment and I do a lot of community liaison and people are always saying I'm really good at community development; but I don't really know what I do? [laughs] I'm not trained in any of the jargon or anything I just talk to people, and do it. Or if I see something, I'll ask people if they think it's a good idea, and if they say "it's a load of rubbish" then I think, well that's a load of rubbish then. I'm not too pushy, I'm not a pushover, I just think its normal human behaviour and its behaving decently towards people. They probably should have had a proper community development person [laughs], but I've learnt loads...I've learnt how absolutely mean and underhand people can be, I've never been involved in anything contentious before. I set up a community charity shop in the village, it had its difficulties, but there was no contention or sabotage or misinformation or lies or underhand behaviour. No, I've never come up against that before, but I know we have come up against less than other people, may be because we are local people, maybe because we live in a place that's quite green anyway. Green in the environmental sense.' (DG, 2/3:00)

Collaborative activity, has been coded to fundraising techniques. VWC had been unsuccessful in their bid for development funding from the British Gas Energy Share scheme although they did reach the second round, and achieved a new support base of 262 local supporters (SLR, 2013: 15). In 2012, VWC established a crowdsourcing campaign to attract funding for at risk development costs, and were successful in securing funding from Future Energy Yorkshire and KMBC. In the interview, VWC were asked if they had

considered collaborating with a commercial developer, instead of leading themselves,

'What could happen is that we would be approached and they would say 'right you could have one of these turbines' [SS: 'they still have to get it through all the planning system, but they have bigger, deeper pockets.'] But how could they give as much money every year because they have to make a profit. [TM: 'they would opt for a bigger farm?'], but there is no room for a bigger farm, unless they go onto the SPA, that is the maximum number we can get. One of the fears is of things like Natural England, I imagine, is they think this might set a precedent and allow a proliferation across the area.' (DG, 2/1.12.05)

Involvement activity, included one to one meetings with every resident within 1km of the potential proposal site to request feedback on how the proposal should be developed. Every meeting was recorded and opinions translated into the project design. By 2013, this approach was repeated but to all residents living within 2km of the proposal site. From this feedback a Programme of Community Consultation was designed and approved by KMBC. Key involvement techniques outlined in the programme included the use of a project website, a Facebook community page and a Twitter account. These sites were used to encourage involvement from community members,

'Valley Wind Facebook page now has (27th October) 225 likes (continues steadily rising) and currently reaches 355 people a week. 141 of Valley Wind 'fans' live locally. Lively and informative conversation occurs with for example, 129 posts over 10 days on a local Marsden Facebook page covering topics including subsidies, noise, landscape, birds, and efficiency.' (SLR, 2013b, 13: 6-11)

When asked their opinions on the use of social media to assist in participation in the project, there was a mixed response,

Yeah on balance, it has helped to get our argument across and to get people on board, it certainly can be seen as a hindrance because it's so time consuming. In terms of progress you have to have someone with time and energy to deal with it' (SS, 1/54:01)

'During that time on Facebook I was blooming there every night from 10pm to 2am, it was endless, then pulling in other people's expertise it was all go. It was loads, a huge amount. I was getting loads of questions, and no one else would go on Facebook, I got you [SS] to go on in the end. [SS: 'she dragged me kicking and screaming'] [laughs], I had to train him. [SS: [laughs], 'I know I'm used to getting a letter and two weeks later I may reply']. (DG, 2/2.09.54)

'Yeah loads of discussion, huge threads of discussion on social media going to and fro. [SS: 'people start taking on the argument themselves, they adopt the pro argument'] They post us things, they tag us on things they post. [SS: 'yes it's a great Facebook page over 3,000 people on it, they can't all be Marsden's because there aren't that many people living in Marsden. It's really active.'] No there are 4,000 people in Marsden, but some of them will be children...

...Some of our supporters have been abusive as well, one of our big supporters contacted us by private message and said "could I come and see him", because he knows me, because I used to run a wildlife watch group for twenty years, for part of Yorkshire Wildlife Trust and his children used to come to it, he said, "I've every respect for you, but I'm not sure because of the site, because it means so much to me". He actually came around my house and had a cup of coffee and we chatted about it, openly and he has become one of our best supporters. Quite a lot of people were like that, at first it was like I felt I needed to be on there all the time, but now I don't need to because there are people just as competent as me [SS: 'who just jump in and make the argument'] yes, and we don't even know them.' (DG, 1/54.54)

When asked how many volunteer hours they have contributed to the project, 'I have totted it up occasionally, thousands, I've got a figure of 4,000 hours in my head, but collectively...[DG: 'its way more than that'] there is an average of seven on the board, we meet roughly once a month for 2-3 hours so 20 hours a month. I put in another 4 hours per week than everyone else, so I'd say about two years solid work. And you do it just in your spare time. [DG: 'especially at the beginning and having to monitor Facebook'] We haven't kept track.' (SS, 2/2.08.23)

VWC, attempted to gain high profile support from a local poet and the local weatherman.

'We've been on the TV, haven't we? [TM: 'did you have any media training prior to it?'] We did that evening at Jane's, how to talk to camera and all that, we really didn't do it though [laughs] [SS: 'that was on Look North with our occasional supporter Rich, he spoke for a couple of minutes for a five or six second clip, but it was good to get the broadcast coverage.'] I feel proud that we have managed to get so much genuine support from people. I think we should be proud of the fact that we have been very upright, open, transparent and honest all the way through.' (DG, 2/2.03.02)

Yet, as time has progressed media interest has waned. Most support has been offered from residents,

'Jan did all the options to lease and all the solicitors stuff, all the minutes for the Board meetings. Emma collects all the newspaper articles about us. Emma is our young person, she scans in all the newspaper letters and sends them to us all. I send out all the stuff by email to update all the supporters and friends once in a while.' (DG,

'We had a volunteer right at the beginning, Ben who must have spent a week setting up our website, he is local lad who is a web designer and did it for us as a volunteer. [SS: 'yes he is my brother in laws next door neighbour, and I go cycling with him sometimes.'] Our friend that died, an accountant did all our accounts for us. Its years of work, over 9 years of time. Put it this way I would have a much tidier house if I hadn't been involved! [laughs]' (DG, 2/2.11.43)

In addition to using social media to gather opinion on the proposal, VWC undertook a series of meetings with local businesses, subscribers, schools, the youth centre, resident's associations and community groups, local ward councillors and the constituent MP to collect opinions to shape the development. All feedback was assessed at by the Board of VWC to evaluate the benefits and practicality of requested changes. By September 2013, no objections had been received from the ward councillors or the MP (SLR, 2013: 15).

VWC's initial consultation activity was led by a public perception study, which was undertaken in 2007, VWC received 444 respondents offering 89% support for the proposal.

'There was one mistake we made was not to get together an independent opinion poll before it all kicked off. [SS: 'we only had our own opinion poll'] We did our own opinion poll about what people thought about wind turbines in the area, would you approve of it and its still consistent, 80% again all for it and we interviewed about 440 people...in shopping areas, district centres, but no one will believe it because we did it, but it was actually reasonable. (DG, 2/1.13.53) [TM: 'Why won't they believe it?']

'Well no, loads of people believe it, but the thing is the antis wouldn't have believed anything, if you come up with any survey that says 80%, they will accuse you of bias.' (SS, 2/1.14.50)

'I think we have done it all properly so when people say its 'all your own idea, and you have foisted it on us', we can say no, we did a survey and made sure it's what people wanted before we even started. The first thing we ever did was make sure to find out it was something that everyone wanted. It's all been done logically and sensibly and evidenced all the way along.' (DG, 2/2.03.02)

Following the approval of the Programme of Consultation by KMBC, the main *consultation* activity, surrounded a two-day public meeting, and exhibition in September 2013. VWC, held the public exhibition and meeting at the Slaithwaite Civic Hall accompanied by a week-long static display in the Mechanics Institute. The exhibition was attended by 195 people, 100 people offering written support with 11 people objecting to the proposal. Following this, the aim was for the Board members to consider how feedback was to be included into the scheme design, however no suggestions for modification were received. The founders confirmed they 'avoided public meetings like the plague' (DG, 2/1.36.32) because

They just give the antis a platform or even those from outside the area and they just take over the meetings. We've been to them, I went to one in Todmorden it was called for a windfarm application that had been submitted and this lecturer from one of the Unis called the meeting and said this is the meeting for people who want to support the application and of course the antis turned up and the Chair was really weak so the whole evening was dominated by these three antis that just wouldn't shut up and the Chair wouldn't shut them up. You can see it if he isn't very experienced and they are very experienced then these meetings are a total waste of time. So we called a meeting of supporters to avoid it.' (SS, 2/1.37.05)

'We also had a couple of supporters training sessions where we did actual specific information sharing and myth busting information for people and we have spent quite a lot of time getting myth busting out there. We have also done more than we remember, Steve and I went to Leeds and we were invited to go and speak at the Poverty Fuel Action Group and we did that. We also had a public film, we did a 'Do the Math' (a climate change film) session where we had that guy come in to talk about the film. A very powerful film and that was followed by someone who was a consultant on wind energy who did a talk, but none of the antis came, did they? Whereas some of us went to 'Thorium Bobs' lecture and it was awful, it was a lecture not a public meeting, but the SMOGITS talked, but no one else could. But we have had nothing compared to some people you know I've had liaison with people from other community wind organisations and support groups. People in Australia and quite a lot of support online from people like the Barnard on Wind, the Irish Misinformation Wind Farm Campaign, there is some very good stuff out there. The Wind Turbine Syndrome people, I delved into it and found a Professor Chapman, then went onto Sydney University. It's been debunked now but people are still going on about it.' [SS: 'yes they argue there is all this stuff you can't hear'] (DG, 2/1.38.35)

'[Sydney University] were really good, I just sent it to Professor Chapman and he must have spent an hour or two going through it and debunking it for us. He did the whole lot and I just put it straight onto the Facebook page. They could even google it, that's been very supportive. [SS: 'yeah you really pulled in some expert assistance there, didn't you?'] I was severely sleep deprived during that period; it was full on. It was sort of quite fun as well. [laughs] Well I laugh about it now, in retrospect but at the time, there were times when I was just quite upset. But we have had nothing compared to others...We have had international support which has been lovely, it does actually keep you emotionally and morally going. [SS: 'Yes, it's the solidarity, it's a global issue. You realise that the majority of people, both locally and global support us.']

Informing activity was undertaken throughout the development life span, with articles published in the local paper, the Huddersfield Examiner.

'They say its split the community, it has not, but that's what they try to make out. What I do find difficult is that you do get weary trying to think of another letter to write to the Examiner. [SS: 'maybe we shouldn't bother with the Examiner?'] No, we should because the councillors read it.' (DG, 2/6:48)

Along with articles in the local paper, leaflet campaigns, included VWC volunteers handing out 1,500 leaflets on the street to advertise the public exhibition and meeting dates and times. As well as the same number of leaflets being distributed to residents within 2km of the proposal site. The leafleting campaign was supported by a poster campaign with 80 posters being displayed in Colne Valley shops and public buildings (SLR, 2013b, 13: 6-11). Other informing activity included a film viewing of 'The Age of Stupid' (2009), a British documentary by Franny Armstrong about an archivist looking back to 2008, to question why human kind fails to tackle climate change. The film night was attended by the EIA project team to discuss the proposal.

Similar talks were held by VWC at other community events, such as the Slaithwaite Market Towns Renaissance programme, the Slaithwaite Totally Locally fair and the Marsden Film and Food Nights group.

'That's where you could say is our weakness, we haven't got a really experienced public speaker, well Stan's a teacher, so we've got people who can grandstand. [TM: 'do you think that's an essential role to have?'] No, I suppose it isn't otherwise we would have gotten someone. I mean it certainly wasn't necessary for the first seven to eight years. It's the last year or so that it would have been useful, we might have had more public meetings, but it would've taken time and effort though.' (SS, 2/10:22)

'If we had, we would have been merged with the extreme left, the Socialist Worker type. They wanted us to have meetings in town, at the Town Hall, so we could get bigger audiences. But we just couldn't be bothered, we just wanted to keep it small until we were ready [SS: 'we couldn't see the benefit of it'] we wanted to grow our supporters.' (DG, 2/11:05)

'We needed to focus on finding a site, get the money together, get the planning permission, the planning application prepared. It's lots of stuff to do, but you don't need hundreds of people to do it. You need a steering group you need a core group of enthusiasts' (SS, 2/11:39)

'I think it's already quite a green community. [SS: 'there is talk of a buyout of the local Mechanics Hall, which is one of the community centres, because the council don't want to keep it. So, you can buy it if you want for nothing or they are going to flog it to someone.'] There is a lot of people saying as well now, that they actually like us because of the changes in society or communities taking over things, we are going to really struggle to fund things so they are really hoping for a bite of the £150,000 a year. What people are really worried about is that the planning is going to reject it and then one of the big energy companies does it.' (DG, 2/1.09.12)

9.7 Community Responses and Social Impact Identification

Once the application was publicly advertised, the proposal received 1,402 letters of representation, of these 1,077 were in support and 325 raised objections (Wakefield, 2014: 24). The case officer summarised the responses which have been coded to Social impact domains in figure 83, *VWC Written Representations by Social Impact Identification*. Most reasons for support fall within the political system domain. Whereas most reasons for objection fall in the cultural and heritage domain.

Figure 83: VWC Written Representations coded to SI Identification

SI Domain	Support	Objection
Political System	Climate Change	Photomontages are misleading
	Renewable energy	Not demonstrated it is financially
	Reduction in CO2	viable
	No nuclear reliance	Increase in energy bills
	Meeting Kirklees targets	Lack of replacement parts means
	Lessen demand for fossil fuels	technology will become redundant
	Energy mix	Inefficient
	Cost effective	Electricity not going directly to local
	Power generation should be	community
	localised not centralised	Subsidies
	In line with KMBC policies on	Proposal not adequately publicised
	energy efficiency	Contrary to UDP and NPPF
Personal and	No evidence that it will impact	Tourism and local economy
Property Rights	detrimentally on tourist	Risk to low flying aircraft
1 7 0	numbers	, J
	Boost local economy	
	Local employment and	
	education benefits	
	Developing new skills in the	
	local workforce	
Community	Community Fund	Highway safety during construction
	Neighbourhood Fund	Driver distraction
	Ecology Fund	Users of the PROW network,
	Local decision making on	enjoyment diminished
	investment options	Landscape and Visual amenity
	Visual impact insignificant	Proximity to dwellings
	Turbines are better than	Nightscape affected due to flashing
	pylons in the landscape	aviation lights
		Mechanical failure risk to health and
Health and	Turbines are not noisy	Noise nuisance
Wellbeing		Low frequency noise
		Shadow flicker
		Isa throw
Cultural and	Add interest to the landscape,	Compromise the isolated and wild
Heritage	a new post industrial	landscape
	revolution	Overbearing structures dominating
	Elegant addition to the	the area
	landscape	Landscape and visual impact

SI Domain	Support	Objection
	Turbines are more attractive	Detrimental impact on the setting of
	than fracking infrastructure	Peak District National Park
	Turbines are an accepted	Cumulative effects / setting precedent
	feature in the landscape across	Applicant has not demonstrated
	the UK	special circumstances that outweigh
	The location is not a	harm to the Green Belt
	pristine landscape	Adverse impact on local heritage
	Turbines do not kill birds in significant numbers Wind is a valuable resource in	Bird population and integrity of the SPA
	Yorkshire	
Fears and	Protect children and future	
Aspirations	generations Forward thinking project Enhance Colne Valley's	
	reputation as a 'Green Vallev' This type of project galvanises	
Way of Life	communities	

Source: Adapted from Douglas, (2014), Wakefield (2014)

The political system impacts for those in support of the proposal centred on combating climate change and the benefits of renewable energy technology and local control of the means of production, whereas those that object focus on the efficiency and financial viability of turbine technology, as well as the robustness of the ES. Within the cultural and heritage domain, objectors focus on the risks to landscape and visual character, setting and designations as well as a risk to unrecorded archaeology. For the supporters, there is a rebuttal to this as the development is perceived as a beneficial addition to the landscape. Within the personal and property domain, supporters challenge claims that the development will impact negatively on tourism numbers, emphasising the positive outcomes for the local economy. The objectors, feel tourism and aviation will be affected. Within the community domain, supporters highlight the new funding streams that the proposal will create and the capacity built in the area by a community led initiative. For those that object, concern is centred on risks to health and safety and the enjoyment of recreational and residential amenity or scepticism towards funding streams. Within health and wellbeing impacts, the objectors are concerned with noise,

shadow flicker and blade throw, whilst the supporters denounce there is any noise impact. Within the environment domain, objectors highlight the impact on birds and the SPA, whereas supporters rebuke this.

There were no objections made that could be coded within fears and aspirations or way of life domains. However, supporters perceived the project as one that has united the community, considers future generations and offers the community a new identity.

In addition to the individual representations several groups submitted objections to the proposal. Slaithwaite and Marsden Oppose Giant Industrial Turbines (SMOGIT), was established to oppose the development. They submitted an objection to the planning department outlining their key concerns:

- Community impacts: benefit one section of the community at the expense of another; visual and landscape impacts on residential and recreational amenity; light pollution; risk from ice throw and driver distraction
- Political: business plan does not evidence the project's viability; poor site selection and assessment of alternatives; no funding for decommissioning; misleading photomontages and limited carbon emission reductions;
- Historical and Cultural: landscape character; inappropriate on the Green Belt designation, with no special circumstances that override this; local heritage assets and risk to unrecorded archaeology, impact on SPA and the setting of the Peak District National Park
- Environmental: VWC advised at pre-application consultation that the proposal would cause negative environmental impacts;
- Personal and Property: negative impact on tourism, local businesses and local economy, risk to aviation and
- Health and Wellbeing: noise pollution and shadow flicker causing turbines to be remotely switched off thus affecting efficiency (Wakefield, 2014: 30-31).

VWC, were asked how they had dealt with the actions of SMOGIT.

"if we throw enough mud, then some of it will stick", is a phrase used in the email for their supporters. So, you can see the approach that's been taken, but having said that, I don't think that they have been that successful. They've only got a quarter of the letters that we've got into planning. What is it, three to one in favour? They haven't really got a mass movement, you know when you hear about anti groups in other areas, you know when you are looking at commercial proposals, sometimes you get a lot of village hall meetings, town hall meetings, but they have not managed that. They called a public meeting at Nont Sarahs [pub by the site] and we went there and about twenty people turned up, which was all of them basically no one else turned up, so it's not really taken up.' (SS, 1/11:54)

Members of VWC, attended SMOGIT's first meeting, where they attempted to debunk myths and discuss the benefits of the project. However, the Action Group did not give them much time to discuss the proposal, instead Steve Slator was subject to jeering from the group (DG, 1/14:12). It was the only meeting with SMOGIT as VWC realised, that regardless of what they said, they were not going to change the minds of SMOGIT members. SMOGIT was established after the public exhibition in September 2013. Their late response to community participation was due to SMOGIT believing that VWC, would not succeed because of the sites proximity to the SSSI, the need to maintain motivation to continue as volunteers and a perception that VWC would not be successful in achieving funding support.

'Every aspect, on what we can do gets slammed down by the antipeople, but they are a minority and they are quite nerdish and a lot of them are people who complain about everything. There's quite a percentage, say of the 20% there is 5% of them who I know (no names) who repeatedly complain about everything they can possibly complain about. They love to complain [laughs]' (DG, 1/42:31)

Steve Slator commented that the members of SMOGIT liked to attack the council from a right-wing view point, all of them residents at 'the tops', living in larger farm houses located nearer to the site. Who view the proposal as 'a little blemish on their perfect world' (SS, 1/7: 19).

'somebody said to me, "I support them anyway, but I could almost just support them, just literally, so that people who think they are better than other people...with them there up on the tops, with their four by fours and their horsey cultures", which is sad, just so they have to listen to something as well, [laughs] even though there isn't any noise, just like the rest of us who have to live with traffic and pollution in the world... (DG, 1/6:45)

In response to if they thought they had changed people's minds in support or opposition to the project,

'in the early days, it sounded like a good idea then soon as they found out how big they were going to be, where they were going to be, his [a supporter] wife was a landscape architect, and she went mad' (SS, 1/10.00) ['Mad, crazy, screaming, she was enraged'] (DG, 1/10:21)

'I think when you live in a rural community, very rural like that, you know, you don't want to fall out with your neighbours, so if you know that it's quite an emotive issue, then people tend to think 'well I'm just going to keep my mouth shut'. (SS, 1/9:07)

'Yes, it is only a minority that oppose and the people that oppose, oppose with hatred and vengeance...they are also part of the larger anti wind turbine groups. And they also don't believe in climate change a lot of them, there are a lot of very standard myths that are put out and are constantly put out.' (DG, 1/10:51)

'So, if we didn't have any opposition would it have been different? I don't think so the planning would still have come to the same

conclusions. I think if SMOGIT had stayed in bed, we still would have been in the same position. I don't think they have influenced the planning process. Talking to the councillors, they are in favour of it. I mean yeah, they have had some influence in terms of talking to the local MP, and he wrote in an objection. [DG: 'but the councillors are all Labour'] yeah, but the Tories were against it before SMOGIT came along, and they are against now so nothing has changed.' (SS, 2/1.55.45)

Locally, the councillors were generally supportive at Cabinet level and the Green Party, were represented in Kirklees, but not in the Colne Valley or represented on the Strategic Committee for major developments. However, within the Colne Valley ward there was a conflict interest,

'Support from one councillor, local councillor only one, but she is unable to be active in that support, unfortunately because of a really random occurrence, because her daughter goes out with somebody who lives nearby the wind turbine site who is pro the wind turbine site and has agreed to have the substation.' (DG, 1/43:53)

In the early days of the proposal, Kali Mountford (2005-2010) for the Labour Party, had been MP for the Colne Valley.

'We did our survey, everyone wanted it, our local MP was really in favour of it, Labour MP (Kali Mountford) at the time, she was really in favour and took it to Parliament's Question time, didn't it? Saying that 80% of the people in the Colne Valley wanted it and her constituents supported it. She used our survey without dissing it.' (DG, 2/2.17.21)

Mountford, asked a question in response to the debate on the Energy Bill (2008),

'Communities in my constituency are keen for changes to be made so that they can have energy from renewable sources; they want to have a sustainable community and then to sell energy back to the national grid. However, they feel that they are stymied by current regulations. What comfort can they be given that those obstacles can be removed and they can get on with being a sustainable community?' (Kali Mountford, Labour, Colne Valley, 3:45pm, 22nd January 2008¹⁰³)

However, Mountford lost her seat in 2010, replaced by Jason McCarthy of the Conservative Party. McCarthy, objected to the proposal because the development would be detrimental to the local environment, skyline and noise to nearby dwellings. Craig Whittaker, Conservative MP for neighbouring Calder Valley, objected because he found research that suggests manufacture and transportation of turbines causes more greenhouse gases than they save, the erection of the turbines would destroy peatlands and put water supplies at risk.

'Jason McCarthy came to our first public display [September 2013] and left a comment saying something like [SS: 'which we have a photograph of and the original somewhere'] which says "community driven renewables are the way forward". (DG, 1/46:55) [SS: 'This was after he had looked at all the pictures, the photomontage and everything. He's seen the lot.'] I said oh Jason, you know if you weren't Tory I might even vote for you [laughs], but he decided he was being lobbied by the people on the hill and he jumped over the fence. And he has now said that it's not community driven' (DG, 1/47:29)

'we were interviewed by the Calder Post on the phone, "we want to do another article", I'm a bit wary of them because they have been pretty negative, but I did talk to them. When the article came out it was "local Tory MPs slam wind farm proposal" and basically they were just reporting how they were objecting to the proposal and what we said about it just wasn't printed.' (SS, 1/46:25)

'The impact of UKIP is that the Tories are moving towards the UKIP agenda which is...[DG: 'Bonkers'], climate change deniers, therefore renewables is a complete waste of money, but bonkers basically yeah.' (SS, 1/48:48)

¹⁰³ Available at https://www.theyworkforyou.com/debates/?id=2008-01-22b.1369.1#c15129

The CPRE, did not consider the merits of the proposal as special enough to encroach onto the Green Belt, would have a severe impact on the landscape, detrimental to the setting of the Peak District National Park and nearby South Pennines SPA, contrary to KMBC UDP, would seriously affect the visual amenity of nearby dwellings and would put any unrecorded archaeology at risk from the construction. The National Trust, objected because of the adverse impact on integrity of the SPA, which is within the ownership of the NT, impact on landscape and visual amenity and the setting of the Peak District National Park and the adverse impact on local heritage assets and archaeology. Yorkshire Wildlife Trust, objected because of the impact on the SPA, and significant damage to priority habitats of the blanket bog. Huddersfield Civic Society, objected because no special circumstances have been demonstrated that outweigh the harm to the Green Belt, landscape and visual amenity, unrecorded archaeology at risk from construction, impact on the South Pennines SPA and impact on leisure and recreational amenity and tourism.

Even though the proposal gathered 1,077 written representations in support and 325 objections, and the project developer was a CE organisation made up of residents, the case officer concluded:

'[B]acking for wind energy developments from the community affected is now a prerequisite before planning permission can be granted. Officers consider that as this case involves the erection of major structures in the landscape, which would be visible from distances of more tha[n] 20km, the affected community could extend well beyond the immediate vicinity of the site. This has been reflected in the nature and source of both objections and supporting representations. Although it is difficult to define what is the affected community with regard to this proposal, *Officers consider that it is clear that public opinion is split and, as a consequence, the Council is not in a position to confirm that the affected community back this proposal* (emphasis added). Officers therefore consider that this development would not accord with guidance contained in the 'Renewable and low carbon

energy' chapter of the NPPG [sic] which is a material planning consideration.' (Wakefield, 2014: 66)

9.8 The EIA and SIA Activities

Much of the tasks and activities VWC undertook prior to the Scoping Opinion, falls within *understanding the issues* of the 26 tasks of an SIA. Once funding was secured, a site found and the CE formally established, VWC were then able to gain assistance through the EIA *to predict, analyse and assess the likely impact pathways* as part of this process *strategies were developed* to mitigate negative impacts and enhance benefits. Following the statutory consultation period and responses to the ES, the application was withdrawn by VWC, so tasks and activities to develop the SIMP and *design and implement monitoring programmes* were not completed.

VWC, commissioned SLR Consulting, a global environmental consultancy registered with IEMA. The in-house project team included experts in town planning, engineering, hydrology, archaeology, ecology and other environmental specialists. The team worked with The Energy Workshop, a Yorkshire based renewable energy consultant, on landscape and visual assessment. ACCON UK, specialist in noise, air quality and vibration on noise. With James Blake, from the Centre of Ecology and Hydrology on climate change SLR (2013b).

The EIA Scoping Opinion offered a list of indicative matters to address, paying attention to impacts on landscape, ornithology and noise.

'The Scoping Opinion concluded that there have been no significant concerns raised through the consultation process and that provided consultees comments are taken on board and are considered in the supporting information, the submission of an application is encouraged.' (SLR, 2013a: 9)

The PDNPA, did not respond to the Scoping Opinion and Natural England requested assessment for cumulative, species and habitats, national landscape character, PROW maintenance and climate change impacts. KMBC Environment Department, added safety issues associated with topple distances and blade throw, shadow flicker, the PROW network, capacity factor, maintenance and monitoring regimes and noise impacts.

The ES is divided into four volumes, the first a 32-page Non-Technical Summary. The second volume, offers 15 chapters of narrative on each area of impact. Chapters one to five outline the site, proposal and policy support for the development with chapter five focused on the assessment of the proposal on climate change. Chapter six and seven have the most information with 70 pages on the assessment of landscape and visual impacts and 84 pages on ecology. The amount of content reduces significantly for the chapters on noise (25 pages), cultural heritage (31 pages) and geology, hydrology and hydrogeology (26 pages). The chapters with the least amount of content are those on traffic and transportation and those on shadow flicker with 16 pages each and the chapter on socio-economic impacts with 14 pages of content. With a final chapter collating other issues such as aviation and telecommunications together in eight pages of content. Volume three, is a collection of drawings, maps and photographs to support the assessment, Volume four, collates the appendices of detailed survey data that informed the assessment.

The chapter on socio-economic impacts, summarises the legislative framework for the proposal. The activities undertaken by VWC for community involvement prior to the application is detailed as is the 'Programme of Community Consultation' that was undertaken as part of the planning application. The chapter continues by outlining the baseline assessment of Marsden and Slaithwaite which is limited to: population; household numbers, prices and ownership; age; income and unemployment claimant percentage; the percentage of people living in rural isolation; the type of businesses in the area and the employment by sector statistics. This

chapter then summarises the assessment of impacts on tourism and recreation amenity and employment and local businesses. Then the impact the neighbourhood and community fund, shareholding options and business rates income can bring to the local community. The chapter concludes with an assessment of the 'Social Value' that can be derived from supporting CE cooperative (SLR, 2013b: 13). The social value is described by SLR, as increased competition to reduce electricity costs, offsetting of austerity measures, strengthening of community links, 'collective agency' creating empowerment, community cohesion and resilience (SLR, 2013b: 13, 391-392)

Yeah it's something they like to hear that there are going to be jobs. When we are talking to councillors we are talking to the Cabinet and they don't pick these things up from the ES, its huge they are not going to read it, so you have to keep going on about it and make the most of those points. Job creation regardless of your political persuasion is the one that will always tick the boxes and get the votes. When we were doing the ES, when we got the draft the socio-economic arguments were rubbish, its fundamental stuff, it's hardly in there. So, we rewrote practically most of this chapter ourselves or rather we added stacks to it anyway; otherwise there would hardly have been anything. It's still quite a short chapter.' (SS, 2/1.18.15)

The responses to the ES from the statutory consultees initiated further work for VWC and its EIA project team. The considered impact on the SPA, triggered an Appropriate Assessment by KMBC as they enacted conditions of HRA process to assess the likely impact on the integrity of the nearby SPA on breeding bird assemblage. Reports by JMA, commissioned to assess the ES on landscape and visual impacts and by the PDNPA, to support their objections to the proposal; were defended by VWC, in a rebuttal to the planning department.

9.8.1 Ecology Impacts

The KMBC, Environment Officer (EO) objected to the proposal as VWC did not address the issues to be considered by an HRA. That is, the methodology to assess the risk of collision by bird species was considered as not generally employed. The assessment did not consider the proposal site is surrounded by land set as a Higher-Level Stewardship scheme, which aims to create favourable breeding bird assemblage for the SPA. The EO, stated that the survey was undertaken during 2012, during weather conditions that were poor for breeding birds. The assessment on populations and displacement impacts was considered an underestimation, the methodology used, not relevant to the South Pennines and the research studies used, not peer reviewed. Of the studies used that were peer reviewed, the EO asserts that although the studies (Pearce-Higgins (2009)) were more robust they still were not conclusive. So, unable to meet the HRA requirements, the EO requested further information (Wakefield, 2014: 18-19). VWC responded by submitting a population viability analysis (PVA) for impacts on curlew and snipe to address the EO's concerns (at a cost of £5000 that required further fundraising), however the EO maintained his objection as he considered the PVA not relevant to issues of impacts on site integrity

'What about the situation with the particular Environmental Officer, we have no idea what his qualifications are, our ornithologist is highly qualified and highly respected...but Natural England defer to him as the local expert and that's who they will follow. I will just give you the example I know personally about. A year ago, I was creating an accessible walk in an area and we were told that we would need planning permission to put a couple of benches in as it wasn't a public right of way, as it was owned by British Waterways. We had to jump through some hoops and he told us that on a path that is used regularly by dozens and dozens of dog walkers who let their dogs off the lead. We were told we weren't allowed to do any work between March and September because of bird breeding. The public right of way people said that this was ridiculous, that they had never heard of such a thing...He also said we couldn't put a structure somewhere

because of water voles; there are no water voles, there's mink bounding all over the place.' (DG, 2/19.43)

The Royal Society for the Protection of Birds (RSPB) objected to the proposal because of the displacement of moorland bird species within the SPA. The methodology used to assess this in the EIA was not considered robust and the local benefits of the proposal were not considered imperative enough to override the planning conditions. The submission of the PVA did not address their concerns (Wakefield, 2014: 35)

The National Trust objected to the proposal because breeding species on land surrounding the SPA. The EIA did not acknowledge the survey limitations, or demonstrate how site integrity would be maintained. NT consider that displacement effects occur up to 800 meters from a large turbine (NE state 600 meters) and the SPA is 150m from the closest turbine. Overall NT did not consider VWC had demonstrated how this was the only available site for the development and how the benefits of the proposal were reasons of overriding public interest (Wakefield, 2014: 52)

'Natural England aren't really concerned over the collision anymore its displacement of birds that they are concerned about. Which is the Pearce Higgins study which gives a greater displacement than other studies but there's been no studies that have been so peer reviewed as the Pearce Higgins studies, but there are loads and loads of studies that show that the birds are displaced but not as far as the Pearce Higgins study, but shows that actually the birds come back, its bonkers. Ok you get your curlews displaced by construction the grass regrows and all you have is three turbines going around. Yeah, we have footpaths through there, the Pennine Way footpath going through there, we've got dogs off leads etc. etc. You know there are people up there. So, the birds go away and everything goes back to normal so your bird's food starts to grow again the insects come back, the grass returns. Don't tell me that Mr Curlew sat out there at 800 meters stays at 800 meters and says [SS: 'I don't like wind turbines', TM: 'they

are the wrong colour'] [laughs] actually we are going to keep away from there we are never going to go near them, they say there is a ruddy great caterpillar, lets nest there [laughs]. It's bonkers.' (DG, 2/36:25)

The case officer summarised that,

'Given that there is scientific doubt the precautionary principle must prevail' (Wakefield, 2014: 51)

9.8.2 Landscape and Visual Impacts

To review the section in the EIA on visual and landscape impacts, KMBC employed Julie Martin Associates (JMA), authors of the Landscape Capacity Study for Wind Energy Developments in the South Pennines (2013) to review the evidence. JMA, concluded that the site was identified as highly sensitive, with no capacity for a wind farm development of this scale in the Capacity Study. The development would conflict with the landscape character of the SPA, adversely affect recreational amenity and the setting of the Peak District National Park (Wakefield, 2014: 20)

'Kirklees Council commissioned Julie Martin Architects and Julie Martin had done the landscape capacity study for the Pennines, which was adopted as a policy by all the local authorities including Kirklees, and that was supposed to be looking at the landscape potential for taking new wind developments, now obviously that depends on your view of wind turbines and obviously their view is that the landscape doesn't have much capacity for turbines, so asking a landscape architect to sort of come up with an idea of how many turbines...it's a crazy question' (SS, 2/44.10)

'I think it has to be balanced. I think it's totally and absolutely ridiculous that something like this, with so much benefit and with

mitigation to improve areas, and the amount of money available to make improvements in the environment in the future, when there is insecure funding for even people who are objecting to us, like the National Trust. I mean the irony of it is that if this goes ahead we could be funding some of our main objectors willingly, without any bad feeling. I've got a big thing about conservation, being a biologist type person I know that conservation is manmade we don't live in a natural environment. The moorlands are not natural [SS: 'they are managed by burning and sheep grazing, otherwise most of the area would be forests by now'] there is a certain aspect that yes there may be some rare things up there but rare things go to rare environments. I kind of lean towards the Monbiot thing or just as a thinking person, I see every time we get heavy rain here the rivers are brown orange and we get flooding down there all silting up, so it's not working [SS: 'that's because it's been managed to stay as it is'] it's been managed to stay as it is by massive heather planting and helicopters, and burning and the grouse shooting, the over grazing [SS: 'and huge subsidies going to large farmers to not graze their animals'] yes someone has chosen to say we will have heather but we won't have bracken, we won't have trees. About the prevention of flooding by mismanaged uplands. So, what is seen as a natural wilderness moorland is actually a barren wilderness. So, I think people don't like change so they want to keep it as it is, so I feel very strongly about all this. Its believing in experts and believing in the National Trust [SS: 'they all have their own agendas, It's quite a narrow focus']' (DG, 2/31.48)

9.8.3 Recreational and Leisure Amenity Impacts

Planning officers, considered that the impact on recreational and leisure amenity would deter enjoyment of the PROW, negatively impact on the attractiveness of the area as a tourist destination and so impact adversely on the local economy. KMBC Business and Economy department raised concerns that the development would have a negative impact on tourism

because of the impact on the landscape and objected to the proposal. VWC, argued that this was unlikely to occur as the Colne Valley does not rely on a pristine landscape to attract visitors, nearby wind farms are promoted by tourist boards and there is no evidence that visitors are dissuaded from visiting an area due to the location of wind farms. KMBC Business and Economy Unit, have not based their objection on research, so this should not be given consideration in planning terms.

'It's not an area of outstanding beauty [SS: 'but there take on it, is that it is, if you read the landscaping report, you hardly recognise it what's in it, is not what we know'] The moors are man-made. (DG, 2/40.57)

'More and more people like them...but so many people say they are beautiful and not just they don't mind them, but they actually like them...One of our committee members doesn't like them, does not like them at all, the aesthetics he thinks are hideous and yet he is on our committee. But he thinks climate change is very serious and he thinks this is a very viable and useful project towards tackling and combating climate change. It's not all about visuals is it?' (DG, 2/1.06.37)

There are no tourism receptors on the site, so negative impacts are limited (SLR, 2013a: 26). The visual and shadow flicker impacts on nearby restaurants (800 east) as considered by JMA as causing a residual negative visual impact on local tourism. The ES argues that the development could,

'attract tourist footfall to the area, particularly when, as with the upper Colne Valley, the location of the Slaithwaite Moor wind energy proposal, the area is already well known as a focus for other 'green' projects and businesses.' (SLR, 2013b: 13, 392)

9.8.4 Socio-economic impacts

The key driver for the development is the economic benefits through the

community, neighbourhood and ecology funds for the host community. As well as the economic benefits for investors who become shareholders in the development. National and local policy supports the development of renewable energy, specifically those that are community owned and led. The ES states that this has a positive impact on the local community not only through income generation for health, social and environment benefits, but also on social identity.

The idea of a Social Impact Assessment, if we had had that in place, I mean for this site we would have had to do an EIA anyway because of the Special Protection Area. Maybe if the proposal had been smaller and somewhere else we would have done a social impact assessment. But unless you change the criteria that's in the planning system we knew that the social impacts would be covered in the EIA. I don't know if in this case a Social Impact Assessment would have helped because we are community led and there should be some planning benefit to that fact. I was saying this to the planning officer today that it should be given more weight and he was saying "no, no, there is no neighbourhood planning in place, there is no local policy in place, so I can't give it any weight", we were in there for two hours today, he won't also give it any weight for the community benefits that it will create. He said that "it could be seen as you just buying permission". (SS, 2/13:59)

Local labour and suppliers' contracts were to be encouraged. The proposal predicted to generate a small number of temporary jobs during construction and create one job during operations for the administration of the SIMP. The supply chain benefits of having temporary workforce in the area (fuel, retail, accommodation). Maintenance and inspection during operations was expected to be from outside the area, but VWC had approached local businesses to review their operational preparedness for uptake on procurement.

'We said we will give local contractors the opportunity to tender the same as anybody else. But we talked to David Browns who make

turbine gearboxes, but they only export to China! [laughs] They do maintenance on turbines as well so you know they might be the possibilities there. ['DG: what about the construction of the site?'] Yeah, well there is a local groundworks contractor, but again you can't say you are going to give it to them, you have to tender.' (SS, 2/1.17.08)

Outcomes from the community led approach to consultation received feedback on suggestions for community fund spend. Ideas included, building energy efficiency measures, road crossing patrol person to promote road safety to children, maintenance of local footpaths and bridleways, youth training and employment initiatives, assistance to those at risk of fuel poverty, public toilets and the development of new CE projects. The neighbourhood fund offers an annual payment to residents living within 1.6km of a wind turbine for the life of the project, with the objective that this income is likely to be spent locally thus benefiting local businesses and the local economy. Based on VOA rates, KMBC is due to receive £76,000 per year in business rates from the development. Shareholders who have invested in the development will expect a return on investment of approximately 6-9 percent. Again, spend from this income was predicted to be allocated, in part locally (VWC, 2014: 2, 13-14).

'If you tabled majority opinion in the Colne Valley then we would be going ahead with the development without a doubt. So, it's not reflecting local feeling and that local feeling doesn't swing with the planners. When I was speaking with the planning officer, I raised subject of support with our 1,500 supporters' letters, as some of the letters were not being recorded. He said that it wasn't the numbers that were important, it's the arguments that are made.' (SS, 2/1.57.56)

The ES found that there was a desire for community owned power in the area, which could assist in lowering utility prices through diversifying the competition. In this way, the ES assessed that the development had the potential to create social value by strengthening community links by understanding the project history, of the work of local volunteers,

'This 'collective agency' has been, and, for a steadily growing number, continues to be inspiring and empowering. Such collective agency only serves to further strengthen local communities. A successful wind energy development, with the electricity generating facility owned, at least in part, by local people and contributing to local needs, is expected to help reinforce community cohesion and self-reliance in the face of the current difficult economic circumstances.' (SLR, 2013b, 13: 392)

The social value of the project was described as a politicisation of the volunteers.

'It does politicise you...I'm politicised very much so, even though I'm someone who has been going on demos since the 1960s well not the 60s the 70s [SS: 'laughs yeah you're not that old Diane'] So yeah you are aware of things as a youth...But then you have kids and it all takes a back seat a bit. But I do think there is more information around about it now, the climate change issue is more open, but the difficulty is in knowing what is true, I mean that's a whole different topic. But you are more aware and I think it has made me a bit more cynical, in terms of authority and government and everything and even more so power and corruption. It's politicised me in that I see many of these things now as just a result of capitalism. So, in that sense I've been newly politicised, I've probably always felt that but now I've got evidence. I sort of felt it, but dismissed it and you just get on with your life.' (DG, 2/1.42.02)

'I think there is more to get angry at now frankly, I mean just putting the whole wind application totally to one side, you know, I've been wanting to be politicised and get involved in stuff because since the recession started, the demonization of the poor and bankers getting off scot-free and richer people getting richer [DG: 'and selling off everything that belongs to the state and then starting off their term with things like bloody Big Society. Actually, I've always volunteered

me, it actually put me off volunteering, I didn't want to volunteering or anything anymore. [laughs]' (SS, 2/1.45.00)

Slator and Green understood the disconnect between aspirational strategies for the community led developments and the local reality. They have an understanding that the NPPF 'seems ambiguous' and locally they have a policy vacuum (SS, 2/1.23.02). They were aware of conflict between the different coalition departments and believed if DECC had more power to support CE, then their proposal would be approved.

'Obviously, this all hinges on the next election, you just can't call that can you? It could be worse after the next election.' (SS, 2/1.51.54)

'But that's just rubbish that we have to wait for whatever political system is in place. I don't really want to be their puppet either, but I want the project to go ahead because it's good, but politically its quite big stuff. You could almost envisage a slight shift, like you say we are in this community energy coalition thing, but a slight shift of that, in it becoming important, would mean there would be some 'nod, nod, wink, wink; let us through" (DG, 2/1.52.05)

9.8.5 Mitigation and Enhancement

The mitigation, enhancement and monitoring efforts include: design of the farm to minimise footprint on peat soil; adoption of industry best practice to limit noise impacts; implementing a strip, map and sample investigation to avoid damage of unknown archaeological remains; implementation of a construction traffic management plan; a management and monitoring plan to minimise any risk to water pollution; employment of security patrol to protect public during construction; implementation and maintenance of wader scrapes, which provide nesting areas for snipe and curlew birds, foraging areas for bats and breeding grounds for amphibians; establish a noise complaint procedure and ongoing monitoring of shadow flicker (SLR, 2013a: 29-31).

However, the planning case officer cautioned that mitigation efforts proposed for the site, cannot be used to offset displacement effects on the SPA, as the SPA is subject to different mitigation requirements (Wakefield, 2014:54). Mitigation efforts on displacement during construction cannot be demonstrated to work during operations. As the case officer felt this cannot be scientifically absolute he then recommended to invoke the precautionary principle.

After VWC reviewed the statutory consultee responses, they submitted a rebuttal to the planning department due to technical omissions and queries raised in reports by JMA and the Peak District National Park Authority (PDNPA) on the quality of the LVIA. VWC, challenged the PDNPAs response that the proposal site (if it were in a National Park), would qualify for inclusion in the natural zone of the Peak District setting. VWC, argued that PDNPA's response was overstated. For example, their response that 'the proposed wind turbines will have a *very substantial* impact upon the setting of the National Park' but the LVIA, found *moderate to substantial* impacts (VWC, 2014: 4).

The restriction on medium to large turbines in or close to the SPA, as stated in JMA (2013), exceeds those stated by the EC Habitats and Birds Directives, which permit development if it can be shown it does not have an adverse effect on the landscape designation (SLR, 2013: 18). As stated in EN3, LPAs should not refuse acceptable renewable energy developments based on buffer zones and separation distances (SLR, 2013: 19). VWC, challenged the JMA response, that the site was highly sensitive landscape character to wind turbines of the proposed scale. VWC, argued that the current detractors on the site had not been considered. The landscape of the Colne Valley has been subject to 200 years of change due to technological advances such as,

'quarrying, roads, reservoirs, canals, railways, textile mills, chimneys and telecommunication masts. So, while the proposal has a landscape impact, the development of contemporary technology is very much in the tradition of the area, and viewed in this context, it could be

expected that the perceived significance of the landscape impact will be ameliorated.' (SLR, 2013: 19)

In response to the EO's concern that the integrity of the SPA would be negatively impacted upon, an Appropriate Assessment was triggered as part of the HRA process. The ES notes that,

'The Appropriate Assessment concluded that the development would not result in significant effects on any valued ecological receptors and that no adverse impact was predicted on the integrity of the South Pennine Moors SPA' (SLR, 2013: 17)

However, the planning case officer reported,

'it was likely that this development would result in the birds for which the SPA had been designated being unable to use a significant area of the SPA and adjacent functionally linked land as freely or in the same numbers. The aforementioned consultees [JMA, PDNPA, NT, NE, RSPB] have confirmed their agreement with officers that the proposals fail the Appropriate Assessment.' (Wakefield, 2014: 54)

As the AA test fails and there is no 'imperative or overriding reasons in the public interest to support the proposal' then planning permission must be refused. (Wakefield, 2014: 59).

The CPRE were instrumental in campaigning for a Green Belt policy in the UK from the 1950s onwards. Its aims to prevent urban sprawl into rural landscapes, thus conserving rural habitats and wildlife. There is no agreed definition of urban sprawl, most are based on land use and density, for many types of development. Generally, it is considered negatively, as ugly development impacting on agricultural or open land or the character of a village, in an unplanned way Chin (2002). The NPPF states,

'When located in the Green Belt, elements of many renewable energy

projects will comprise inappropriate development. In such cases developers, will need to demonstrate very special circumstances if projects are to proceed. Such very special circumstances may include the wider environmental benefits associated with increased production of energy from renewable sources.' (NPPF, 2012: 21)

However, the government does not offer any advice to decision makers as to how 'special circumstances' and 'wider environmental benefits' are defined. The Case Officer, for KMBC stated that,

'It is considered that due to the nature of this proposal, which involves the erection of substantial structures and the construction of associated infrastructure, it would not preserve the openness of the Green Belt and therefore constitutes inappropriate development.' (Wakefield, 2014: 33)

9.9 Planning Outcomes

The KMBC planning case officer, did not find the benefits of the scheme outweigh the harm to the Green Belt, landscape character and the integrity of the SPA and impacts on the habitats bird species, residential and recreational visual amenity and the setting of the Peak District National Park. The case officer stated that VWC had not demonstrated the need for the development and evidenced why it could only be located at Slaithwaite Moor (Wakefield, 2014: 21). He recommended to the planning committee that the proposal should be refused. During the week after the report had been circulated but prior to the planning meeting, VWC submitted their rebuttal, however, the council members decided to defer their decision until after the winter.

'So, we have our dozen people practising for their three minutes on tourism etc. but when we get there we are told its likely to be deferred, very, very, very likely to be deferred. So, I got in touch with everybody and said "don't bother to come we can't have you taking time off work to come and support us". So, it looked like we didn't have any supporters because there were just four of us that turned up and there

'He is the case officer, so it's not necessary the last word on it, he has a senior and the council has to approve it. We are meeting with the Chief Planning Officer next week. We are hoping that the potential to go to appeal and the associated costs for the council may have an impact on their decision making. We are hoping that in the end they will take a more pragmatic view and a wise council will prevail. Just that there doesn't seem to be much sight of that. That is why we have put in a report to attempt to counter some of the Planning Officers views directly to the members.' (SS, 2/48.02)

Following the case officer's recommendation, the interviewees were asked their opinions on their experience of the local planning system,

They are not treating us like a community group they are treating us like big business like the dirty developer coming in to ruin the landscape.' (DG, 2/51.22)

'Yes, it's hard not to come to the conclusion that they have already decided. The planning officer and the environmental officer decided they didn't want it and so now they are constructing the arguments to suit. That might be unfair, but that is how it feels.' (SS, 2/51.30)

Overall, they felt that the planning department was under immense pressure due to budget cuts, cuts that are much higher in the north than elsewhere in England. This has led to a lack of capacity within the development control, and a lack of experience in Kirklees with onshore wind applications and the EIA process, all operating within an adversarial system.

'If they are not familiar of the area of work they are just going to play safe because it's always better to say 'no' when you know you've got some grounds to say 'no' than say 'yes' when you think there is a risk. They feel they will be sticking their necks on the line if they say 'yes' because they haven't got the experience to justify it...How do we stick to 'no' rather than help facilitate to find a way forward? On other applications, Natural England have engaged with the applicant in similar circumstances and they have found a way to mitigate the [not clear] issue.' (SS, 2/24.13)

Slator and Green were asked if they would take the proposal to appeal, if the members decided on refusal. They considered that the planning and environment officer had made mistakes, and had not given any weight to the community led benefits of the scheme, which would be grounds for appeal. Their planning advisor and solicitor both confirmed that they would have a good case,

'[DG: 'But this is bonkers'] I know it's really counterintuitive, you start thinking alright let's start back pedalling and let them do their worse.' (SS, 2/26.49) ['It's just creating lots of work for consultants and lawyers. This aspect of it is very disheartening, it's hard.'] '(DG, 2/27.38)

'The lawyers are saying they think it will be almost automatic for example, if the council approve it but Natural England objected then it will be called in almost certainly. Actually, I don't know if it is an absolute certainty, the planners may not be right on this. He was banging on about it today, that if the councillors vote this through it will be subject to judicial review. So, they are laying it on even more, they are telling us what to do, but they may also be frightened of it...He [the planning officer] says he has taken legal advice, you know we have taken legal advice which says one thing and he reckons he has taken legal advice that says another thing.' (SS, 2/59.46)

For VWC, unlike commercial ventures, the cost of an appeal may be prohibitive. They predicted they would need to fundraise in the region of £100,000 for the legal representation, and they have already spent £200,000 \pm

(SS, 1.03.19). This additional cost would need to be sought from their key funders,

'I think we may very well get funding for an appeal, I spoke to CO2Sense about funding the £5,000 [for the PVA], and she said we don't do less than £50,000 now because of the cost of set up, we talked a little bit about it and she said if you do go to appeal come back to us because we may be able to help. She knows quite a lot about the project already so that's encouraging, we might get funding but it's not a certainty.' (SS, 2/1.04.05)

The judgement by KMBC Planning Committee, was to be made in September 2014, however, due to the omissions and technical inaccuracies raised in reports by statutory consultees and the case officer, as well as poor weather conditions on the day of the site visit, the planning committee decided to defer their decision. A week prior to the decision in June 2015, VWC reluctantly withdrew their application. In VWC's final press release, published on their website, the chair, Steve Slator states,

"We're very disappointed of course. We submitted a thorough Environmental Impact Assessment and, over the eighteen months the proposal's been in planning, a lot of additional evidence to show that the scheme could operate without any significant harm to the birds of the nearby Special Protection Area. But Natural England and the RSPB still don't accept that and Kirklees planning oppose the scheme.'

"We're also very aware of how difficult the political environment for onshore wind energy now is, even for community projects. In fact, the new government seem determined only to acknowledge local opposition, which we think is unjust — particularly for the 77% majority of people who've written to Kirklees planning in support! But bearing in mind the huge costs and strict time limit should it come to an appeal, we've sadly no choice but to withdraw. We're going to mothball the project for now and keep an eye on developments. Over time, we hope there may be more recognition of the need for onshore

wind energy to fight climate change, and of the potential of the Pennine moors, especially for community energy" (VWC, 2015)

Slator and Green were asked if the LPA refused the proposal would they feel proud of what they have achieved over the last nine years,

'I don't think it's been wasted [DG:' I might cry'] I'm proud we've tried to do it, I've learnt a huge amount, being involved [DG: 'Steve has done a lot more than the rest of us, he is retired for one thing and it's his fault...his idea [laughs]']. What would we have achieved if it doesn't come off? [DG: 'skills, skills'] We've contributed to community cohesion, and something else may come out of it, but we may all be dead by then!' (SS, 2/2.01.56)

They both agreed they would not have become involved if they had known it would take nine years just to get the proposal to planning, having to deal with community conflict and the hours voluntarily dedicated to the project, affecting other areas of their lives. However, neither of them regretted their time on the proposal and would continue to assist on similar projects in the future,

'I would help, because I would feel as though that would be really mean not to give my experience, I think because I think it's really important. I don't think I would get involved in the same capacity, but I would advise and help.' (DG, 2/2.14.50) and

'I have got involved in another scheme, I'm on the Board of the Four Winds Coop, it's an Energy4All scheme basically, it's not that far away which is one of the reasons why they have asked me to come on. It's in the Chesterfield / Barnsley area they have an agreement with the Hardwick estate who seem to have the ownership of all the old coal haul land so its pits that have been filled, slag tips that have been levelled all that sort of thing. So fewer objections, two that have passed, one they are putting the turbine up next week, no it should

have gone up today. I'm not reactively involved, I've said I can't put much into it because of time, but I'm interested in it and I will stay involved in that for as long as they want me. But that is just single 50kw turbines so a bit less controversial...If I thought it would be a year stretch with no guarantee of success then well you know, I'm older than I was 9 years ago, so I possibly wouldn't. I think we have done our time on this, and we really hope for a positive outcome. I would want quicker returns next time. Which is what we thought at the beginning, we didn't think it would take 9 years, we thought 3-4 years tops. Although we did know it took Westmill thirteen years. I remember saying 'thirteen years that long, ours isn't going to take that long!' (SS, 2/2.15.18)

9.10 Conclusion

Early in the process VWC appear to have support for the proposal from KMBC and the local MPs, this support dissipates as time goes by. The lack of experience from KMBC, the policy vacuum on renewables (but not landscape) because of budgetary cuts in the planning department and the Green Belt designations conspire to weaken their proposal. However, VWC are represented by highly skilled and well-known community members. They were adept at securing funding and overseeing the work of the EIA project team. They were successful in finding a site, despite the various technical constraints. The LA went from offering support to actively withdrawing it, by not finding solutions to the difficulties that VWC found. In this case not only the Environment department, but also the Regeneration department objected to the proposal.

VWC, could secure 70 percent local support for their scheme, but were still subject to sabotage and an anti-wind campaign. A campaign that led to national press coverage and the involvement of UKIP policy advice. A highly-supported project became a contentious one, representing the opposing views

of Energy Democracy and climate change denial. The support they received was not believed or denied, specifically by the case officer. Localism and positive social benefits have no weight in the planning balance. The section in the ES on socio-economic benefits VWC rewrote as they felt it had been a weak area, admitting that this was still underrepresented.

The closer the application came to a decision; the more hurdles were set for the group. The authors of the Landscape Capacity study, who were calling for the site to be redesignated as an AONB, were asked to confirm how many turbines would be acceptable. KMBC requested further ecology assessment, which required further funding. Community benefits funding and Section 106 Agreements were confused with community led scheme. The number of support letters were ignored and not published on the council's website. VWC felt, KMBC feared the Secretary of State would call in the proposal, the local planning officer and environmental officer were working to their own agendas and the opposition campaign had the support of their local MP.

However, for the interviewees, the experience has politicised them. They felt there is a disconnect between aspirational strategies for community led energy developments and the local reality. The weakening of DECC and the ambiguity of the NPPF, has meant they have been they are subject to the political ideology of the time, regardless that at the start of the project when this ideology was supportive. They challenge the wisdom of long-term community projects being subject to the changes of political governance. Especially if LPAs only acknowledge local opposition, and not support. For VWC, nine years of voluntary work have a resulted in a withdrawal of the proposal from planning. An empowered community prevented from having power within the decision-making process, because of the planning system.

Chapter Ten: Findings and Recommendations

10.0 Introduction to Chapter

The literature review and data collection and analysis of central government, LPAs, developers, action groups and community energy case studies answer the research questions: What is the current policy context for the development of onshore wind farms in the UK? This has been discussed by understanding the history of wind development in the UK, the current regulatory system and the role of central government and local authorities in delivering renewable energy policy; What is the current practice for planning the development of onshore wind farms in England? This has been described through the development life cycle of an onshore wind farm as a proposal moves through Development Control; Why is there local opposition to the siting of onshore wind farms in England? This has been reviewed by the literature on social acceptance, landscape values and community benefits and community energy; What planning theories would support SIA as an environmental planning tool in England? This has been discussed by reviewing the literature on communicative and collaborative planning theories and its critique by agonistic pluralism, participation and SIA. What evidence is there the social impacts (positive and negative) have been assessed at a local planning level? By applying a set of Social Impact Identification codes to the content of the written representations used in appeal hearings, LPA wind farm planning guidance and accessing renewable energy data trackers to identify a sample area for investigation. This enabled analysis of submitted, withdrawn, refused and approved planning applications; What SIA activities are currently used to support / oppose onshore wind farm proposals in England and in what context EIA? By applying social impact identification, participation codes and SIA tasks to the content from action groups and developers; and what SIA activities used in the siting of onshore wind farms are specific to: participation; profiling; impact prediction; mitigation; options appraisal; capacity building; conflict mediation, management, monitoring and evaluation? Addressed by examining in detail two community energy case

studies. This chapter highlights the findings of the research to examine how they answer the research questions, support the use of planning theories and test the hypothesis that the English planning system uses Social Impact Assessment to site onshore wind farms.

10.1 UK Context

This research has deepened the understanding of the research problem set out in chapter one, illustrating the discrepancy of higher refusal rates and lower operational farms in England compared with the other devolved regions. The research problem is set in a context of neo-liberal economic decision making and political ideology that removes public subsidy for renewables. An ideology that reemphasises the importance of Localism when objecting to visual landscape impacts, instead of Localism when supporting benefits of renewable energy. Academic writers have proposed strategic solutions to bridge the negative impacts with position benefits, but this remains unimplemented in favour of the no development option.

Finding 1: Research Problem

Of the 124 LPAs in the research sample, 72 LPAs (59%) have had no history of planning activity for onshore wind farms between the period of 1991-2015. Over half of the MPs (all Conservative) who lobbied for the cuts in subsidies for onshore wind farms have never had an operational farm in their constituency. Of the remaining 52 LPAs, 48 percent have experience of only refusing an application. There have been 13 community energy wind applications (over 4MW) in England during 2002 to 2015. Of these only four have secured planning permission. Of the seven planning refusals, three applications were withdrawn prior to consideration.

Finding 2: Political Ideology

Since 2010, the Coalition and Conservative governments have undertaken a systematic withdrawal of support for onshore wind farm developments. This is part of a long-term agenda by right wing political administrations. Wind energy was proved to be economically viable in the 1960s but was suspended in favour of nuclear power. Nuclear energy was too expensive to outsource to the private sector as part of the neo-liberal economic agenda, so required public subsidy. By gaining European approvals for a low carbon subsidy regime, renewable energy was afforded the same market support. The Prime Minister, Davide Cameron (2010-2016) was elected on a Green Conservative platform, only to remove all ministers that publicly supported renewables to those that oppose, in a Cabinet reshuffle of 2012. At the same time, a backbench campaign began to remove subsidies for renewables, specifically onshore wind. This became an election manifesto pledge of 2015. Throughout this period of administration, the following interventions were enacted: the need for EIA at small scale development; pre-application consultation requirement; Localism and the evidencing of local support; non-registration of energy cooperatives; the extension of call in powers and micro management of the appeals process by the DCLG Secretary of State; the removal of RO subsidies support; selling the Green Investment Bank and the reduction in budget and eventual closure of DECC.

Finding 3: Strategic Solutions

The literature review has evidenced that strategic solutions for onshore wind farm planning can be implemented. There have been strategic mitigation ideas against the adverse impacts of onshore wind farms: a national and centralised policy approach; use of the soft estate (natural habitats that run parallel to the highways infrastructure), technology design changes and a reconceptualization of landscape aesthetics. There have been many calls by the UK wind industry for a national policy, plan or programme for on

onshore wind farms to be linked to a Strategic Environmental Assessment (SEA). The SEA, would follow a similar process to the EIA, but instead of a project level assessment this would be applied to the policy, plan or program level. The SEA analysis could include an assessment of the national wind resource and a mapping and selection of areas to be protected or opened for potential development. The SEA approach ensures statutory and public consultation and mitigation, it also gives space to assessing alternatives and the need to justify the policy direction. Ideally this would be determined centrally in liaison with local authorities, but could also occur at a regional or local policy level. This to date has not occurred in the UK.

10.2 Central Government

Implementation of the Conservative political ideology is illustrated through the level of recovered appeals. Micro-management of the process by the Secretary of State supports the reemphasis of the negative visual impacts on landscape and heritage setting over the benefits of renewable energy. This is mirrored in the written representations in objection and in support from community members.

Finding 4: Decision-making Power

Call ins of planning applications at appeal by the Secretary of State usually occur for significant or controversial projects. However, during the period of research the Secretary of State recovered 228 planning appeals. Most recoveries were new housing developments on Green Belt and Travellers and Gypsy sites in rural areas. Of these recoveries, 51 appeals were for onshore wind farms. Of these, 47 cases refused planning, 17 of which refused against the Planning Inspector's recommendation. Of the refusals against the Inspector's recommendation, 38 cases rejected because of impacts on the landscape character, visual amenity and the setting of historic assets. These

actions led the Secretary of State to be criticised for micro-management of the planning system for reasons of political ideology by the British wind industry and the Royal Town and Planning Institute.

Finding 5: Social Impact Identification in Recovered Appeals

The number of written representations in the appeals, objecting to a proposal (50 sources, 2504 references) has more content than those supporting proposals (30 sources, 682 references). For objectors, most content is coded to community impacts, whereas supporters content is mainly coded to political system impacts. The community social impact domain, is dominated by the visual impacts on amenity value or landscape appearance. Unlike the Secretary of State, there is less concern for the impacts to heritage setting. For supporters, the political social impact domain contained the most comment. This realm dominated by content coded to the benefits of renewable energy technology to lessen fossil fuel dependence, reduce carbon emission and become resilient to climate change.

10.3 Local Planning Authorities

LPAs were found to be using SIA activities in their wind farm planning guidance. Most content assigned to predicting and assessing impacts through the EIA, followed by understanding the issues. The LPAs were weakest in providing guidance on operational strategies and monitoring and evaluation arrangements.

Finding 6: LPA SIA Activities

The guidance from the five LPAs, focuses on stages of prediction and assessment of impacts. Tasks that occur within the EIA. The advice then

discusses understanding the issues, which occurs during the pre-application consultation stage of a proposal. Within predicting and assessing impacts, most advice is on social changes and impacts. Most content assesses impacts on ecology and visual and landscape by the EIA. Within understanding the issues, advice on scoping, followed by ensuring an inclusive participatory process and gathering baseline profiling data; has the most references. Less content found on operational strategies and if stated then this links to community benefits funds. Lacking description, is monitoring, evaluation or review processes during and after operations. When it is discussed it refers to decommissioning and habitat reinstatement.

10.4 Developers

Most of the developers' participation activity was informing, but this was followed by collaboration activity because of the outcomes of community benefits funding. This is reflected in the developers' SIA activity which is predominantly operational strategies or SIMPs for community benefit funding.

Finding 7: Developers' Participation Methods

For participation methods, the research identifies that most developers use informing content on their websites. They inform on issues of climate change and the development stages for an onshore wind farm proposal. After informing activity most developers are engaged with collaborating tasks, half of these activities were coded to community benefits funding. The same amount of activity is assigned to consulting, mainly discussing their corporate social responsibility policies in relation to the outcomes of community benefit funding.

Finding 8: Developers' SIA Tasks

Most SIA activity is through operational strategies for community benefit funding, advice to landowners and local suppliers. Followed by information on understanding the issues through feasibility assessment, providing project location maps and describing the planning system and the development process.

10.5 Action Groups

Unlike the objections from the Recovered Appeals, the Action Groups' concerns fell into the political impact domain predominantly coded to issues with renewable energy technology. As with the developers, the Action Groups' participation activity is mainly coded to informing content. Empowering participation activity occurred only when a proposal was taken to planning hearings or inquiries.

Finding 9: Action Groups' Social Impact Identification

Most coded content falls within the political system impacts domain followed by community impacts. Content in political system impacts is mainly coded to technology. This stresses the inefficiency of the technology the opposition to subsidies and the preference for alternative renewable energy. Followed by renewables targets, preferences for the use of fossil fuels and nuclear power. Decreasing significantly, in the amount of content, are issues coded to community impacts which focuses on landscape and visual impacts, followed by the impact on residential amenity or quality of the living environment.

Finding 10: Action Groups' Participation Methods

Most website content on participation techniques coded to informing activity,

followed by involving activity. Informing techniques, rebuke the NIMBY narrative, provide links to further information or answer frequently asked questions (FAQs). A key area of informing activity for the action groups, is offering advice on how to object to the LPA. Empowering activity occurred when a group was involved in planning hearings and appeals.

10.6 Community Energy Case Studies

RCET and VWC experience problems with their socio-economic technical papers in the EIA. Lacking detail and evidence to support the positive benefits of the proposal in comparison to the landscape and visual impacts assessment. This making it difficult for decision-makers to fully include the benefits in the planning balance. Both CE proposals were led by groups of local people, RCET key aims to alleviate poverty, VWC to combat climate change. Both LPAs were experiencing a local policy vacuum for onshore wind planning, community energy provision and neighbourhood planning. The CE groups undertook SIA activity in understanding the issues, prediction and analysis of the impacts and monitoring arrangements for SIMP outcomes. The social impacts they identified reflects the written representations in the Recovered Appeals where objections are based on negative impacts on visual landscape and support for benefits of renewable energy. The CEs excelled in empowering participation activity as they were community led developments. Both groups gained majority support for their proposals, but were subject to powerful opposition campaigns and central government decision making, ironically made in the name of Localism.

Finding 11: CE SIA Activities

RCET produced three pages on socio-economic impacts written by property and construction specialists. They provided out of date Scottish data and gave assurances for local procurement and job creation with no technical data to support these assumptions. They debunk tourism impacts and simply state

that as its community owned with community benefits funding with one sentence listing the range of activities to be funded. The combined knowledge and experience of RCET charities gave them an advantage of having a full understanding of the profile of the communities within their social area of influence. However, although this local knowledge was used to undertake the participatory decision-making process, this was not reflected in the ES.

VWC rewrote the socio-economic paper themselves providing fourteen pages of evidence for a baseline assessment, an assessment of impacts on tourism, recreation amenity and employment and local businesses. The impact the neighbourhood and community fund, shareholding options and business rates income can bring to the local community. Concluding with an assessment of the 'Social Value' that can be derived from supporting CE cooperative. The social value is described as increased competition to reduce electricity costs, offsetting of austerity measures, strengthening of community links, 'collective agency' creating empowerment, community cohesion and resilience (SLR, 2013b: 13, 391-392).

Understanding the issues

Both CE cases had responded to earlier LA studies on landscape capacity and appropriate siting of renewable energy developments in their areas. Both LPAs had previously rejected commercial developments at the same or nearby locations. Both cases were undertaken at a time when the LPAs were in a policy vacuum awaiting the replacement of Local Plans. However, landscape capacity studies for Kirklees and landscape and visual impactstudy for heritage assets in Bolsover were referred to in the planning judgement. The Kirklees site subject to Green Belt designation and a call for AONB status. Both developments were in previously managed landscapes. Bolsover, a former coal mining area and Colne Valley, former mill towns. High ranking on the indices of multiple deprivation for Bolsover meant that the focus for the development was alleviation of poverty, whereas for Colne Valley the focus on climate change resilience. For VWC, the developers were a group of

local residents, whereas RCET a collaboration between two local voluntary community groups. For both CE developers, finding an appropriate site had been difficult. RCET could enter a lease arrangement because of their charitable status and VWC had taken three years to agree on a site that was in their neighbourhood.

Prediction and analysis of impacts

RCET, planning judgement was between the benefits of CE and impact on heritage assets, for VWC the benefits of CE and impact on bird assemblage in the nearby SPA. For RCET, the development control archaeologist, conservation officer, English Heritage and the National Trust argued the negative impacts against the benefits of the development put forward by the regeneration, business and economy experts. VWC benefits of the scheme were ignored in favour of the arguments put forward by the development control environment officer, Natural England, RSPB, CPRE and landscape architects. Both final designs had been developed through a series of mitigation exercises that responded to the concerns of the statutory consultees, English Heritage, the National Trust and Nature England. Designs that had changed size, position and number of turbines.

Monitoring and operational strategies

RCET had developed strategies for a Conservation Area Fund, a tree planting payment and a decommission bond for reversibility costs. VWC developed an Ecology fund, a neighbourhood fund and a shareholder's plan. The main monitoring strategy for RCET was its SIMP for the operation of community benefits funding. For VWC, this work was to be completed once planning permission had been granted.

Finding 12: CE Social Impact Identification

RCET had undergone six years of work at an aborted cost of £600,000. VWC had taken nine years at a cost of £200,000. Both CEs aimed to build the largest CE cooperative in England. For RCET to continue a proud heritage of power and energy production, whilst tackling poverty in Bolsover and for VWC to contribute to an ethically green community providing climate change resilience and challenging the energy oligopoly in Kirklees.

Local objections to the RCET proposal mainly fell within the domain of community impacts headed by landscape and visual impacts and residential and recreational amenity. The main reasons for support included tackling climate change, reduction in carbon emissions and community benefits funding. In the VWC proposal most reasons for objection fall in the cultural and heritage domain, objectors focus on the risks to landscape and visual character, setting and designations as well as a risk to unrecorded archaeology. Objections in the political impact domain focus on the efficiency and financial viability of turbine technology, as well as the robustness of the ES. For the supporters, there is a rebuttal to this as the development is perceived as a beneficial addition to the landscape, provision of a method to combat climate change, the benefits of renewable energy technology and local control of the means of production.

Finding 13: CE Participation Activity

Empowering activity

As CE proposals both case studies engaged in empowering participation activity. As Board members and owners of community energy production. As developers and expert witnesses in the planning process, RCET taking the proposal to appeal and VWC considering an appeal. Empowered in their plans for operational management of community benefits funding.

VWC evidenced 70 percent support for their proposal, RCET 53 percent support. RCET received 85 objections and six letters of support. VWC received 1,077 letters of support and 325 raised objections. VWC avoided public meetings as adversarial, opting instead for direct action activity in Huddersfield town centre evidencing the majority support for their project and gaining international support for their values of energy democracy. However, the planning officer reported that public opinion was split and the Council could not confirm the host community backed the proposal. RCET had strong support from the Regeneration, business and commerce representatives whereas VWC received formal objection from the Regeneration and business department for unevidenced negative impact on tourism due to landscape and visual impacts. Both CEs had gained approvals from funders for at risk development funding. RCET crowd sourced funding from its supporters to pay the costs of the appeal.

KMBC was identified as an LPA that had never approved an application for an onshore wind farm greater than 4MW capacity, although it did consider an application that was ultimately refused. The Colne Valley site was identified by a commercial developer as early as 1993/94 as a potential wind farm location resulting in the Countryside Alliance calling a community meeting to establish an opposition campaign. The later opposition campaign, SMOGIT believed that the proximity to the SSSI, the motivation of the volunteers and the difficulty in gaining funding support would prevent the development. The opposition had powerful representatives: UKIP MEP (site landowner and anti-wind farm proponent), SMOGIT (opposition campaign, led by a landscape architect), Professor Cywinski (resident near the site and nuclear power supporter), Conservative constituent MP, Jason Whittaker (initially supportive but changed allegiances post ministerial statement). Sabotage of the met mast causing £20,000 damage, as well as misinformation, lies and underhand behaviour within the community and on social media. RCET gaining planning officer approval, but overturned by

local members, the case then subject to Secretary of State micromanagement of appeals process. Whereas VWC withdrew their application because of the likelihood of refusal and call in by the Secretary of State. The community led and owned approach was a key argument for RCET in the planning balance, but this was ignored by officers for the VWC proposal. This dismissal would have been VWCs grounds for appeal.

10.7 Discussion

The research has tested the hypothesis that the English planning system uses Social Impact Assessment to site onshore wind farms. SIA activities (understanding the issues, prediction and assessment of impacts and monitoring and operational strategies) are used by LPAs, Developers and CE groups. Social impact identification occurs in the written representations in the Recovered Appeals, the Action Groups websites and in the written representations to the CE proposals. There is a clear delineation between objection to visual landscape impacts and renewable energy technology, and support for renewable energy, community energy and the outcomes of community benefits funding. Participation in the planning process is robust, developers score highly on collaboration activity because of community benefits funding, action groups are empowered because of their involvement in preventing proposals at planning hearings. Yet the empowered participation activity of the CE groups, who should be the epitome of Localism, are disempowered. LPA disregards evidence of support and focuses on levels of opposition.

Warren and Birnie (2009) asked if local or global issues have more credentials in wind energy planning, this research shows that the local perspective takes priority. Statutory consultees such as English Heritage and Natural England have the power to control the narrative. Applying increased significance on the local negative impacts on visual landscape or bird assemblage. Over the global positive impacts for reductions in carbon

emissions. Wolsink (2007) offers a rebalancing, by institutionalising a supportive narrative at a local level. But for the CEs in this research, support was evidenced, for RCET the principle planner approved the project it was local councillors that overturned his decision. For VWC the planning case officer recommended refusal and denied the levels of community support. Instead what has been institutionalised is the objector's narrative based on landscape values. This makes collaborative planning redundant.

Bristow et al (2012) questioned if community governance will be given sufficient power in local decision making, if decisions are opposed to the government policy interests. This research evidences that CE is declared a government policy interest in theory, but in practice community groups are encouraged to participate in the planning system, but when they do, hurdles to achieving their aims are increased and their objectives devalued. Regardless of local support, irrespective of the planning system; decision making is controlled by the political ideology of the day. At present that is a neo-liberal approach that supports the Big Six, cuts to planning departments, abolishing support for renewables and lessening any power, communities attempt to claim for themselves.

Community benefits has no weight in planning, which means the outcomes from the funding do not either. The government are using the EIA to create a sense of bureaucratic burden, to discouraged actors from taken forward onshore wind farm developments. The positive outcomes of a proposal through community benefits funding has no space for consideration and is not being included in EIA. This must be reviewed in line with the work of Cowell et al (2012) on the compensation narrative especially if the community benefits funding is from a community led scheme, where social acceptance is gained because the development can be transformational for the local community.

This research shows participatory approaches to EIA have been undertaken, and the normative, substantive and instrumental rationales for participation in EIA have been followed. But the socio-economic technical papers have not

been undertaken by relevant experts in social research so the specific and wider positive social benefits are not incorporated into planning decisions. The decision makers are not ensuring the full scope of the EIA and are ignoring the potential for an SEA to provide strategic solutions to the problem, except to limit development.

Although most commentators including the government and the CPRE, support community ownership as a rationale for social acceptance; the market system is designed for large scale developments. A system that offers energy brokerage, but until cooperatives have increased in scale they are unable to offer other forms of delivery and so increased income levels for more social outcomes. The legal operational status of cooperatives is under threat, which in part means, there are very few community owned onshore wind farms in England. The government recommends community ownership to achieve social acceptance but ideologically, politically, legally and financially, the system is unable to meet the diverse needs of this development model.

Bond (2011) asks planners to shape agonistic debate to gain democratic decisions. Widening the scope of the EIA to include SIA activities would begin to offer a normative framework in a space of conflict. Agonistic pluralism can analyse identity, social relations, the history of location and alternatives and uncover power relations. For CEs this allows their strengths to be of material consideration and judged in planning. O' Faircheallaigh (2010) highlights the assumption that public participation ensures that the quality of information for decision makers is improved, but that occurs independently from public participation being used as a tool of community empowerment. In the CEs the redistribution of power has been prevented by both local and central government. Participation activity was needed to evidence local support and but only local opposition voices were heard. Aitken (2010a), views participation as a superficial tokenism to gain credibility for decisions that have already been made. That is, refusal of the proposal, has made the participation process useless and results in distrust

between decision makers and communities.

Wolsink (2012); (Wüstenhagen et al. (2007) highlight the lack of understanding between social acceptance and finance institutions, as the latter is one of the key decision makers on a new development. Both CEs had gained considerable levels of at risk development finance, which now as the schemes are rejected will be written off as a loss by the lenders. If capacity factors are included within the planning balance then so should the cost benefit analysis and business plan approved by the lenders of a CE scheme. The development of a wind farm is a political decision requiring sociopolitical, community and market acceptance. That is, the socio-political acceptance of technologies and policies by the public, stakeholders and policy makers. This needs to include any disconnect between national and local policy objectives and the level of government financial support mechanisms, such as subsidies; the community acceptance of procedural and distribution justice affecting trust, the influence of international networks through social movement campaigns and the lessons that can be learned from the global south, local ownership models and the market acceptance from consumers, investors and intra-firm trade.

SIA can be of assistance to planners, policy makers, developers and communities by uncovering and making transparent the hidden power dynamics for CE proposals. Today's planners are weighed down with austerity measures and budgetary cuts to operations, but they must remember their heritage is situated in post war welfarism. The Town and Country Planning Act (1947) was one of a portfolio of transformational policies alongside the creation of the NHS and the welfare state. Planning was progressive, planners were social activists seeking solutions for the common good.

Collaborative planning regime asks for consensus on in decision making, but opponents (including planning officers and statutory consultees) in the CE case studies, provide falsehoods and exaggerate the significance of impacts to

protect their self-interest and promote their ideology to win a planning response that serves their needs. If agonistic conflict had been allowed to develop in the CE deliberation, meaningful participation would have occurred, uncovering the hidden power dynamics and resulting in challenging the established systems of power. For RCET, this was the power of English Heritage, the National Trust and ultimately the Secretary of State. For VWC, the power of Natural England, CPRE, the RSPB and local informal lobbying networks. Mouffe (2013), Flyvbjerg (1989), Allmendinger & Tewdwr-Jones (1998), Brownill & Carpenter (2007). If the power dynamics had been transparent, the CE groups would not have continued with the proposal beyond pre-application consultation and the lenders would not have financed the proposals. Instead, waiting until national administration change that delivers on its promise to support CE developments. Support that means a redistribution of power and profit away from the Big Six electricity generators and a divestment from fossil fuels to renewables and low carbon technology. At the expense of rural place identities and landscape values based on conservation and protection. For planning and planners to be 'agents of progressive social change; not agents of power' (Fox-Rogers & Murphy: 246-265) developments that tackle climate change must be supported over those that maintain the status quo. Regardless of the latest ministerial statement, that purports to guide planning activity, when in fact it aims to win election votes.

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The Cabinet appointments for the Secretary of State for DECC and DEFRA (policy responsibility for climate change) and for DCLG (policy responsibility for planning) and their departments' ministers, have undergone change throughout the time of the Coalition government. This has had an impact on the practice of renewable energy policy and planning permissions for developing onshore wind farms. Figure 2.4, *Changes in Ministerial Appointments, 2008 to 2015,* pictures the key changes to government ministerial posts within departments, select committees and quangos or advisory bodies with decarbonisation responsibilities.

2008 2009 2010 2011 2012 2013 2014 2015 Department Chris Huhne Secretary of State - DECC Minister - DECC Minister - DECC Shadow Secretary of State - DECC Secretary of State - DEFRA Minister - DEFRA Secretary of State - DCLG Minister - DCLG (planning) Jonathan Porritt (2000-09) Will Day Select Committee LordTurner(AdairTurner) Lord Deben (John Gummer) Key:

Figure 2.4: Changes in Ministerial Appointments (2008-2015)

Source: Own Design adapted from www.parliament.gov.uk

The red vertical line in figure 2.4, marks the general elections of 2010 and 2015, with a cabinet reshuffle in 2013. Also shown, is the political party of the Chairs of the Select Committees providing scrutiny for DECC. The Environment and Climate Change Committee and cross-department scrutiny by Environment Audit Committee, led by Tim Yeo and Joan Walley, respectively. The advisory body the Sustainable Development Commission led by Jonathan Porritt and later Will Day wound up operations in 2012. Its

duties transferred to the Committee on Climate Change, led by Lord Adair who in 2012 was replaced by Lord Deben.

Appendix 2: Community Wind Cooperatives, England projects greater than 4MW installed capacity

Sub.	Name	Developer	LPA	No. T	MW	Planning Status
<u>Dat</u> 2002	Coldham Hall Estate	Cooperative Croup	Fenland District	8	14	Planning granted 2002 Operational
2002	Columni Hall Estate	Cooperative Group	remand District	0	14	Planning granted 2002, Operational
2006	Westmill Wind Farm	Cooperative Energy	Vale of White Horse	5	6.5	2005 Planning granted 2007, Operational
2008	Cooperative Bodmin Moor	Community Power	District Cornwall County	20	50	2008 Section 36 for consideration by DECC,
						Planning application withdrawn 2009,
2009	Deeping St Nicholas Wind	Wind Prospect &	South Holland	2 of 8	4 of 16	Own two turbines on an 8-turbine site
2009	Farm Twin Rivers	Fenland Green Power Cooperative Group	District East Riding of	14	28	owned by Wind Prospect Planning granted 2009, under
2009	Claughton Moor	Community Wind	Yorkshire Lancashire County	20	50	construction 2015 Application Refused 2010, Appeal
2011	Escrick Park Community	Power E.On	Selby District	2	4.6	withdrawn 2011 Application withdrawn 2011
2012	Power Proiect Norton Community Wind	Origin Energy CIC	Doncaster MBC	2	5	Application Submitted 2012.
2013	Turbines Claughton Moor	Community Wind	Lancashire County	10	23	Planning permission refused 2013
2013	Resubmission Davidstow Resubmission	Power Community Wind	Cornwall	16	48	Withdrawn 2014
2013	Totnes Community Wind	Power Totnes Renewable	South Hams District	2	4.6	Planning permission refused 2013
2013	Farm Roseland Community	Energy Society Roseland Community	Bolsover District	12	6	Application Refused 2013, Appeal
	Energy Farm	Energy Trust				lodged 2014, Secretary of State
						intervention 2014, Secretary of State
2013	Valley Wind Cooperative	Slaithewaite Moor	Kirklees	3	6.9	Application submitted 2013,
	_	Wind Farm				Withdrawn 2015 (selected as case
						atudu)

Source: Adapted from Community Energy England (2015) members list and DECC REPD (2015) and Energy Archipelago (2015)

The figures 2.5, *Key Ministerial Statements: Supporting Onshore Wind* and *Figure 2.6, Key Ministerial Statements: Opposing Onshore Wind*, available in appendix 8.2. It offers detailed quotes from statements made by department leaders, published in Hansard parliamentary records, on their position for developing onshore wind over the period of 2010 to 2015; which is summarised here.

In 2012, Greg Clark who had been supportive of a diversity of renewable energy technologies, community benefits and had responsibility for publications supporting a transition to a low carbon economy, Conservative Party policy papers: The Low Carbon Economy (2009) and Rebuilding Security (2009), moved from DCLG to the Treasury. Charles Hendry who had been sympathetic towards onshore wind developments, community benefits, community ownership, local decision making and funding for community wind developments moved from DECC to the Department of UK Trade and Investment. Tim Yeo, moved from chairing the Environmental Audit Committee to the Energy and Climate Change Committee in 2010, argued his support for onshore wind farm development as a solution to prevent increases in electricity prices. He upheld his position as Chair of the Committee, but was deselected as constituency MP in 2013, and resigned from government in 2015.

In 2012, Chris Huhne who had been encouraging of onshore wind farms, reiterated that he found them 'beautiful'. He argued the importance of local planning determination, community ownership and offered the argument that 'not all communities are opposed to the development of onshore wind farms'. He resigned from his position following an expenses scandal. Replaced by Ed Davey who continued in his position as Secretary of State throughout the remaining years of the Coalition government, until losing his seat in the 2015 election. Davey continuously argued for onshore wind farms deployment. He introduced community engagement protocols, community

benefits strategy, community ownership guidance and support for subsidies. He offered assurance to the wind industry that the government were providing comprehensive support. From 2010 until 2014, Gregory Barker supported introducing models for community energy cooperatives, community benefits and stressed the contribution of the wind industry to the British economy. In July 2014, he announced that he would not be standing for election in 2015 and returned to the backbenches, replaced by Amber Rudd.

In 2012, John Hayes replaced Charles Hendry who in the same year described onshore wind farms as an 'atavistic echo of dark satanic mills' and 'monstrous concrete structures'. After six months in post he moved from DECC to become a Minister without Portfolio. Michael Fallon replace Hendry in 2013, who emphasised the importance of local planning authorities having robust plans in place for the siting of onshore farms. He announced the Secretary of State for DCLG would be increasing the number of applications for call in at appeal. Fallon also announced the Conservative Party Manifesto pledge to remove subsidies for onshore wind farms and to abolish the Planning Inspectorate. In 2014, he moved from DECC to become the Secretary of State for Defence. Fallon succeeded by Mathew Hancock, who 'strongly' opposed onshore wind farm developments within his constituency, supported a strengthening of local planning to object to applications and argued for the removal of subsidies. He upheld his appointment until the end of the Coalition government.

In 2014, Eric Pickles the Secretary of State for DCLG, announced his intent to increase the number of applications called in at appeal for his consideration. In response to perceived community concerns that the Planning Inspectorate overturned local decision making on the siting of onshore wind farms. During this period of micro management by the Secretary of State for DCLG, Owen Paterson was the Secretary of State for DEFRA from 2012 to 2014. Following the Cabinet reshuffle of 2013 his appointment ended, he returned to the back benches and he established the policy think tank, UK2020. As the chair of UK2020, he delivered a lecture to the Global Warming Policy Foundation,

called the *Keeping the Lights On* in 2014. In his speech he calls for the repeal of the Climate Change Act (2008) and a redirection from renewable technologies such as wind, solar and biomass. Towards shale gas, combined heat and power, small modular nuclear power and rational demand management.

"Reigning in unrealistic green ambitions allows us to become more 'green' than the Greens. We are the only country to have legally bound ourselves to the 2050 targets — and certainly the only one to bind ourselves to a doomed policy." (Paterson, 2014: 18-19)

His opinion towards onshore wind energy clarified when he stated,

"However, this paltry supply of onshore wind, nowhere near enough to hit the 2050 target, has devastated landscapes, blighted views, divided communities, killed eagles, carpeted the countryside and the very wilderness that the 'green blob' claims to love, with new access tracks cut deep into peat, boosted production of carbon-intensive cement, and driven up fuel poverty, while richly rewarding landowners." (Paterson, 2014: 8)

In 2015, the newly elected Conservative government, appointed Andrea Leadsom as Energy Minister at DECC. She argued that wind energy was inefficient, with no manufacturing base and subject to the intermittency of wind supply. That new turbines were 'bigger than Big Ben' and 'taller than the London Eye', opposed to subsidies for onshore wind energy and the role of the Planning Inspectorate in overturning local decision making. In 2015, Amber Rudd's appointment as Secretary of State for DECC, oversaw abolishing subsidies for onshore wind farms a year earlier than the planned review. Although she confirmed her support for any community application for a single turbine. Lord Bourne of Aberystwyth (Nick Bourne) appointed to the ministerial role in DECC in 2015, states he is 'technologically neutral', but ending subsidies was a deliverable election promise. He calls for a refocus

towards indigenous gas and oil supplies, but confirms he will consider one to two turbines brought forward by community groups as part of the Feed-in-Tariff system.

In July 2015, the government announced DECC would be subject to 90% cuts to staff budgets over the next three years. The Green Alliance, an independent environmental policy think tank, analysed that this,

'will concentrate spending reductions onto DECC's low carbon activities, and especially onto its relatively modest staff budget. This unusual, but dramatic, ring-fencing effect could reduce DECC's resource spending by as much as 90 per cent by 2018-19, curtailing the department's ability to make sure the UK has secure, clean, affordable energy supplies and promote international action to mitigate climate change' (Benton & Coats, 2015: 1).

In 2012, an open letter sent to the Prime Minister, David Cameron, signed by 107 backbench MPs (available in appendix 8.1: MP's Letter to David Cameron). Although described as cross party signatories, 102 MPs were from the Conservative Party, 2 MPs from the Labour Party, 2 Liberal Democrat Party and 1 MP from the Democratic Unionist Party. In it, the signatories argue against subsidy support for developing onshore wind energy as they considered the technology as inefficient and intermittent. They called for amendments to the NPPF to rebalance power away from the Planning Inspectorate, working for nationally set targets for renewable energy, to the primacy of the views of local communities.

Although not frontbenchers in 2012, Andrea Leadsom (DECC), Brandon Lewis (DCLG) and Mathew Hancock (DECC) were all signatories on the letter. Of the 107 signatories, thirteen were executive members, out of nineteen (the deputy Chair role shared) of the 1922 Committee. (Conservative Home Gazette, 2012) Named after the year in which a group of backbench Conservative MPs voted to end the Liberal/ Conservative Party

coalition. This influential committee facilitates backbenchers in having a direct line to the Prime Minister, with the Chair, meeting with the PM weekly. The committee has the power to argue for a vote of no confidence in the Party leader and select new candidates. It offers a forum for backbenchers to voice their concerns and for Whips to calculate the severity of those concerns.

The lead signatory of the letter was Chris Heaton-Harris, MP for Daventry, Northamptonshire, whose shared his synonym heavy opinion, on wind energy, in a Commons debate a month before sending the letter to Cameron,

"That brings me to some unbelievably bad news I received yesterday about my constituency. There was—how can I put it?—a disgraceful, vulgar, disrespectful, terrible, shameful, contemptible, detestable, dishonourable, disreputable, ignoble, mean, offensive, scandalous, shabby, shady, shocking, shoddy, unworthy, deplorable, awful, calamitous, dire, disastrous, distressing, dreadful, faulty, grim, horrifying, lamentable, lousy, mournful, pitiable, regrettable, reprehensible, rotten, sad, sickening, tragic, woeful, wretched, abhorrent, abominable, crass, despicable, inferior, odious, unworthy, atrocious, heinous, loathsome, revolting, scandalous, squalid, tawdry, cowardly, opprobrious, insulting, malevolent, scurrilous and basically stinkingly poor decision of the Planning Inspectorate to approve the Kelmarsh wind farm, which will devastate huge swathes of beautiful rural Northamptonshire. It used an old-fashioned east midlands regional plan, which I thought we had abolished in the Localism Act 2011, did not take into account any emerging policy in this area, not least the national planning policy framework, and used the targets, which the hon. Member for Brighton, Pavilion [Caroline Lucas, Green Partyl is so passionately attached to, of getting 20% of our energy from renewables by 2020." (Chris Heaton-Harris, Energy and Climate Change, Commons Debates: 20/12/11, Column 1269)

Heaton-Harris, a vocal opponent of onshore wind energy was the subject of a film secretly made by Greenpeace, called *Energygate*, to highlight underhand

tactics in the Corby by-election of 2012. Reported widely in UK print and broadcast journalism, Heaton-Harris, acted as campaign manager for the Conservative candidate. He encouraged a rival candidate James Delingpole, an anti-wind activist and right-wing journalist to stand for election as an independent. Not to gain the seat but to raise the issue of wind energy higher on the political agenda.

'The campaign group [Greenpeace] shared its footage exclusively with the Guardian. Heaton-Harris gave further details about his knowledge of Delingpole's campaign during a second meeting with the undercover reporter, which took place three weeks after the first. That encounter was on 31 October, the day the Daily Mail and Telegraph carried front-page stories based on an interview with [John] Hayes who had called for an end to the spread of wind farms, announcing, "Enough is enough." (Lewis & Evans, The Guardian, *Tory MP running Corby campaign 'backed rival in anti-windfarm plot'*, 2012)

As Delingpole had not paid his deposit, Heaton-Harris denied that he had engineered the political strategy to raise the issue of onshore wind farms. Heaton-Harris at the same time started an initiative called 'Together Against Wind' a national campaign that states on its website:

"Together Against Wind" is run by Chris Heaton-Harris MP and has a simple aim of changing government policy which is currently at risk of causing industrialization of our countryside on an unprecedented scale. It will encourage a two-way flow of information between the Houses of Parliament and those groups and individuals fighting wind turbine applications' (Together Against Wind, 2012)

The letter signatories are the population area to source a sample for data collection in this research. The constituencies of those MPs analysed for the planning status of onshore wind farms in their areas (see chapter 4).

In 2013, the then Secretary of State for DCLG, Eric Pickles, sent a letter to local authorities setting out his intent on PPG for onshore wind farms,

- 'the need for renewable energy does not automatically override environmental protections and the planning concerns of local communities;
- decisions should take into account the cumulative impact of wind turbines and properly reflect the increasing impact on (a) the landscape and (b) local amenity as the number of turbines in the area increases;
- local topography should be a factor in assessing whether wind turbines
 have a damaging impact on the landscape (i.e. recognise that the
 impact on predominantly flat landscapes can be as great or greater
 than as on hilly or mountainous ones); and
- great care should be taken to ensure heritage assets are conserved in a manner appropriate to their significance, including the impact of proposals on views important to their setting' Eric Pickles, Secretary of State for DCLG (DCLG, 2013).

In June 2015, the Secretary of State for DCLG, Greg Clarke amending the guidance on renewable and low carbon energy in a House of Commons written statement:

'When determining planning applications for wind energy development involving one or more wind turbines, local planning authorities should only grant planning permission if:

- the development site is in an area identified as suitable for wind energy development in a Local or Neighbourhood Plan; and
- following consultation, it can be demonstrated that the planning impacts identified by affected local communities have been fully addressed and therefore the proposal has their backing.' Greg Clarke, Secretary of State for DCLG (DCLG, 2015b)

The government do not provide guidance on how to evidence local community backing or how the local community are going to identify impacts, this is for the LPA to judge.

Member of Parliament	Parliamentary Record / Date	Statement (Supportive of Onshore Wind Farms)
Greg Clark Shadow Secretary of State DECC	Energy Security (13 Jan 2010: Column 757)	We think that, in order to secure our energy supplies in future, we need diversity of energy sources. It was Churchill who said that the security of our energy supply lies in diversity and diversity alone, and it is important that we have contributions to our supply from across the piece. Therefore, we would change that policy, because one of the problems with the current onshore wind policy regime is that many communitiesfeel they gain no advantage from the siting of wind farms in their locality. They are sometimes concerned about what they might see as risks-they might not know whether the wind farms will be noisy, or what the impact will be. They will therefore often decide-on a precautionary principle, perhaps-to oppose the application because there is no countervailing argument. On the continent, however, wind farms tend to be much more community-based and community-owned. Whether in Denmark or Spain, the communities that host wind farms share in the benefits, such as by receiving revenue from the electricity sold or, in many cases, getting cheaper electricity. Our policy is to return some of those benefits-through the first six years of business rates, for example-and to look into how we might provide cheaper electricity to the communities involved. That at least provides a more balanced debate.
Charles Hendry Minister at DECC	Energy Security (8 July 2010 : Column 145WH)	We must ensure that we begin to take a lead on renewables. We will need more onshore and offshore wind power, a massive increase in energy from waste and faster development of marine energy such as wave and tidal. We wish to drive all those technologies further forward. Undoubtedly, the renewables obligation has encouraged significant investment in onshore wind, but that has not been without problems in the communities where it operates. In order to drive further development, we want a different relationship, considering what aspects of council tax and business rates can be kept local to communities and how communities that host facilities of wider regional or national significance can share in the benefits that they bring. That way, we hope to give wind farms

Member of Parliament	Parliamentary Record / Date	Statement (Supportive of Onshore Wind Farms)	
		greater public legitimacy than has sometimes been the case when investment has been sought in such important systems.	
Charles Hendry Minister at DECC	Independent Parliamentary Standards Authority Committee Wind Power: Yorkshire and the Humber (12 July 2010: Column 462W)	The Government are committed to the development of wind energy in the UK. As a island nation we have outstanding wind resources and wind energy is an indigenous source of energy which is needed to meet our renewable energy and climate change goals. The wind industry can be a key player in creating the investment, exports an we need to bring back economic prosperity, and the UK is already a world leader in offshore wind. We also want communities and individuals to benefit from the increase renewable energy, including wind power, and to own a stake in our collective low of future. This is why we committed in the coalition programme for government to encouraging more community-owned renewable energy and allowing communities host renewable energy projects to keep the additional business rates they generate.	
Charles Hendry Minister at DECC	Wind Power Planning Permissions (7 Dec 2010 : Column 65WH)	We want a different relationship between wind farms and the communities that host them. That is why, in the localism Bill, to be published shortly, we will discuss how local communities can derive much greater direct benefit from the facilities that they host, both financially, for local business rates for a number of years, and through community ownership. Examples throughout the country include Westmill community wind farm in Oxfordshire, which is 100% community owned. The people living near such facilities can truly see the benefits that they get from them.	
Charles Hendry Minister at DECC	Wind Power (18 Jun 2012 : Column 833W)	The Government is keen to give local communities more of a stake in windfarms, over and above the energy benefits these windfarms bring nationally. We are introducing legislation in this session to enable local authorities in England to retain business rates for the life of the windfarm. There are also programmes to support the development of community-owned windfarms. For example the £15 million Rural Community Renewable Energy Fund announced by the Chancellor of the Exchequer in autumn 2011. This is due to launch in spring 2013 and will be administered by DECC and DEFRA.	

Member of Parliament	Parliamentary Record / Date	Statement (Supportive of Onshore Wind Farms)	
Chris Huhne Secretary of State DECC	Electricity Market Reform (16 Dec 2010 : Column 1075)	Some issues can be tackled at national level; one planning issue on onshore wind surrounds aviation impacts and radar, and we should obviously lead that at national level. But I refer him to the answer that I gave previously: local people should be able to determine local planning and, therefore, local impact. If they are on board, and if they are brought into the proposals, renewable projects go ahead. That is our experience throughout the UK, and that will be the right way forward in getting planning approval for renewable projects.	
Chris Huhne Secretary of State DECC	Fourth Carbon Budget (17 May 2011 : Column 188)	We are keen to engage community groups; the ministerial team does a lot of visits and makes sure that we are talking to members of civil society and, of course, to non-governmental organisations, which have an important influence on community groups. This is also particularly crucial in an area that I know can be controversial, even among those on the Government Benches: proposals for onshore wind. I think that that is a beautiful form of renewable energy, although I know that that opinion is not always shared across the House. It is an important part of our strategy to get community groups involved and owning these policies, and some interesting proposals have been made. For example, the biggest proposal for onshore wind is the Viking proposal for Shetland and it is half-owned by the community group that supports Shetlanders. So I am very much in favour of the sort of engagement that my hon. Friend has rightly suggested.	
Chris Huhne Secretary of State DECC	Topical Questions (19 May 2011 : Column 494)	I should also say that there are many local communities the length and breadth of this country that actually want to install onshore wind turbines. It is not always the case that they are unpopular. Indeed, the most attractive and regularly visited tourist feature in my constituency is the Bursledon windmill. It is, admittedly, slightly older than many wind turbines, but it works on exactly the same principle. Bursledon windmill is beautiful, and many of the wind turbines that we are installing are beautiful too.	
Chris Huhne Secretary of State DECC	Topical Questions (7 July 2011 : Column 1651)	I urge my hon. Friend not to take too jaundiced a view of onshore wind turbines. So far I am the only Member of the House who has been booed on "Any Questions" for pointing out that onshore wind turbines are beautiful, a view I hold to firmly and with which I hope other Members will agree.	

Member of Parliament	Parliamentary Record / Date	Statement (Supportive of Onshore Wind Farms)	
Chris Huhne Secretary of State DECC	Electricity Market Reform (12 July 2011 : Column 191)	I would say is that by comparison with other renewable technologies, onshore wind is a tested, effective and affordable technology. It is the lowest-cost renewable technology available in these islands, and it produces electricity at a similar cost to first-of-a-kind nuclear power stations. However, I return to what I said earlier to my hon. Friend the Member for Bournemouth West (Conor Burns) about energy sources. It so happens that every energy source has its detractors. As I view wind turbines as beautiful, I hope that we will not find oppositionall over the country to what is a cheap and effective source of energy for our consumers.	
Tim Yeo Chair Energy & Climate Change Select Committee	Energy Security (6 Sep 2012 : Column 143WH)	We must face the facts, however uncomfortable they are to the population. Whenever I mention the subject of onshore wind turbines, I am assailed by hundreds, possibly even thousands, of e-mails, some of which are quite irrational or even offensively pornographic, but never mind. I will not read them out to Members here in Westminster Hall; it would involve using some un- parliamentary language. Nevertheless, we cannot avoid the arithmetical fact that at present it is cheaper to generate electricity from an onshore wind turbine than from an offshore wind turbine—or from tidal power or wave power—and it is likely to be so for some years to come. I cannot wish that fact away.	
Tim Yeo Chair Energy & Climate Change Select Committee	Energy Security (6 Sep 2012 : Column 143WH)	However, I do not suggest that we should impose wind power from wind turbines on an community that does not want them. Any community is perfectly entitled to say that on visual or noise grounds the turbines are too intrusive to be accepted; that view is fine. None the less, we cannot alter the fact that if we ruled out onshore wind turbines completely, the absolutely certain consequence would be to raise the price of electricity for consumers.	
Ed Davey Secretary of State DECC	Onshore Wind Farms (1 Nov 2012 : Column 369)	Our policy remains the same: to support onshore wind farms. Onshore wind is good for our energy security, emissions reductions, economic growth and jobs, and it reduces pressures on consumer bills. The new wind projects to deliver the ambition of 13GW by 2020 are largely on the table. The Government are clear that those must be properly sited and must provide genuine benefits to local communities.	

Member of Parliament	Parliamentary Record / Date	Statement (Supportive of Onshore Wind Farms)	
Ed Davey Secretary of State DECC	Topical Questions (1 Nov 2012 : Column 374)	I do agree that investment in onshore wind is a serious matter. We need to ensure that industry and investors know that the Government are committed to a long-term, stable and consistent framework. The hon. Gentleman will know that I lead on renewable energy strategy and I decide the policy, and the industry has heard that.	
Ed Davey Secretary of State DECC	Topical Questions (14 Mar 2013 : Column 467)	Onshore wind is one of the cheapest—if not the cheapest—of the large-scale renewable technologies. It has huge benefits. The planning system is important, however, and local communities can have a say on these matters. One reason that we published the call for evidence on community benefits was to ensure that local communities benefit more from hosting such installations.	
Ed Davey Secretary of State DECC	Low Carbon Energy Sources (19 Mar 2015 : Column 880)	The right hon. Gentleman will know that onshore wind has boomed under this Government. There is no moratorium, so what he said was wrong, but it is true that there are Conservative colleagues who do not share my enthusiasm for onshore wind. I recently opened the largest onshore wind farm in England at Keadby, and I was able to grant, after the recent very successful first auction of contracts for difference, 15 out of 27 contracts to new onshore wind farms. That sounds to me like we are going ahead fast.	
Gregory Barker Minister DECC	Renewable Energy Projects (14 July 2010 : Column 319WH)		

Member of Parliament	Parliamentary Record / Date	Statement (Supportive of Onshore Wind Farms)	
Gregory Barker Minister DECC	Renewable Energy Projects (14 July 2010 : Column 319WH)	When the hon. Gentleman introduced this debate, he was right to say that there were problems and that, historically, there has been resistance to renewable energy projects in all of our constituencies. Some of that resistance was well based, but often it was based on misconceptions. It is difficult to blame local communities for resisting renewable energy because often they are asked to have something imposed on them that spoils their view or the amenity of the local land, and brings them no benefit whatsoever. If we are to see an increase in the number of such installations, we need a more equitable settlement. We need a greater sense of community participation both in decisions about where the installations are to be sited, and in the returns that flow from them. There are potentially remunerative streams of profit to be gained under those arrangements, and it is right for the communities that host renewable energy sources to benefit in that way.	
Gregory Barker Minister DECC	Energy and Climate Change, Wind Power (9 Apr 2014 : Column 242W)	There is no cap on current deployment of onshore wind (or any other renewable energy technology). It is the role of the planning system to ensure that wind farms are only built where the impacts are, or can be made, acceptable. Onshore wind is one of the cheapest forms of large-scale renewable energy—supporting onshore wind in 2013 added around £9 per year to the average UK energy bill. Since 2010 DECC has recorded announced investments by developers in onshore wind totalling around £4.6 billion, with the potential to support over 7,700 jobs; and, around the UK, onshore wind developments are providing community funds and other benefits to local people, such as money off electricity bills.	

Source: Hansard (www. http://search-material.parliament.uk)

Member of Parliament	Parliamentary Record / Date	Statement (Opposing Onshore Wind Farms)	
John Hayes Minister DECC	Oral Answers to Questions Northern Ireland, Security Situation (24 Oct 2012 : Column 979)	It also means more nuclear, by the way, as Members who are as great fans of nuclear power as I am will be relieved to hear. And it means communities benefiting, guiding and owning the energy infrastructure, not having infrastructure, such as onshorewind turbines, scattered across our precious land like an atavistic echo of dark satanic mills.	
John Hayes Minister DECC	Offshore Wind Generation (North Wales), (24 Oct 2012 : Column 278WH)	Let me say a few words about onshore wind, because my hon. Friend the Member for Montgomeryshire (Glyn Davies) and the hon. Member for Clwyd South (Susan Elan Jones) raised that issue. I entirely agree that we must see it as being about aesthetics as well as utility. I regard it as almost extraordinary that people can stare at some monstrous concrete structure and tell me that it is beautiful. These are industrial structures. Placing them insensitively, in areas where there is large-scale and understandable opposition to them, has done immense damage to the debate about renewables. I think that we need to settle the onshore wind argument to get on the front foot and have a more positive debate about renewables—of the kind that we have had today. I think that we need a new paradigm in those terms.	
Michael Fallon Minister DECC	Wind Energy (17 Oct 2013 : Column 877)	We have reduced the support for onshore wind projects from April this year and the draft strike prices that we have set out are reduced over time up until 2018, but the new planning policy framework makes it clear that local authorities should have policies in place to ensure that any adverse impacts, including visual impacts and cumulative impacts, are addressed satisfactorily. My right hon. Friend the Secretaryof State for Communities and Local Government has made it clear that he intends now to call in more applications at appeal to ensure that the new planning practice guidance is meeting the Government's intentionsPlanning applications in respect of onshore wind should be approved only if the impacts are acceptable to the local community. The new planning guidance from the Department for Communities and Local Government helps to deliver the balance that we expect, ensuring that proper	

Member of Parliament	Parliamentary Record / Date	Statement (Opposing Onshore Wind Farms)	
		weight is given to the visual impact, the cumulative impact and any heritage implications for particular sites.	
Mathew Hancock MP West Sussex	Backbench Business, Onshore Wind (10 Feb 2011 : Column 163WH)	I attest to the beauty of Frodsham and Helsby hills, which my hon. Friend talked about. The area is almost as beautiful as the area near Clare in my constituency, where there is a proper for a six-turbine wind farm, to which I am strongly opposed. There, too, residents formed action group, Stop Turbines Over Clare, and I commend them for that. They also found the wind speeds are much lower than the applicant suggested. I hope my hon. Friend will agree that the Minister needs to look at objective measures of where the wind is. Does he agree to often the choice of where proposals are made seems entirely random and does not take in account local populations or the beauty of the local environment?	
Mathew Hancock MP West Sussex	Backbench Business, Onshore Wind (10 Feb 2011 : Column 163WH)	The commitment from Conservative Members is clear. I personally have fought against the placing of onshore wind turbines in some of the most beautiful parts of Suffolk—and therefore the most beautiful parts of the country—in landscapes that were admired and painted by Constable in years gone by and that have changed little since. As a constituency MP, I have fought proposals to put wind farms in places where they would damage the local environment and the local amenity. The policy that we inherited had an override over local considerations because of the impact on climate change of putting up wind farms.	
Mathew Hancock Minister DECC	Wind Subsidies (Abolition Bill), (6 Mar 2015 : Column 1228)	So we have taken steps in the planning system, some of which have been mentioned today, but we are clear that where local people do not want wind farms, the planning system will be strengthened, and there will not be these subsidies when we can remove them. My hon. and learned Friend the Member for Torridge and West Devon (Mr Cox) asked, not unreasonably, for a deadline, so I shall set it out this way. The 10% of the electricity system from onshore wind is expected by the coalition Government by 2020—that is a Government figure—and the Prime Minister has set out that then there will be no need for future subsidies. If, as the costs of all renewables come down, we are able not only to deal with the problem of climate change, but to do so in a way that allows us to remove subsidies sooner, so be it. That framework sets a clear deadline, but the clarity of our commitment to remove	

Member of Parliament	Parliamentary Record / Date	Statement (Opposing Onshore Wind Farms)	
		subsidies for onshore wind is stark—we shall do this. I hope that gives him the commitment he was seeking.	
Andrea Leadsom MP South Northamptonshire	Onshore Wind Farms (1 Nov 2012 : Column 369)	Does my right hon. Friend believe that it is fair that my constituents in Helmdon, Sulgrave and Greatworth have spent two years and thousands of pounds of their own money fighting a wind farm in their area, with support from South Northamptonshire council, only to have the decision overturned on appeal? The inspector said that all their objections were very valid and upheld them, but added that national policy overruled local wishes. What steps is the Secretary of State taking to improve that unfair situation?	
Andrea Leadsom MP South Northamptonshire	Onshore Wind Turbines (10 Feb 2011 : Column 154WH)	We have painted rather a gloomy picture here and I can add one last bit of gloom, which is that sadly-before we all go out and shoot ourselves-we also do not benefit from the manufacturing of wind turbines. At a time when the renewable industry offers great potential in terms of business growth, it is something that we must take great strides to improve, and we are doing so in this Government. There is now a fairly gloomy picture in this country, where it appears that the taxpayer foots the bill for wind farms, communities pay the price of the loss of amenity and the wind farm developer takes all the reward without even needing to prove that there is a benefit in terms reducing our carbon footprint. So I again applaud the Minister for the way in which we are moving to a different environment, in which communities will have a greater say and will share in the proceeds that accrue from the building of wind farms.	
Eric Pickles Secretary of State DCLG	Local Planning and Renewable Energy Developments (9 Apr 2014 : Column 13WS)	This coalition Government appreciate the continuing concerns in communities when a local decision is challenged on appeal. It is important that local communities continue to have confidence in the appeals process and that the environmental balance expected by the framework is being reflected in decisions on renewable energy developments. On 10 October 2013, Official Report, column 30WS, I announced a temporary change to the appeals recovery criteria, for a period of six months. In doing so, I explained that I wanted to give particular scrutiny to planning appeals involving renewable energy developments so that I could consider the extent to which the then new practice guidance was meeting our intentions.	

Member of Parliament	Parliamentary Record / Date	Statement (Opposing Onshore Wind Farms)	
		I am pleased to confirm that the guidance is helping ensure decisions reflect the environmental balance set out in the framework. I note, for example, that prior to the guidance, more appeals were approved than dismissed for more significant wind turbines. Since the guidance, more appeals have been dismissed than approved for more significant turbines. Every case should, of course, be considered on its individual merits in light of local circumstances and the material planning considerations. I am encouraged by the impact the guidance is having but do appreciate the continuing concerns in communities. I also recognise that the guidance is still relatively new and some development proposals may not yet have fully taken on board its clear intent. Therefore after careful consideration I have decided to extend the temporary change to the appeals recovery criteria, and continue to consider for recovery, appeals for renewable energy developments, for a further 12 months. This criterion is added to the recovery policy issued on 30 June 2008. For the avoidance of doubt, this does not mean that all renewable energy appeals will be recovered, but that planning Ministers may recover a number of appeals.	
Amber Rudd Secretary of State DECC	Onshore Wind Subsidies (22 Jun 2015 : Column 618)	This Government were elected with a commitment to end new subsidies for onshore wind and to change the law so that local people have the final say on onshore wind applications. Colleagues, particularly my hon. Friend the Member for Daventry (Chris Heaton-Harris) and, additionally, my hon. Friends the Members for Montgomeryshire (Glyn Davies) and for Selby and Ainsty (Nigel Adams), and my hon. and learned Friend the Member for Sleaford and North Hykeham (Stephen Phillips), have led the way in calling for this. Six weeks into this Government, we are acting on that commitment. Alongside proposals outlined within the new energy Bill to devolve decision making for new onshore wind farms out of Whitehall, my right hon. Friend the Secretary of State for Communities and Local Government has set out further considerations to be applied to proposed wind energy development in England so that local people have the final say on onshore wind farm applications.	
Amber Rudd Secretary of State DECC	Onshore Wind Subsidies (22 Jun 2015 : Column 623)	We must recognise that, sometimes, when Members of Parliament choose to fight for their community, they take a different view from that of the national party. I am here representing the views of Members of Parliament as well as the national party. We believe that our policy addresses communities and keeps bills down.	

Member of Parliament	Parliamentary Record / Date	Statement (Opposing Onshore Wind Farms)	
Amber Rudd Secretary of State DECC	Onshore Wind Subsidies (22 Jun 2015 : Column 629)	I am happy to say that a single wind turbine will still be allowed, if a community wants it. We are very keen to support community energy. As for shale exploration, we are at an early stage and we will have to wait to see how the community responds.	
Lord Bourne of Aberystwyth (Nick Bourne) House of Lords	Energy Bill, Second Reading, House of Lords (22 July 2015: Column 1163)	Obviously, we will not all agree about wind. There are differences even within party groups. I notice that some are more enthusiastic than others about onshore wind. Clearly, the fundamental point is that industry should not have been taken by surprise by the attitude of the Conservative Party to wind. One thing we cannot be accused of ambiguity: the manifesto made our stance very clear.	
Lord Bourne of Aberystwyth (Nick Bourne) House of Lords	Energy Bill, Second Reading, House of Lords (22 July 2015 : Column 1121)	In conclusion, this Bill seeks to reform onshore wind subsidies and put more power in the hands of local people to make decisions on the development of new wind farms in their area. This Bill will help to support jobs and growth by reinvigorating our domestic oil and gas industry. I believe that the measures in the Bill will keep Britain on the road to economic recovery and secure our energy supplies.	
Lord Bourne of Aberystwyth (Nick Bourne) House of Lords	Energy, Onshore Wind (22 Jun 2015 : Column 1384)	I will also shortly be considering options for future support for community onshore wind projects that might represent one or two turbines through the feed-in tariffs—FITs—as part of the review that my department is conducting this year. I do not wish to stand in the way of local communities coming together to generate low-carbon electricity in a manner that is acceptable to them, including through small-scale wind capacity. However, that action must be affordable as well as acceptable. Clean energy does not begin and end with onshore wind. Onshore wind is an important part of our current and future low-carbon energy mix, but we are reaching the limits of what is affordable and what the public are prepared to accept. We are committed to meeting our decarbonisation objectives. The changes that I have outlined to Parliament will not change this.	

Source: (Hansard, 2010-2015, www.http://search-material.parliament.uk)

Appendix 4: MP's Letter to Prime Minister David Cameron

The Rt. Hon David Cameron MP
The Prime Minister
10 Downing Street
LONDON, SW1A 2AA

30th January 2012

As Members of Parliament from across the political spectrum, we have grown more and more concerned about the Government's policy of support for on-shore wind energy production.

In these financially straightened times, we think it is unwise to make consumers pay, through taxpayer subsidy, for inefficient and intermittent energy production that typifies on-shore wind turbines.

In the on-going review of renewable energy subsidies, we ask the Government to dramatically cut the subsidy for on-shore wind and spread the savings made between other types of reliable renewable energy production and energy efficiency measures.

We also are worried that the new National Planning Policy Framework, in its current form, diminishes the chances of local people defeating unwanted on-shore wind farm proposals through the planning system. Thus we attach some subtle amendments to the existing wording that we believe will help rebalance the system.

Finally, recent planning appeals have approved wind farm developments with the inspectors citing renewable energy targets as being more important than planning considerations. Taken to its logical conclusion, this means that it is impossible to defeat applications through the planning system. We would urge you to ensure that planning inspectors know that the views of local people and long established planning requirements should always be taken into account.

Yours sincerely,

Appendix to the letter: Suggested amendments to paragraphs 152 and 153 of the NPPF

- 152: To help increase the use and supply of renewable and low-carbon energy, local planning authorities should recognise the responsibility on all communities to contribute to energy generation from renewable or low-carbon sources. They should:
 - have a positive strategy to promote energy from renewable and low-carbon sources, including deep geothermal energy;
 - design their policies to maximise renewable and low-carbon energy development while ensuring that adverse impacts are addressed satisfactorily;
 - identify suitable areas for renewable and low-carbon energy sources, and supporting infrastructure, where this would help secure the development of such sources and achieve an appropriate balance between environmental, social and economic objectives, including in particular the contribution of the rural landscape and heritage assets to economic development - See Footnote:
 - support community-led initiatives for renewable and low carbon energy, including developments outside such areas being taken forward through neighbourhood planning; and
 - identify opportunities where development can draw its energy supply from decentralised, renewable or low carbon energy supply systems and for colocating potential heat customers and suppliers.
- 153: When determining planning applications, local planning authorities should apply the presumption in favour of sustainable development and in doing so should take full account of the requirements set out in paragraph 152 and the footnote and:
 - not require applicants for energy development to demonstrate the overall need for renewable or low-carbon energy, recognising that overall compliance with national EU obligations as a whole is not a material consideration in relation to the acceptability of specific locations, and also recognise that even small-scale projects provide a valuable contribution to cutting greenhouse gas emissions;
 - approve the application if its impacts are (or can be made) acceptable. Once
 opportunity areas for renewable and low-carbon energy have been mapped
 in plans, local planning authorities should also expect subsequent

applications for commercial scale projects outside these areas to demonstrate compelling reasons why development should take place outside such areas; and

• identify and weigh all the separate forms of harm to other interests of acknowledged importance that would be likely to arise, including significant heritage assets, and ensure that development would provide wider benefits that would clearly outweigh the sum total of all the harm identified.

Footnote:

In assessing the likely impacts of potential wind energy development in broad areas, and in determining planning applications for such development, including all non-domestic schemes irrespective of their scale, planning authorities should follow the approach set out in the National Policy Statement for Renewable Energy Infrastructure (read with the relevant sections of the Overarching National Policy Statement for Energy Infrastructure, including that on aviation impacts). Where plans identify areas as suitable for renewable and low-carbon energy development, they should make clear what criteria have determined their selection, including for what size of development the areas are considered suitable.

List of Signatories

MPs	Party	Constituency
	KEY:	1922 Committee Executive Member ¹
Adams, Nigel	Con	Selby and Ainsty
Afriyie, Adam	Con	Windsor
Andrew, Stuart	Con	Pudsey
Bacon, Richard	Con	S. Norfolk
Baker, Steve	Con	High Wycombe
Barclay, Stephen	Con	North East Cambridgeshire
Bebb, Guto	Con	Aberconwy
Bingham, Andrew	Con	High Peak
Binley, Brian	Con	Northampton South
Blackman, Bob	Con	Harrow East
Bone, Peter	Con	Wellingborough
Bradley, Karen	Con	Staffordshire Moorlands
Brady, Graham	Con	Altrincham and Sale West
Bridgen, Andrew	Con	North West Leicestershire
Brine, Steve	Con	Winchester
Burley, Aiden	Con	Cannock Chase
Byles, Dan	Con	North Warwickshire
Cairns, Alun	Con	Vale of Glamorgan
Carswell, Douglas	Con	Clacton
Cash, William	Con	Stone
Chope, Christopher	Con	Christchurch
Clappison, James	Con	Herstmere
Collins, Damian	Con	Folkstone and Hyth
Cox, Geoffrey	Con	Torridge and W. Devon
Crouch, Tracey	Con	Chatham and Aylesford
Cunningham, Tony Sir	Lab	Wokington
Davies, Philip	Con	Shipley
Davis, David	Con	Haltemprice and Howden
De Bois, Nick	Con	Enfield North
Dinenage, Caroline	Con	Gosport
Dorries, Nadine	Con	Mid Bedfordshire
Doyle-Price, Jackie	Con	Thurrock

¹Of the 107 signatories, thirteen were executive members, out of nineteen (the deputy Chair role shared) of the 1922 Committee. (Conservative Home Gazette, 2012) Named after the year in which a group of backbench Conservative MPs voted to end the Liberal/ Conservative Party coalition. This influential committee facilitates backbenchers in having a direct line to the Prime Minister, with the Chair, meeting with the PM weekly. The committee has the power to argue for a vote of no confidence in the Party leader and select new candidates. It offers a forum for backbenchers to voice their concerns and for Whips to calculate the severity of those concerns.

Drax, Richard	Con	South Dorset
Elphicke, Charlie	Con	Dover
Engel, Natascha	Lab	North East Derbyshire
Evans, Graham	Con	Weaver Vale
Fullbrook, Lorraine	Con	South Ribble
Garnier, Mark	Con	Wyre Forest
Glen, John	Con	Salisbury
Gray, James	Con	North Wiltshire
Griffiths, Andrew	Con	Burton
Hancock, Matthew	Con	West Suffolk
Harrington, Richard	Con	Watford
Hart, Simon	Con	Carmarthen West and South Pembrokeshire
Heald, Oliver	Con	North East Hertfordshire
Heaton- Harris, Chris	Con	Daventry
Hollobone, Philip	Con	Kettering
Holloway, Adam	Con	Gravesham
Hopkins, Kris	Con	Keighley
Jackson, Stewart	Con	Peterborough
Jenkin, Bernard	Con	Harwich and North Essex
Jones, Marcus	Con	Nuneaton
Knight, Greg Sir	Con	East Yorkshire
Latham, Pauline	Con	Mid Derbyshire
Leadsom, Andrea	Con	South Northamptonshire
Lefroy, Jeremy	Con	Stafford
Leigh, Edward Sir	Con	Gainsborough
Lewis, Brandon	Con	Great Yarmouth
Lewis, Julian Dr	Con	New Forest East
Liddell-Grainger, Ian	Con	Bridgwater and West Somerset
Lopresti, Jack	Con	Filton and Bradley Stoke
Lumley, Karen	Con	Redditch
Main, Anne	Con	St. Albans
Maynard, Paul	Con	Blackpool North and Cleveleys
McCartney, Karl	Con	Lincoln
McPartland, Stephen	Con	Stevenage
Mensch, Louise	Con	Corby
Mercer, Patrick	Con	Newark
Mills, Nigel	Con	Amber Valley
Morris, David	Con	Morecombe and Lunesdale
Mowat, David	Con	Warrington South
Newton, Sarah	Con	Truro and Falmouth
Nokes, Caroline	Con	Romsey and Southampton North
Nuttall, David	Con	Bury North
Parish, Neil	Con	Tiverton and Honiton

Patel, Priti	Con	Witham
Pawsey, Mark	Con	Rugby
Percy, Andrew	Con	Brigg and Goole
Pincher, Christopher	Con	Tamworth
Poulter, Daniel Dr	Con	Central Suffolk and North Ipswich
Pritchard, Mark	Con	The Wrekin
Reckless, Mark	Con	Rochester and Strood
Rees-Mogg, Jacob	Con	North East Somerset
Reevell, Simon	Con	Dewsbury
Rosindell, Andrew	Con	Romford
Ruffley, David	Con	Bury St Edmunds
Soames, Nicholas	Con	Mid Sussex
Spencer, Mark	Con	Sherwood
Stevenson, John	Con	Carlisle
Stewart, Bob	Con	Beckenham
Stewart, Iain	Con	Milton Keynes South
Stewart, Rory	Con	Penrith and The Border
Sturdy, Julian	Con	York Outer
Syms, Robert	Con	Poole
Tomlinson, Justin	Con	North Swindon
Tredinnick, David	Con	Bosworth
Turner, Andrew	Con	Isle of Wight
Vickers, Martin	Con	Cleethorpes
Walker, Charles	Con	Broxbourne
Walter, Robert	Con	North Dorset
Wharton, James	Con	Stockton South
Wheeler, Heather	Con	South Derbyshire
Whittaker, Craig	Con	Calder Valley
Williams, Mark	LibDem	Ceredigion
Williams, Roger	LibDem	Brecon and Radnorshire
Wilson, Sammy	DUP	East Antrim
Zahawi, Nadhim	Con	Stratford on Avon
		•

Source: Adapted from www.artistsagainstwindfarms.com [last accessed 12/07/15]

Appendix 5: List of Commercial Wind Developers for Content Analysis

Developer	Website for Content Analysis
Airvolution	http://www.airvolutionenergy.com/
Banks Renewables	http://www.banksgroup.co.uk/banks-group/banks-renewables/
Blue Energy	http://www.blue-energyco.com/
Broadview	http://broadviewenergy.com/
Community Windpower	http://www.communitywindpower.co.uk/
Coriolis	http://www.coriolis-energy.com/
Coronation Power	http://www.coronationpower.com/
E.On	https://www.eonenergy.com/About-eon/our-company/generation/our-current-portfolio/wind/onshore
Ecotricity	https://www.ecotricity.co.uk/our-green-energy/our-green-electricity/from-the-wind
EDF	https://www.edfenergy.com/future-energy/energy- mix/wind
Energie Kontor	http://www.energiekontor.co.uk/
Enertrag	https://www.enertrag.com/89_unternehmen.html?&L =1
Green Energy	http://www.greenenergyuk.com/
Infinergy	http://www.infinergy.co.uk/
Infinis	http://www.infinis.com/our-business/onshore-wind/
Natural Power	https://www.naturalpower.com/sector/onshore-wind/
Peel	http://www.peelenergy.co.uk/wind/
Prowind	http://www.prowind.com/
Pure Renewable Energy	http://purenewenergy.co.uk/Pure_Renewable_Energy/home.html
Renewable First	https://www.renewablesfirst.co.uk/
RES	http://www.res-group.com/en
RWE	https://www.rwe.com/web/cms/en/8/rwe/
Scottish Power	https://www.scottishpowerrenewables.com/
Seneca Global	http://www.senecaglobalenergy.com/wind-energy/
SSE	http://sse.com/whatwedo/wholesale/generation/renew ables/wind/
TCI Renewables	http://www.tcirenewables.com/
Vattenfall	https://corporate.vattenfall.co.uk/
Volkswind	http://www.volkswind.de/en/home.html
West Coast Energy	http://www.westcoastenergy.co.uk/
Whirlwind	http://www.whirlwindrenewables.com/
Wind Direct	http://www.wind-direct.co.uk/
Wind Prospect	https://www.windprospect.com/

Appendix 6: List of Action Groups for Content Analysis

Action Group	Website for Content Analysis
Action for Rural Morpeth (ARM)	http://www.afrm.org.uk/
Against Subsidised Windfarms Around Rugby (ASWAR)	http://www.aswar.org.uk/
Burton Against Turbines (BAT)	http://burtonagainstturbines.webs.com/
Belvoir Locals Oppose Turbines	http://blot-online.org/
(BLOT)	intep.//biot offine.org/
Birdsedge and district Opposition to	http://www.birdsedge.co.uk/bolt.htm
Large Turbines (BOLT)	
Cumbria Wind Watch (CWW)	http://www.cumbriawindwatch.co.uk/ind
	ex.php/Map_page
Den Brook Judicial Review Group	http://www.denbrookvalley.co.uk/index.h
(DBJRG)	tml
Friends Of Rural Cumbria	http://forcecumbria.org/
Environment (FORCE)	httm://www.flogfower.org.uk/index.html
FLAG (Fowey Landscape Action Group)	http://www.flagfowey.org.uk/index.html
KHG (Keep Hampshire Green)	http://www.keephampshiregreen.org/ind
Mid (Meep Humpshire dreen)	ex.html
Residents Against TurbineS (RATS)	http://www.r-a-t-s.org.uk/index.html
Strategic Alliance Against Lakeland	https://againstlakelandturbines.wordpres
Turbines (SAALT)	s.com/
SAVE Maer Hill	http://savemaerhills.co.uk/index.php
Stop Hempnalls Onshore Wind	http://www.showt.org.uk/
Turbines (SHOWT)	
Save Our Marsh Block Rural	http://www.sombre.org/
Exploitation (SOMBRE)	http://www.gov.gov.gov.gov.gov.gov.gov.gov.gov.gov
Save Our Stainmore (SOS) STOP Havisham Wind Farm	http://www.saveourstainmore.co.uk http://www.stophavershamwindfarm.org.
5101 Havisham wind Parin	uk/aboutusSHWAG.html
STOP Woodlane Wind Farm	http://www.stopwoodlanewindfarm.co.uk
	/index.htm
SULGRAVE and Weston Windfarm	http://sulgrave.org/
Action Group	
Save the Vale Association (SVA)	http://www.savethevale.org.uk/index.htm
Tolpuddle Against INdustrial	http://taint.org.uk/
Turbines (TAINT)	intp.//tuint.org.un/
Villages Of the Cliff Against Turbines	http://docs.west-
(VOCAT)	lindsey.gov.uk/WAM/doc/Appeal%20Cor
	respondence-
	583206.pdf?extension=.pdf&id=583206&
	appid=1001&location=Volume2&contentT
	<pre>ype=application/pdf&pageCount=1 (website no longer live, see planning case)</pre>
	(ozote no ronger nye, oce praming cuse)

Appendix 7: Interview Questions

Introductions: How did this all start?

RESEARCH QUESTIONS	THEMES	QUESTIONS
RQ1 - What is the current policy and practice for planning the development of onshore wind farms in the	POLICY AND PRACTICE ENVIRONMENT	1. You have attempted to submit a planning application within a regulatory environment that supports small or large schemes (medium scale being 50KW – 10MW) what are your thoughts on the repercussions of this?
UK?		2. How knowledgeable do you think the local planning officers are on issues of energy and climate change?
		3. What is your opinion of the recent consultation paper by the Financial Conduct Authority (FCA) that calls for non-registration on any cooperative that doesn't trade directly to its members?
		4. What do you think of the socio-economic assessment within the EIA, did it give enough consideration to the positive / negative impacts?
		5. Do you think there is an argument for separating this section of the impacts assessment from the main EIA document?
		6. Do you think that Kirklees has given "positive weight to renewable and low carbon energy initiatives that have clear evidence of local community involvement and leadership"?
		7. The planning officers report does not include any mention of DECC's January 2014 Community Energy Strategy, what is your response to this? Ed Davey has written to all local planning authorities to urge adoption.

RESEARCH QUESTIONS	THEMES	QUESTIONS
		8. Do you think there is an argument for Kirklees to revisit their supplementary planning guidance on wind farms?
	LOCAL DEMOCRACY AND DECISION MAKING SUPPORT	9. Have you had any government support to negotiate an appropriate benefits package for the community that will be the recipients of community benefits funding?
		10. Can you describe how Kirklees Council have supported you?
		- In the development of the cooperative
		- Through the planning process
		- Through neighbourhood planning
		11. How did Kirklees assist you in understanding the scope of the Environmental Statement?
		12. Do you have a point of contact with Kirklees officers to advise on Community Benefits and is this outside of the planning system?
		13. Have you as individuals and or as the cooperative been involved in local neighbourhood planning?
		14. If approved do you think there will be a legal challenge to the decision?
		15. Will you take the case to appeal if the application is rejected? What does this mean for the collective in terms of funding, timescales, resources and motivation?
		16. In pre-application advice Kirklees formally advised that "the negative environmental impacts would outweigh any positive benefits" at this point in the timescale what

	were your arguments for continuing with the
	application? 17. Having been in conversation with the planning department prior to submission where you surprised at the conclusions of the planning officers report?
USE OF EXPERTS TO SUPPORT APPLICATION	18. Can you outline how and by whom this development has been funded: for feasibility, pre-planning work, planning application work, project finance for construction and operational management and maintenance?
	19. Can you outline your involvement with Energy4All and describe their level of support?
	20. At what point in the development did the Board approve the need / appointment of salaried staff?
	21. What was the response to the planning application for a met mast?
POLARISED DEBATE	22. Since the establishment of CVC do you think there has been an increase in the local community awareness of environmental issues?
	- How would you evidence this?
	23. To what extent has the understanding of energy issues in the wider community supported or hindered your work?
	24. What were the key issues that were up for debate? Do you think dialogue has been two way? Was there a need for conflict resolution? Did you employ specialist community development workers for this role?
	SUPPORT APPLICATION

RESEARCH QUESTIONS	THEMES	QUESTIONS
		25. Did / do you have a media strategy?26. Do you think the arguments supporting and opposing the development were given fair representation in the Planning Officers report?
RQ 7 - What SIA activities are currently used to support or oppose onshore windfarm proposals?	CONSULTATION, ENGAGEMENT AND PARTICIPATION TECHNIQUES	 27. CVC are specifically mentioned in the Community Energy Coalition 2020s Manifesto for the support of CCE, were you involved in the drafting of the manifesto? 28. How as a group have you managed to maintain enthusiasm and motivation for involvement in the development? 29. Are you contacted for support by other community groups wishing to start an energy cooperative and if so to what extent have you been able to assist them? 30. Can you talk through the process and activities of your pre-application consultation? How did you publicise the project? How did you decide who needed to be consulted? How did Kirklees support you in this? 31. What was the response from the community to your consultation activities? 32. To what extent did your consultation efforts include myth busting information? 33. How did you evidence that community views were being taken into account?

RESEARCH QUESTIONS	THEMES	QUESTIONS
		34. What specific engagement techniques have you used to date?
		35. How do you plan to continue engagement during planning, construction and operation?
		36. How have you consulted on how community benefits will be delivered?
		37. Where there any specific barriers to engagement with any members of your community? Did you undertake any bespoke approaches?
		38. What changes have been made to the proposal following consultation efforts?
		39. Who prepared you community engagement plan?
	YOUR BASELINE PROFILING OF YOUR COMMUNITY	40. What existing key sources of information have you found most helpful in developing the Cooperative and submitting the planning application
		41. How prevalent was a sense of community or an interest in collective action in Slaithwaite prior to the formation of the cooperative and do you think this has changed since your inception?
		42. How did you go about collating data on the local context, demographics, values, sensitivities, history and geography of the area, the economic climate, who the local leaders are, the local media readership?

RESEARCH QUESTIONS	THEMES	QUESTIONS
		 43. What level of discussions or desktop research has been undertaken into local contractors and suppliers? Has an estimation been given for potential local job creation? 44. Do you envisage a need for upskilling / apprenticeships to enable local businesses to tender for the work?
	THE PRINCIPLES AND VALUES YOU OPERATE WITHIN	45. Do you think since your involvement in CCV that there has been a strengthened sense of community purpose, pride and achievement?
		46. Why did you opt for community ownership rather than solely community benefits as a model of development?
		47. Your board has a wide range of skills and previous experience was this which is can be rare to find within a single project; can you describe how you went about recruiting volunteers to assist?
		48. As a collective how many hours do you think you have contributed voluntary towards supporting the project?
	YOUR OPTIONS APPRAISALS, ALTERNATIVES AND	49. Can you talk these through with me specifically in response to the Planning Officers comments on alternative sites?
	MITIGATION SOLUTIONS	50. How did you go about identifying potential sites?
		51. What mitigation measures will you be required to make to allow the discharge of planning conditions?
	ANY CONFLICT MEDIATION /	52. Have any of your engagement techniques been adhoc and reactive?

RESEARCH QUESTIONS	THEMES	QUESTIONS
	RESOLUTION MANAGEMENT	53. How have you communicated with the opposition campaign SMOGIT?
		54. Do you think you have changed minds?

Closing: If at the start of the development you knew what you know now, would you have become involved? Would you participate in another development?

Appendix 8: Developer Survey Questions

Research Question	Question	Answer Options
 Introduction 	Which of the following job descriptions do you mainly undertake?	Planning / Consents / Legal Project Management Community Development / Engagement / Consultation Technical / Engineering / Construction EIA Policy / Research Public Relations / Communications / Media Director / Leadership Other (Specify)
• What is the current policy context for developing onshore wind farms in the UK?	If public subsidies for renewables are abolished will your company continue to develop onshore wind farms in England?	Yes No Not unsure Other (specify)
 What is the current practice for planning onshore wind farms in England? Why is there local opposition to the siting of onshore wind farms England? 	How many of your company's planning applications for wind farms (subject to EIA) have been rejected?	Specify
 What is the current practice for planning onshore wind farms in England? Why is there local opposition to the siting of onshore wind farms England? 	How many of your company's planning applications have been subject to call in / recovery powers by the SoS DCLG?	Specify
What is the current practice for planning onshore wind farms in England?	How many rejected applications have been overturned at appeal?	Specify

Research Question	Question	Answer Options
Why is there local opposition to the siting of onshore wind farms England?		
What is the current practice for planning onshore wind farms in England?	Has the cost of an appeal meant a development was no longer economically viable?	Yes No No sure Other (specify)
What is the current practice for planning onshore wind farms in England?	How many operational farms has your company (or client) developed in England (subject to EIA)?	Specify
What is the current practice for planning onshore wind farms in England?	How may farms do you (your client) have consented, awaiting or under construction in England?	Specify
 What is the current practice for planning onshore wind farms in England? 	How many planning applications (subject to EIA) do you currently have within the planning system (England)?	Specify
 What is the current practice for planning onshore wind farms in England? 	Does your company undertake the EIA internally or do you commission a third party?	Internal Third Party Other (specify)
 What EIA and SIA activities support and oppose onshore wind farm proposals in England? 		
England? • What SIA methods are specific to the areas of: participation, profiling, impact prediction, mitigation, alternatives, capacity building, conflict mediation, management, monitoring and evaluation; for developing onshore wind farms?		

Research Question	Question	Answer Options
 What is the current practice 	e for Which of the following socio-economic	Accommodation / Housing
planning onshore wind farr		Aesthetic values
England?	are analysed in an EIA?	Cohesion of the development and its
 Why is there local opposition 		surroundings
the siting of onshore wind f	arms	Community facilities and social
England?		infrastructure
 What evidence is there that 		Crime and public safety
social impacts (positive and		Demographic and population statistics
negative) are assessed at a l	ocal	Employment
planning level?		Health and Wellbeing
 What EIA and SIA activities 		Heritage and cultural values and beliefs
support and oppose onshor	e	Legal
wind farm proposals in		Leisure and Recreation
England?		Local economic effects
 What SIA methods are spec 		Mobility and access
to the areas of: participation		Needs of social groups (e.g fuel poverty)
profiling, impact prediction		Political
mitigation, alternatives, cap		Property values
building, conflict mediation		Risk perceptions / fears and aspirations
management, monitoring a	na	
evaluation; for developing		
onshore wind farms?		
 What is the current practice 	e for Has your company / client ever	Yes
planning onshore wind farr		No
England?	onshore wind development?	Not sure
 What evidence is there that 		
social impacts (positive and		
negative) are assessed at a l		
planning level?		
 What EIA and SIA activities 	s	
support and oppose onshor	e	
••		

Research Question	Question	Answer Options
wind farm proposals in England? What SIA methods are specific to the areas of: participation, profiling, impact prediction, mitigation, alternatives, capacity building, conflict mediation, management, monitoring and evaluation; for developing onshore wind farms?		
	If yes to question 12, please state location/s? If you answered yes to question 12, was the application consented?	Specify Yes No Not sure
 What is the current policy context for developing onshore wind farms in the UK? Why is there local opposition to the siting of onshore wind farms England? 	SIA is a methodology that has been used within planning systems to influence the social acceptability by stakeholders and the decision making of developers, for new developments. Do you think SIA would be of benefit to the English planning system in relation to the development of onshore wind farms?	Specify
• What is the current policy context for developing onshore wind farms in the UK?	If SIA was part of the consenting process for the development of new onshore wind farms in England, do you think this should be as part of the EIA process or undertaken separately?	Part of the EIA process SI should be given more emphasis within an EIA Separate to EIA No value in undertaking SIA None of the above Other (specify)

Research Question	Question	Answer Options
 What is the current practice for planning onshore wind farms in England? What evidence is there that social impacts (positive and negative) are assessed at a local planning level? What EIA and SIA activities support and oppose onshore wind farm proposals in England? What SIA methods are specific to the areas of: participation, profiling, impact prediction, mitigation, alternatives, capacity building, conflict mediation, management, monitoring and evaluation; for developing onshore wind farms? 	What level of social profiling data collection do you undertake?	350 m radius of site 500 m radius of site 2 km radius of site ward level town level district level LPA County Regional National Other (specify)
 What is the current practice for planning onshore wind farms in England? 	Which personnel form you company has specific responsibility for engaging with communities?	Planning / Consents / Legal Project Management Community Development / Engagement / Consultation Technical / Engineering / Construction EIA Policy / Research Public Relations / Communications / Media Director / Leadership Other (Specify)

Research Question	Question	Answer Options
 What is the current practice for 	Within the development process does you	Involvement in site selection
planning onshore wind farms in England? Why is there local opposition to	company undertake any of the following activities with the host community?	Involvement in project development Incorporating local knowledge and values in project development
the siting of onshore wind farms England?		Undertaken an analysis of the local historical context
 What EIA and SIA activities support and oppose onshore wind farm proposals in 		Interpretation of the likely responses Outlines potential areas of conflict and offers resolution methods
England? What evidence is there that social impacts (positive and negative) are assessed at a local		Analyses cumulative effects Offers mitigation / modification of planned intervention works with local community on alternative
planning level? What SIA methods are specific to the areas of: participation, profiling, impact prediction, mitigation, alternatives, capacity building, conflict mediation, management, monitoring and evaluation; for developing onshore wind farms?		options Enhances positive impacts None of the above Other (specify)
 What is the current practice for planning onshore wind farms in England? What evidence is there that social impacts (positive and negative) are assessed at a local planning level? What EIA and SIA activities support and oppose onshore 	Which of the following activities / guidance / policy does you company / client offer?	Community consultation, engagement or participation EIA practitioners are Quality Mark registrants Corporate Social Responsibility Community Benefits Funds Assessing socio-economic impacts Commitment to local labour / suppliers Commitment to focused siting

Research Question	Question	Answer Options
wind farm proposals in England? What SIA methods are specific to the areas of: participation, profiling, impact prediction, mitigation, alternatives, capacity building, conflict mediation, management, monitoring and evaluation; for developing onshore wind farms?		Offering training / educational opportunities to host community Funding research into social acceptance issues Supporting community ownership models Sustainable development and equity considerations Supporting options for social capital and strengthening local democratic process None of the above Unsure Other (specify)
 What is the current policy context for developing onshore wind farms in the UK? Why is there local opposition to the siting of onshore wind farms England? 	What do you think are the biggest barriers to the responsible siting of onshore wind farms in England?	Specify

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Appendix 9: Action Group Survey Questions

Resear	rch Question	Survey Question	Answer Options
	Introduction	When was, your group established?	Specify
•	What is the current policy	Does your group support the abolition of	Yes
	context for developing onshore	public subsidies for renewables?	Yes (only for onshore)
	wind farms in the UK?		No
•	Why is there local opposition to		Other (specify)
	the siting of onshore wind farms		
	England?		
•	What is the current policy	Would you support the development of	Onshore
	context for developing onshore	any of the following sources of energy	Offshore
	wind farms in the UK?	production (or associated facilities) within	Tidal / Wave
•	Why is there local opposition to	your local planning authority (tick any that	Solar
	the siting of onshore wind farms	apply)	Hydroelectricity
	England?		Biomass
			Radiant Energy
			Geothermal
			Gas / Coal
			Shale Gas
			Compressed Natural Gas
			Nuclear
			None of the above
	What is the current practice for	Have you ever been involved in any of the	Written representations
	planning onshore wind farms in	following planning appeal procedures?	Hearing
	England?		Inquiry
•	Why is there local opposition to		Appeal to High Court
	the siting of onshore wind farms		Inquiry following SoS recovery / call in
	England?		Challenge to the Court of Appeal
			Complaint to Ombudsman
			None of the above
			Other (specify)

Research Question	Survey Question	Answer Options
What is the current practice for planning onshore wind farms in England?	How have the costs of your campaign been funded?	Government / Tax payer NGO Campaign membership National / European campaign support Individual donor Crowd sourcing Fundraising activities Volunteers Other (specify)
 What is the current practice for planning onshore wind farms in England? Why is there local opposition to the siting of onshore wind farms England? 	Has your group been successful in stopping a wind farm development?	Yes No Ongoing case
Why is there local opposition to the siting of onshore wind farms England?	If construction of the development has gone ahead, can you describe your feelings about the operational wind farm? Would you participate in future campaigns to oppose the siting of onshore wind farms in your area?	Yes No Not sure Other (specify)
 What is the current practice for planning onshore wind farms in England? What evidence is there that social impacts (positive and negative) are assessed at a local planning level? What EIA and SIA activities support and oppose onshore wind farm proposals in England? 	Has your group commissioned independent expert opinion to support your case with the local planning authority?	Yes No

Research Question	Survey Question	Answer Options
• What SIA methods are specific to the areas of: participation, profiling, impact prediction, mitigation, alternatives, capacity building, conflict mediation, management, monitoring and evaluation; for developing onshore wind farms?	If you answered yes to question 9, please describe the work they undertook for you?	Specify
 What is the current policy context for developing onshore wind farms in the UK? What is the current practice for planning onshore wind farms in England? Why is there local opposition to the siting of onshore wind farms England? What evidence is there that social impacts (positive and negative) are assessed at a local planning level? What EIA and SIA activities support and oppose onshore wind farm proposals in England? What SIA methods are specific to the areas of: participation, profiling, impact prediction, mitigation, alternatives, capacity building, conflict mediation, management, monitoring and evaluation; for developing onshore wind farms? 	What have been your groups reasons for objecting to the planning application for an onshore wind farm in your area? (please tick all that apply)	Noise / health / sleep disturbance Sun / Shadow flicker Bird / Bat wildlife Flora / fauna Local economy: tourism, property prices, residential & leisure amenity Landscape character / visual amenity Aviation safety Construction access / noise Historic / Cultural / Archaeology Telecommunications Proximity to residential dwellings Cumulative Effects Proximity to landscape designations eg AONB, NPs, SSSIs Lack of trust in Developer Lack of disclosure / dissemination of information Inefficiency of technology Exaggerated claims to reductison in CO2 emissions Other (specify)

Research Question	Survey Question	Answer Options
 What is the current policy context for developing onshore wind farms in the UK? What is the current practice for planning onshore wind farms in England? Why is there local opposition to the siting of onshore wind farms England? What evidence is there that social impacts (positive and negative) are assessed at a local planning level? What EIA and SIA activities support and oppose onshore wind farm proposals in England? What SIA methods are specific to the areas of: participation, profiling, impact prediction, mitigation, alternatives, capacity building, conflict mediation, management, monitoring and evaluation; for developing onshore wind farms? 	If one of your reasons for objecting to a development has been the impact on the landscape and visual amenity, can you describe your feelings?	Specify
 What is the current policy context for developing onshore wind farms in the UK? What is the current practice for planning onshore wind farms in England? 	Have any of the following stakeholders supported your campaign? (please tick all that apply)	Civil Aviation Authority Ministry of Defence English Heritage Natural England Environment Agency

Research Question	Survey Question	Answer Options
What EIA and SIA activities support and oppose onshore wind farm proposals in England?		RSPB Intermediaries e.g. Parish Councils, Neighbourhood forums, CPRE Other NGOs Other community / public interest groups Individual members of public Other (specify)
 What is the current policy context for developing onshore wind farms in the UK? What is the current practice for planning onshore wind farms in England? 	Apart from signing the letter to David Cameron in support of the abolition of public subsidies for renewables, how else has your MP supported your campaign? (please describe)	Specify
What is the current practice for planning onshore wind farms in England?	How has the wind developer responded to your concerns?	Specify
• Why is there local opposition to the siting of onshore wind farms England?		
 What evidence is there that social impacts (positive and negative) are assessed at a local planning level? 		
 What EIA and SIA activities support and oppose onshore wind farm proposals in 		
 England? What SIA methods are specific to the areas of: participation, profiling, impact prediction, mitigation, alternatives, capacity building, conflict mediation, management, monitoring and 		

Research Question	Survey Question	Answer Options
evaluation; for developing onshore wind farms?		
 What is the current policy context for developing onshore wind farms in the UK? What is the current practice for planning onshore wind farms in England? Why is there local opposition to the siting of onshore wind farms England? What evidence is there that social impacts (positive and negative) are assessed at a local planning level? What EIA and SIA activities support and oppose onshore wind farm proposals in England? What SIA methods are specific to the areas of: participation, profiling, impact prediction, mitigation, alternatives, capacity building, conflict mediation, management, monitoring and evaluation; for developing onshore wind farms? 	How has the local planning authority supported your groups role in the decision-making process?	Specify
 What is the current practice for planning onshore wind farms in England? What evidence is there that social impacts (positive and 	Is or has there been a pro wind action group campaigning in support of the development in your area?	Yes No Not sure

Research Question	Survey Question	Answer Options
negative) are assessed at a local planning level? What SIA methods are specific to the areas of: participation, profiling, impact prediction, mitigation, alternatives, capacity building, conflict mediation, management, monitoring and evaluation; for developing onshore wind farms?		•
 Why is there local opposition to the siting of onshore wind farms England? What evidence is there that social impacts (positive and negative) are assessed at a local planning level? What EIA and SIA activities support and oppose onshore wind farm proposals in England? What SIA methods are specific to the areas of: participation, profiling, impact prediction, mitigation, alternatives, capacity building, conflict mediation, management, monitoring and evaluation; for developing onshore wind farms? 	Which of the following socio-economic impacts do you think will be affected if your campaign is unsuccessful (please tick all that apply)	Economic and occupational status, personal and property rights Social patterns, lifestyles or way of life Social amenities, relationships and community cohesion Psychological features, fears and aspirations Physical amenities Environmental Health and Well being Personal security Religion, belief system Technological Cultural Political Legal Aesthetic values Other (specify)

Research Question	Survey Question	Answer Options
 Why is there local opposition to the siting of onshore wind farms 	Have you experienced conflict within your community since you started your	Yes No
England?	involvement in the campaign?	If yes: Specify
• What SIA methods are specific to the areas of: participation, profiling, impact prediction, mitigation, alternatives, capacity building, conflict mediation, management, monitoring and evaluation; for developing onshore wind farms?		
 What is the current policy context for developing onshore wind farms in the UK? What is the current practice for planning onshore wind farms in England? Why is there local opposition to the siting of onshore wind farms England? What evidence is there that social impacts (positive and negative) are assessed at a local planning level? 	Do you live within the proximity of an onshore wind farm or potential wind farm?	350-meter radius 500-meter radius 2 km radius In my ward In my town Within my district Within the LPA area In my constituency No Other (specify)
 What is the current practice for planning onshore wind farms in England? What EIA and SIA activities support and oppose onshore wind farm proposals in England? 	Does your action group carry out any of the following campaigning techniques? (tick all that apply)	Leaflets, newsletters, brochures, posters Written representations Petitions Website Development site map Videos / imagery Photomontages / verified visual modelling Site tours / videos of operational farms

profiling, impact prediction, mitigation, alternatives, capacity building, conflict mediation, management, monitoring and evaluation; for developing onshore wind farms? What is the current policy context for developing onshore Arts competitions / e Public exhibitions, prodays Mobile exhibitions Use of local media Use of questionnaires Engaging with other High profile support Offering FAQs Links to planning apport Ofter (specify) Has the wind developer undertaken any of the following activities within the Involvement in site s Involvement in projections / e	rethods are specific of: participation, apact prediction, alternatives, capacity onflict mediation, and, monitoring and for developing and farms? Public meetings 1:1 meetings, door knocking, drop ins Arts competitions / events Public exhibitions, presentations, open days Mobile exhibitions Use of local media Use of questionnaires, online surveys Engaging with other campaign groups
 What is the current practice for planning onshore wind farms in England? Why is there local opposition to the siting of onshore wind farms England? What evidence is there that social impacts (positive and negative) are assessed at a local planning level? What EIA and SIA activities in project developme. Undertaken an analyst historical context. Interpretation of the Outlines potential are offers resolution method and planned intervention works with local comoptions. 	current policy developing onshore in the UK? current practice for ashore wind farms in the local opposition to f onshore wind farms on the state of

Research Question	Survey Question	Answer Options
mitigation, alternatives, capacity building, conflict mediation, management, monitoring and evaluation; for developing onshore wind farms?		
 What is the current policy context for developing onshore wind farms in the UK? What is the current practice for planning onshore wind farms in England? Why is there local opposition to the siting of onshore wind farms England? What evidence is there that social impacts (positive and negative) are assessed at a local planning level? What EIA and SIA activities support and oppose onshore wind farm proposals in England? What SIA methods are specific to the areas of: participation, profiling, impact prediction, mitigation, alternatives, capacity building, conflict mediation, management, monitoring and evaluation; for developing onshore wind farms? 	Do you support any of the following?	Community Benefits Fund Developers assessing socio-economic impacts Developers having local labour / suppliers' contracts Developers having commitment to focused siting (eg brownfield, sewage works, old mining areas) Developers offering training and educational opportunities to affected communities Developers funding further research into socio-economic impacts of onshore wind farms Community ownership models Micro / small scale wind turbines None of the above

Research Question	Survey Question	Answer Options
 What is the current policy context for developing onshore wind farms in the UK? What is the current practice for planning onshore wind farms in England? Why is there local opposition to the siting of onshore wind farms England? 	Do you feel local democratic decision making has occurred, please describe why?	Specify

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Appendix 10: Interview Transcript

The interview transcript is over 22,000 words in length; because of word count constraints for submission of the thesis, this is available separately to the appendices.

For a copy of the transcript contact the researcher directly on tara.muthoora@liv.ac.uk

Appendix 11: LPA Planning Guidance for Content Analysis

Sample LPA	Date	Planning Guidance
Cumbria County Council (Allerdale)	2007a	Cumbria Wind Energy Supplementary Planning Document Part 1 General Planning Guidance
	2007b	Cumbria Wind Energy Supplementary Planning Document Part 2 Landscape and Visual Considerations
	2007c	Cumbria Wind Energy Supplementary Planning
		Document Habitats Regulations Assessment
	2007d	Cumbria Wind Energy Supplementary Planning Document Sustainability Appraisal Stage D: Draft Consultation Report
Fenland District Council	2014	Resource Use and Renewable Energy Supplementary Planning Document
Daventry District Council	2012	Interim Guidelines when Assessing Proposals for the Development of Wind Turbines
	2007	Energy and Development Supplementary Planning Document
Cornwall County	2014	The Development of Onshore Wind Turbines Renewable Planning Guidance Note 3 (V4)
East Riding of Yorkshire	2009a	Planning for Renewable Energy Developments Interim Planning Document
	2009b	Planning for Renewable Energy Developments Interim Planning Document Appendices

Source: (www.allerdale.gov.uk, www.fenland.gov.uk, www.cornwall.gov.uk, www.daventrydc.gov.uk, www.eastriding.gov.uk)

Appendix 12: Recovered Appeals Inspectors Report

Inspector	Year	Case / Site Name	LPA	Case number	Applicant
Rose, D.M.H.	2013	Hallburn Farm & Beck Burn Peat	Carlisle	APP/E0915/A12/2170838; APP/E0915/A/12/2177996	REG Windpower & EDF
MII DDE	0010	Works		ADD /70000 /A /40 /0404004	D 1 D 11
Mellor, R.P.E.	2013	Weddicar Rigg	Copeland	APP/Z0923/A/13/2191361	Banks Renewables
Jackson, P.	2013	Sutton St Edmund	Fenland &	APP/D0515/A/12/2181777;	Wind Ventures
			South Holland	APP/A2525/A/12/2184954	
Pykett, A.	2013	Bozeat, Lavendon	Milton Keynes (1)	APP/Y0435/A/10/2140401;	RWE Npower Renewables
		and Harrold	Bedford	APP/K0235/A/11/2149434;	
			Wellingborough	APP/H2835/A/11/2149437	
McCoy, R.	2013	Harbarrow Farm	South Lakeland	APP/MO993/A/12/2185234	Windberry Energy
Watson, J.P.	2014a	Lane Head Farm	Allerdale (1)	APP/G0908/A/13/2191503	Mary Ruth Harker
Graham, J.	2014	Dorcus Lane	Aylesbury Vale (1)	APP/J0405/A/13/2205701	Force 9 Energy & EDF
Watson, J.P.	2014b	Wood Lane	Breakland	APP/F2605/A/12/2185306	Ecotricity
Griffiths, P.	2014a	Fursdon Farm	Cornwall (1)	APP/D0840/A/12/2189476	Murex Energy
Pope, N.	2014	South Torfrey	Cornwall (2)	APP/D0840/A/12/2186603	Mr & Mrs S. Andrews
		Farm			
Graham, D.	2014	Long Furlong	Daventry	APP/Y2810/A/13/2203312	Alistair Haigh
Griffiths, P.	2014b	Thornholme Fields	East Riding of	APP/E2001/A/13/2190363	Wind Prospect
			Yorkshire (1)		
Woolcock, J.	2014a	Welham Bridge	East Riding of Yorkshire (2)	APP/E2001/A/13/2207817	RWE Innogy
Mellor, R.P.E.	2014a	Bythorne &	Huntingdonshire (1)	APP/H0520/A/13/2197548	RWE Innogy
1,101101, 1011 121	20114	Molesworth			
Watson, J.P.	2014c	Linskeldfield	Lake District National	APP/Q9495/A/12/218858	G. R. Young
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	20110		Park	11117 40 100/11/12/11/110000	an in ioung
Woolcock, J.	2014b	Turncole Farm	Malden	APP/X1545/A/12/2174982;	RES UK and Ireland
,				APP/X1545/A/12/2179484;	
				APP/X1545/A/12/2179225	
Grantham, R.W.	2014	Former Asfordby	Melton (1)	APP/Y2430/A/13/2191290	Peel Wind Farms
N		Mine	(-)		

Inspector	Year	Case / Site Name	LPA	Case number	Applicant
Jackson, P.K.	2014a	Hill Farm	Milton Keynes (2)	APP/Y0435/A/12/2186522	RWE Innogy
Hill, Z.	2014a	Hawton	Newark and Sherwood	APP/B3030/A/12/2183042	Bolsterstone Innovation
			(1)		Energy
Jackson, P.K.	2014b	Brackenhurst	Newark and Sherwood	APP/B3030/A/13/2208417	Nottingham Trent
		College	(2)		University
Robinson, A.D.	2014	Saxby Wolds	North Lincolnshire (1)	APP/Y2003/A/12/2180725	RWE Innogy
Hill, Z.	2014b	Louth Canal	North Lincolnshire (2)	APP/D2510/A/13/2200887	PFR (Louth) Canal Ltd
Mellor, R.P.E.	2014b	Winterton Landfill	North Lincolnshire (3)	APP/Y2003/A/13/2207858	FCC Environmental
		Site			
Hammond, A.	2014	East Moneylaws	Northumberland (1)	APP/P2935/A/13/2193153	Robin Lathangie
		Farm			
Ware, P.J.G.	2014	Fenrother Lane	Northumberland (2)	APP/P2935/A/13/2194915	EnergieKontor
Jackson, P.K.	2014c	East Heslerton	Ryedale	APP/Y2736/A/13/2201109	RWE Npower
		Wold			
Baird, S.R.G.	2014	Popular Farm	Sedgemoor (1)	APP/V3310/A/12/2186162	Next Generation
Jackson, P.K.	2014d	Pilrow Farm	Sedgemoor (2)	APP/V3310/A/13/2197449	Broadview Energy
Major, P.	2014	Laburnham Farm	Selby (1)	APP/N2739/A/13/2204642	John Sherwood
Braithwaite, J.	2014	Busseys Loke	South Norfolk (1)	APP/L2630/A/13/2207755	Streetwood Wind Farm
Dudley, G.	2014	Upper Vaunces	South Norfolk (2)	APP/l2630/A/13/2203839	Upper Vaunces Wind Farm
		Farm			
Woolcock, J.	2014c	Spring Farm Ridge	South	APP/Z2830//A/11/2165035	Broadview Energy
			Northamptonshire		
Baird, S.R.G.	2014	Bishops Itchington	Stratford upon Avon	APP/J3720/A/13/2193579	Broadview Energy
Graham, J.	2015	Lillyhall Landfill	Allerdale (2)	APP/H0900/A/14/2224323	FCC Environment
		Site			
Baird, S.R.G.	2015a	Ison, Fordham &	Aylesbury Vale (2)	APP/J0405/A/13/2194726	Ison, Fordham and Elgin
		Elgin			
Jackson, P.K.	2015a	Rotherham Road	Bolsover	APP/R1010/A/14/2212093	Roseland Community
Major, P.	2015	Bishopsthorpe	East Lindsey (1)	APP/D2510/A/14/2213150	ASC Renewables
		Farm			
Baird, S.R.G.	2015b	Orby Village	East Lindsey (2)	APP/D2510/A/11/2161066	Mark Cauldwell Ltd
Griffiths, P.	2015	Bicton Industrial	Huntingdonshire (2)	APP/H0520/A/13/2207023	Broadview Energy
		Site			
Nield, C.	2015	Wakefield Road	Kirklees	APP/Z4718/A/14/2219268	Stuart Searby
Novitzky, A.	2015	Hall Farm	Melton (2)	APP/Y2430/A/12/2186471	Professor Gary England
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Inspector	Year	Case / Site Name	LPA	Case number	Applicant
Novitzky, A.	2015	Park Farm	Melton (3)	APP/Y2430/A/12/2187098	Mrs H. Tolton
Pope, N.	2015	Torr Works	Mendip	APP/Q3305/A/14/2227407	Aggregate Industries UK
McCoy, R.	2015a	Shoreswood Farm	Northumberland (3)	APP/P2935/A/13/2195630	W. Jackson
Braithwaite, J.	2015	French Farm	Peterborough	APP/J0540/V/14/2220136	REG Windpower
Jackson, P.K.	2015b	Cestorsover Farm	Rugby	APP/E3715/A/14/2227479	RES UK and Ireland
Hill, Z.	2015	Lumby	Selby (2)	APP/N2739/A/14/2221816	Walker & Sons Hauliers
McCoy, R.	2015b	Gleaston Park	South Lakeland	APP/MO933/A/14/2221985	Mr Dennison
·		Farm			
Pinner, D.C.	2015a	Stone Park Farm	Stafford	APP/Y3425/A.14/2212769	Andrew Barnett
Pinner, D.C.	2015b	Kingerby Wood	West Lindsey (1)	APP/N2535/A/14/2216163	Happy Days Farming
					Company
Jackson, P.K.	2015c		West Lindsey (2)	APP/N2535/A/14/2217829	RWE Innogy

Source: DCLG (2015) https://www.gov.uk/government/collections/planning-applications-called-in-decisions-and-recovered-appeals#recovered-

planning-appeals