Wind Farms Community Engagement Good Practice Review

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Contents

1. Introduction

This report sets out the findings of a review of community engagement for wind farm developments. We focus in particular on the engagement carried out by developers with communities. The aims of the study were to evaluate current good practice for engaging people in decision making about on- and offshore wind farms in different European countries; to evaluate the effect that different practices have on public opinion and acceptance; and to make relevant recommendations for Scottish policy and planning.

The structure of the report is as follows. First, we briefly outline the methods used, and then provide an overview of the different planning regimes – focusing on the opportunities, timing and procedures for public engagement – in each of the case study countries. This overview is summarised in table form on page 8. We then identify and discuss some case studies in each of these countries which highlight points of particular interest, and we analyse these in terms of the volume, timing, and thoroughness of the public engagement that they permit, and the effect that this has. We then discuss trends in good practice in community engagement for wind farms, and the particular implications and recommendations for Scotland.

2. Methods

The report provides evidence of good practice in Scotland, England, Wales, and compares this with four additional European countries. Their selection was to ensure a range in terms of: the number of wind farm developments; differences in planning systems; and anticipated transferability of experiences to Scotland. The countries chosen are:

- Germany: selected due to its mature wind energy sector, both on- and offshore (32,479 MW installed as of June 2013) and the interesting prevalence of developer-community partnerships;
- Denmark: selected due to its mature wind energy sector (both on- and offshore) and decentralised planning system;
- Sweden: selected due to similarities between the Swedish and Scottish planning regimes, providing a useful point of comparison and potential applicability;
- France: selected due to interesting differences between French and Scottish planning regimes (e.g. the French regional focus) which may offer opportunities for learning. Additionally, new offshore development processes are underway.

We conducted a review of academic literature, policy documents and reports from commercial developers, community developers, local authorities and government bodies relating to community engagement for on- and offshore wind power in these countries. We identified case studies of good practice in community engagement, and interviewed developers, local councillors, planners, and community councils, and used a documentary analysis to examine the extent to which public acceptance is influenced by the engagement processes used. A detailed discussion of the methods used is given in Appendix 1.

3. Community Engagement across Case Study Countries: Onshore Wind Farms

The following section describes the planning systems in each of the case study countries and outlines the opportunities for community engagement about wind farms in these countries. We have analysed this information in terms of the opportunities and methods of engagement that are used, and taking into account their timing. For example, in some of the case study countries, community engagement was 'front-loaded' towards the earlier stages of the development process; in other countries this came later. The methods used also differ.

This analysis is summarised in Table 1 (page 8). In Section 3.1 (page 9), we discuss the key points that pertain to this, and their relevance for Scotland.

Table 1: Key Features of the Planning Systems in Case Study Countries for onshore wind farms

Time / *Country*	Zoning / Pre-Project Stage	Pre-Application	Post-Application (after submission, before decision)	Post-Approval / Construction	Post-Commissioning
Scotland	▪ Comments on plans and SEA	▪ Non-binding pre-application consultation (for developments over 20MW) ▪ Information provision; public events on site	▪ Written comments and representations ▪ Possible hearing	▪ Information provision	▪ Community funds depending on developer
England		▪ Compulsory pre-application consultation, but no standardised approaches	▪ Written comments and representations	▪ Information provision ▪ appeals	▪ Community funds
Wales		▪ Compulsory pre-application consultations	▪ Written comments and representations	▪ Information provision ▪ Potential appeals	▪ Community funds
Denmark	▪ Public consultations and hearings while developing plans ▪ Initiation of projects	▪ Suggestions on content and scope of EIA	▪ Public consultation period; written comments, representations and alternatives ▪ Non-compulsory citizen meetings	▪ Appeals	▪ Benefits through various ownership schemes
Germany	▪ Public display of draft plans ▪ Written comments on local and regional development plans		▪ Public display of documents ▪ Written comments during approval procedure ▪ public hearing		▪ Potential financial benefits through (co)-ownership
Sweden	▪ Early consultation on local plans	▪ Public hearings	▪ Several rounds of public consultation ▪ Written comments		
France	▪ Proposal of zones for wind farms ▪ Consultations on zone designation		▪ Information provision ▪ Public inquiry		

3.1 Comparison of Planning Frameworks, Consultation and Engagement Opportunities

For the UK case studies, this study has focussed on developer-led community engagement. That is, engagement relating to specific proposed developments rather than in local authority led spatial planning processes (such as local development plans or strategic development plans). This is due to the fact that, whilst planning authorities prepare spatial frameworks for wind farms of 20MW or above[1], community engagement is currently most active (and contentious) in the UK in relation to particular proposed developments rather than at the spatial level. However, within some other European case study countries we found higher uptake of community engagement during spatial planning processes, and also that this appeared to be more influential than later engagement on specific plans in these countries, as will be discussed below. As such, in order to enable comparisons of the different approaches to community engagement we have included spatial planning processes for some of the European case study countries where this seems to be the most relevant level at which to examine community engagement.

Early opportunities for engagement in Scotland are part of the Planning etc. (Scotland) Act 2006, which includes provision for engagement at the Main Issues Report stage (including SEA) of development plan preparation, and at the Proposed Plan Stage. Although this is not a statutory requirement, there is the opportunity for anyone who wishes to contribute to background reports which inform the Main Issues Report. Planning Authorities are required to publish: a 'development plan scheme', which sets out key stages and likely timings in the preparation of the development plan; and a participation statement, which describes the type of engagement to be pursued with which groups of people/organisations, as well as the wider public consultation process. However, whilst there is the *opportunity* for community engagement to form part of this process, in *practice* most active community engagement takes place in later project-specific (and developer-led) engagement processes. Further, whilst the strategic and local development plans plus supplementary guidance form the basis on which decisions on individual applications are made, such planning decision making is of course discretionary.

This provides some interesting points of contrast with the other European countries included in our research. For example, in comparison to Scotland, England and Wales, where large wind farms (e.g. those with a generating capacity over 50MW) are approved by each national government, current wind farm planning in Denmark, Germany and Sweden is almost exclusively handled by local or regional authorities. The municipal and county level in these countries plan and approve wind farms, regardless of size and capacity. Likewise, wind farm planning in France is more decentralised and regulated through the designation of particular wind energy zones at municipal and county levels. Only in Sweden is the central government in charge of approving larger onshore wind farms, which still requires prior land use planning through municipalities.

[1] The current draft Scottish Planning Policy indicates that all development sizes should be planned for in future.

As a consequence, a second key difference between our case study countries is that, compared to the UK countries, there is more opportunity for the public to have a greater input *earlier* in Germany, Sweden, France and Denmark. This is not to say that there is no opportunity for early engagement in the UK countries (see above for Scotland), but rather that it tends to be less frequently taken up. In addition, there is less opportunity for communities to become involved at the later stages in the European comparison countries; so there is much greater focus, emphasis and influence possible at this early stage.

For example, in Germany and Denmark, land use plans (which have a broad scope but may include wind farms as part of the overall plan) are opened up for public comment; and the public have the opportunity and power to suggest changes at this stage. In Sweden, comprehensive plans also set out the long-term development of the physical environment and indicate the features of land use, and there is public consultation on them. In these countries, these plans are then used to determine where wind farms are and are not appropriate, and subsequent individual applications are then made on the basis of this. At the later stage of individual applications in these countries, as will be discussed below, communities may have little opportunity to comment. This places considerable extra emphasis on this early stage in these countries.

Thirdly, we find that this early public input is more likely to be meaningful in Germany and Denmark than in the countries of the UK – action is more likely to be taken on the basis of what people say at this early stage, for example, in terms of designating an area not suitable for wind farm applications. However, it is important to note that – as is the case in Scotland – the significance and influence of public input in Germany and Denmark varies, and depends on the assessment and weighting of different land use interests during the establishment of municipal or regional development plans or suitable areas.

In addition, whilst public engagement is emphasised at this early pre-project stage in the other European cases, there is a greater focus on the engagement that takes place at the pre-application stage in the countries of the UK. For projects classified as major or national this involves minimum mandatory standards (Scotland, England, Wales) and non-prescriptive guidelines (Scotland, Wales) for community engagement, as well as an obligatory consultation report. In other countries the pre-application engagement is not as significant as in the UK, since relevant communities do not usually become involved in the designation of wind farm zones prior to the development of a particular project, or often initiate schemes (e.g. Denmark, Germany). Interestingly, in contrast to the UK countries, there is no legal requirement in Germany for the developer to consult and engage with local communities during a pre-application process. Similarly, at the pre-project planning stages in France the engagement with the public also appears to be restricted, insofar as the public is informed with only limited opportunities to influence a particular application early on. Early project planning in Sweden does comprise mandatory public hearings and consultation reports, but only previously prepared draft plans and assessments can be discussed.

Once a planning application has been submitted (post-application), official periods of public engagement are obligatory in all countries, and often directly linked to the necessity of an EIA. There are opportunities in all countries for people to comment on the actual plans; but in Germany and Denmark this is only if an EIA is required. In these countries, if no EIA is required for a particular wind farm application, then there is not an official route for public comment. So – the balance of public input is *heavily* weighted towards pre-project stage rather than post-application in these countries, and depends on the size of the planned scheme.

Post-application engagement of the wider public is usually fulfilled by the opportunity to submit written representations and comments on the project. Larger and more controversial developments may also allow for public hearings with affected stakeholders. However, the meaningfulness and ultimate manifestation of consulted input hinges highly on the developers' discretion and the planning authorities' judgement.

A detailed discussion of the planning regimes and opportunities for community engagement is given in Appendix 2. This appendix contains descriptions of planning processes in all case study countries as well as Scotland.

4. Community Engagement across Case Study Countries: Offshore Wind Farms

The following section describes the planning systems in each of the case study countries and outlines the opportunities for community engagement relating to offshore wind farms in these countries. Again, we have analysed this information in terms of the opportunities and methods of engagement that are used, in terms of their timing. This information is summarised in Table 2 (page 11), and a summary of the points of significance follows in Section 4.1 (page 12).

Table 2: Key Features of the Planning Systems in Case Study Countries for offshore wind farms

Time / *Country*	Zoning / Pre-Project Stage	Pre-Application	Post-Application (after submission, before decision)	Post-Approval / Construction	Post-Commissioning
Scotland	▪ Written comments on draft plan	▪ Information provision ▪ Pre-application consultation / dialogue ▪ Hearings and exhibitions on site ▪ Scenario mapping	▪ Written comments and representations ▪ Continuing meetings and events	▪ information on progress	▪ Community funds
England	▪ Early consultations on NPS	▪ Pre-application consultation that determines further consultation strategies	▪ Information provision ▪ Consultation of general public on application ▪ Written comments	▪ Negotiation of benefits	▪ Potential community funds
Wales	▪ See England; as offshore wind farms off Wales are regulated by the UK government				
Denmark	▪ Several hearings depending on developers	▪ Written comments on wind farm specifications	▪ Consultations on EIA ▪ Public hearing	▪ appeals	▪ benefits (shareholding, compensation schemes)
Germany	▪ Consultation, written comments on regional plan	▪ Written comments during regional planning procedure ▪ public hearing	▪ Public display of documents ▪ Written comments during licensing procedure ▪ Non-public hearing	▪ progress updates	
Sweden	▪ Consultation on plans that extend over territorial waters	▪ Consultations on EIA	▪ Information provision ▪ Written comments		
France		▪ Public debate ▪ Meetings, exhibitions	▪ Stakeholder consultations	▪ Negotiation of local investments	

4.1 Comparison of Planning Frameworks, Consultation and Engagement Opportunities

As can be seen from Table 2, there are a number of key differences across the different case study countries. In particular, the jurisdiction over sea – divided into territorial waters and the Exclusive Economic Zone (EEZ) – has consequences for the ultimate decision-making process and the role of public input.

The planning and approval of offshore wind farms is centrally regulated in the UK, France and Denmark, as the jurisdiction of their local authorities and municipalities does not expand over the offshore areas around these countries. This substantially limits the influence of local stakeholders in the UK, although Danish municipalities exert some influence on offshore wind development. In Germany and Sweden, the planning system and the jurisdiction over the sea is divided between the territorial waters and the EEZ. While regional authorities (federal states) in Germany and local authorities (municipalities) in Sweden are responsible for the planning and approval of developments in territorial waters, it is a central government agency that exerts decision-making power over the EEZ in these two countries. In addition, in Sweden, territorial waters belong to the coastal municipalities, stipulating them to create development plans over the offshore area.

The planning of offshore wind farms in most countries is controlled by specific agencies, such as Marine Scotland, DECC or the Danish Energy Agency. However, German offshore wind farm approvals are granted by different institutions using existing laws and regulations which have not been specifically created for approving offshore wind facilities in territorial waters. The approval is under the responsibility of the coastal federal states and is regulated by the same Act applied to review impacts of other infrastructure projects on land. Specific regulations, standards and guidelines only exist for licensing technical facilities for energy generation in the EEZ, for which a federal agency (BSH) is responsible.

Early engagement opportunities in all countries are provided through public consultations during the establishment of strategic or specific plans, or in the context of strategic environment assessments (SEA), usually conducted through written comments and public hearings. The pre-application stage is again particularly emphasised in the UK countries, through extensive and creative, but case-dependent, engagement processes with coastal communities. Offshore wind farms in all case study countries also require EIAs which entail various forms of public engagement on the specific projects. Formal post-application engagement usually comprises written comments by the wider public, and their weighting varies between countries and cases. In the UK, and particularly in Scotland, coastal communities and the local public are regarded as important stakeholders in planning offshore and are consequently engaged in the project planning, but the significance of their input appears to be rather case-specific. This is reflected in the various engagement methods used by different developers as well as the early abandonment of the short-term

options, such as Wigtown Bay Offshore Wind Farm and the Robin Rigg Extension (RUDOLPH, 2013).

In Denmark and Sweden, local authorities and communities are seen as crucial stakeholders in the planning of offshore wind farms and their capacity to substantially influence a proposal is not ruled out, and even leads to financial participation (Denmark). Communities in Sweden can participate within a formal consultation procedure for specific projects, which should then be modified on the basis of the consulted information. In Germany, coastal communities are generally regarded as less affected by offshore wind farms, and therefore only tend to be furnished with minor influence. Offshore wind farm projects in France are not as advanced as in the other European countries, but all large-scale infrastructure projects in France are subject to a comprehensive public debate which provides the wider public with the opportunity to express views and concerns at the pre-application stage.

A particular problem in Scotland and Germany has emerged from a temporal overlap in planning, as the advancement of particular projects took place at the same time or even preceded the establishment of overall offshore wind farm plans (draft plans for suitable areas). Another particularity of marine planning in Scotland and the rest of the UK is that the seabed is owned and managed by the UK Crown Estate, which "acts as landlord for the seabed", "as a quasi-public body" and has turned into an "executive agency for delivering marine wind energy" (JAY 2011:4131). These circumstances led to particular issues around a lack of community engagement at the very early planning stages and the site selection of specific wind farm projects in Scotland and controversies over the ownership of the Scottish offshore area (RUDOLPH, 2013).

We find that decisions over wind farm siting are inevitably a balance between the conflicting priorities of economic usage and environmental conservation and protection, regardless of where offshore wind farms are developed. Therefore, the applications need to be reviewed by particular authorities, and other stakeholders of the offshore area (in addition to the public) must be included in the decision-making process. In particular in Germany, a discrepancy in the participation in the decision-making process between stakeholders who are officially invited due to their marine expertise and stakeholders from the public who feel affected by the offshore wind farm, is not conducive to a straightforward process.

A detailed discussion of the planning regimes and opportunities for community engagement is given in Appendix 2. This appendix contains descriptions of planning processes in all case study countries as well as Scotland.

5. Case Studies of Good Practice in Community Engagement for Onshore Wind Farms

Having set out the planning context in each of these countries, we now turn to case studies to highlight issues of interest in each. We identified the case studies to provide a range of issues of interest. In most instances the case studies represent examples of where developers have gone beyond minimum standards for community engagement and/or adopted innovative engagement methods; and we discuss the impact that this has.

UK Case Studies

The following is a summary of case studies in the UK countries. A more detailed discussion of each of the case studies in given in Appendix 4:

Scotland

Name of Wind Farm:	**Stronelairg**
Developer/Operator:	SSE
Size of Proposed Development:	84 turbines, 240 MW (reduced from 144 turbines, 300 MW)
Current Status:	Decision expected 2014
Community Engagement Methods Used:	Exhibitions; Consultation on Scoping Report; Community Liaison Group; Community Liaison Officer; Updates at Community Council meetings

Name of Wind Farm:	**Clyde Wind Farm**
Developer/Operator:	SSE
Size of Proposed Development:	152 turbines, 350 MW (reduced from 197 turbines)
Current Status:	Operational since September 2012
Community Engagement Methods Used:	Schools' Education Programme; Open Days; Exhibitions (roadshow and fixed);
Points of Interest:	Consent was originally refused but granted after appeal (public inquiry). A planning application for an extension is currently under consideration.

Name of Wind Farm:	**Glenchamber**
Developer/Operator:	RES
Size of Proposed Development:	11 turbines
Current Status:	Consented July 2012
Community Engagement Methods Used:	Community Liaison Group; Community Council Meetings; Questionnaire; Telephone Survey; Newsletters; Exhibitions; Meetings; Comment Cards.
Points of Interest:	Planning permission was originally refused but granted after appeal.

Name of Wind Farm:	**Carron Valley**
Developer/Operator:	Partnership for Renewables (PfR)
Size of Proposed Development:	15 turbines, 45 MW (Reduced from 60 turbines)
Current Status:	Refused planning permission
Community Engagement Methods Used:	Public Exhibitions; Stakeholder Meetings; Workshops; Feedback Forms; 'Micro-site' visual representation

England

Name of Wind Farm:	Burton Wold - South
Developer/Operator:	Infinergy
Size of Proposed Development:	5 turbine extension to existing 10 turbines (plus another 7 turbine extension) – total capacity: 45.5 MW
Current Status:	Consented March 2012
Community Engagement Methods Used:	Information Leaflet; School Visits; Open Days; Adverts and Press Releases; Door-knocking; Website; Freephone number; Freepost address; Comment Cards; Local Energy Organisation
Points of Interest:	This is an extension of the Burton Wold Wind Farm. The developer adopted a pre-application community involvement strategy despite no legal regulations dictating such a process for a relatively small wind farm.

Wales

Name of Wind Farm:	Pen Y Cymoedd
Developer/Operator:	Vattenfall
Size of Proposed Development:	76 turbines, 256 MW
Current Status:	Consented May 2012
Community Engagement Methods Used:	Website; Drop-in Sessions; Newsletter; Council Meetings; Workshops; Feedback to Community; Survey; Crowd-sourcing (re: community benefits)
Points of Interest:	The planning and delivery of the consultation process was appointed to an external company, BDOR Limited, who also drafted the statement of consultation.

Engagement Methods Used

Clearly a wide range of engagement methods are being used in relation to onshore wind farms across the UK countries. The dominant approaches consist of a range of awareness raising activities such as public exhibitions and drop-in sessions, complemented by consultation exercises such as surveys or comment cards. However, the case studies also evidence some innovation in engagement methods. For example, at Pen Y Cymoedd, traditional engagement methods were complemented by digital techniques including a crowd-sourcing exercise to explore ideas for the community benefits fund. In two case studies (Pen Y Cymoedd and Carron Valley) workshops were used in addition to conventional meetings. These facilitated more active engagement with community members and were described as encouraging greater dialogue and interaction. A representative of PfR (Carron Valley) described workshops as one way of addressing the often confrontational or antagonistic nature of public meetings which can be dominated by strong voices, a sentiment echoed across other case studies.

We interviewed a range of stakeholders involved in these case studies, who commonly described a need to adopt proactive approaches to get information out to the community and to provide accessible channels through which community members could respond and

make comments or ask questions. For some developers, this led to the development of project specific websites; targeted mailings; door-knocking and the establishment of freephone numbers and freepost mail addresses. Moreover, it was suggested that personality was an important factor shaping success or otherwise of community engagement. Good community engagement may be best conducted by individuals who enjoy talking to people (as noted by a representative from Burton Wold) and who are not afraid to stick their head above the parapet (as suggested by a representative from Carron Valley).

Our interviewees indicated that community engagement was most effective when it involved dialogue and interaction rather than one-way information provision. This means that concerns are taken seriously and responded to and/or addressed (e.g. through a follow-up phone call or visit to residents' homes). For example, a local councillor speaking about the Burton Wold wind farm described a process by which local people expressed their concerns about interference with television reception; and the developer agreed to fund a firm to go around to correct and provide extra equipment to overcome this problem, and to trim the blades of the turbines so that they wouldn't flicker. The councillor describes this as an "intelligent approach to community engagement". On the basis of our research, attempts to find out what the issues were, and make sure that developers recognise any possible adverse consequences to the community and made provisions to deal with them, are very much welcomed. Another example is at Pen Y Cymoedd, where apprenticeships have been created associated with the development – in interview this was described as being a result of consultation responses received through community engagement.

However, across the case studies it seemed that examples of where people were informed of tangible changes resulting from their comments were rare.

Underlying many of these methods needs to be, as one councillor said, a willingness by a developer to expose themselves to questioning and argument – i.e., to actually *engage* with a community, rather than merely providing information, or being defensive or removed from a community. We return to the rationale for engaging with communities below and in section 7.

Ongoing Community Engagement

The case studies include examples of developers setting up ongoing engagement, for example through the establishment of a local energy organisation (Burton Wold) or community liaison group (Stronelairg, Glenchamber). This suggests a commitment to community engagement beyond the pre-application and planning application stages. Indeed, the developers' representatives we interviewed described community engagement as having valuable roles to play at all stages from scoping and feasibility studies, through pre-planning, planning, construction and operation.

Ongoing community engagement and the building of relationships with local communities appear to be key factors for ensuring future positive experiences. For example, in the case of Burton Wold, which was a planning application for an extension to an existing wind farm, positive experiences and relationships between the developer and local community appear to have been important for bringing about local community support and positive planning experiences relating to the proposed extension. Attempts to build ongoing relationships, developing trust and communication, mean that any issues that arise can be tackled openly, and have less risk of jeopardising a project as a whole.

Rationales for Engagement

The developers we interviewed as part of this research had all taken extra effort to engage the public – *and* – they all consistently described community engagement as being a critical component of planning and development processes. Engagement was described as being not simply "an add-on" but an integral part of the process (interview with Pen Y Cymoedd developer). Across our interviews, the reasons given for conducting community engagement included:

- It is important to keep the community informed;
- It is important to give the community opportunities to express any concerns;
- Being transparent and open is more likely to lead to community support for the project, which in turn can increase the likelihood of planning success;
- Engaging community members in the process can ensure that they benefit from (or are not negatively impacted by) the development;
- Good community engagement "keeps people on side".

Local Context

Developers noted the importance of flexibility in designing approaches to community engagement in order to be responsive to local contexts and needs. Additionally, it was said that; "different projects require different levels of interaction" (Interview with developer representative from Carron Valley). As such a one-size-fits-all approach to community engagement is seen to be inappropriate.

This represents a challenging dimension of community engagement. The local context and social, political or cultural factors will influence how opportunities for community engagement are perceived and responded to. For example; in interview, a councillor from Northamptonshire County Council described the community of Burton Latimer as having a tradition of being open-minded towards new developments, and this sentiment may have been significant in leading to support for the Burton Wold wind farm and facilitating positive experiences of community engagement. Conversely, at Carron Valley despite concerted efforts at community engagement there was a poor response from the local community

which a representative of the developer attributed to "developer fatigue". The previous and ongoing volume of planning applications for wind farms in the area appears to have had a significant impact on how community engagement was responded to. Indeed; in an article in the local newspaper the Chair of Carron Valley and District Community Council stated: "No other community in Scotland would have as many wind farms in close proximity as here, if all these proposals are given the green light. Enough is enough" (Falkirk Herald 24/04/2012). As such, recent local history and potential cumulative impacts may have obstructed efforts at community engagement for the proposed wind farm.

What this means is that developers are required to get to know the local context and its specificities, before embarking on an engagement process. It also means that they need to be flexible enough to respond to any particular concerns that might be raised; such as the specific siting issues which impacted upon television reception for certain residents at Burton Wold. Without engagement processes open enough to discover this, important local details may be missed.

Community benefit funds

In each of the UK case studies where planning permission had been granted, a community benefit fund has now been, or is being, set up. Interviewees described how community engagement efforts were at this stage reoriented towards developing ideas for the management and implementation of community benefits.

During pre-application engagement and planning processes, community benefits are typically not discussed in great detail given that these are not material planning considerations. Nevertheless there is evidence that expectation of community benefits impacts on local acceptance of proposed wind farms (both positively and negatively). For example, on their website the Glyncorrwg Action Group (which opposed the Pen Y Cymoedd wind farm) states that:

> "Developers offer community gain which is one of the devices offering incentives which divide the community and blind people to the fact that short-term gain can lead to long term losses of our beautiful landscape. In this disadvantaged community this has swayed some people into accepting the unacceptable."

Conversely, the deputy leader of Neath Port Talbot Council was quoted in the local newspaper as saying that "the long term benefits of the Pen y Cymoedd project would outweigh any short term disruption of the scheme" (South Wales Evening Post, 08/11/2012). What becomes clear is that perceptions of benefit, and the stage at which they are discussed, impacts upon public acceptance. The importance of this is discussed in greater depth in section 7.

Challenges

The interviews with developers revealed a number of challenges associated with conducting community engagement. For example:

- It was suggested that proposing a wind farm is inherently controversial, meaning that some opposition or resistance to community engagement may be inevitable
- The wind power industry's reputation was described as having been tarnished by previous bad practice which shapes people's expectations and willingness to participate in community engagement processes
- In some cases, the local community suffer from "developer fatigue" due to the high number of previous proposed wind farms and are not interested in participating in further community engagement

In some locations the relevant or affected community/ies can be located across large areas making it challenging to identify the relevant community/ies to engage with and/or create satisfactory opportunities for engagement of all community members. Indeed at Burton Wold, despite largely positive experiences, there is evidence of conflicts between council areas and dissatisfaction among councillors and residents of areas which were not consulted as fully or whose councils did not have competence and decision-making power.

Guidelines

Planning documents relating to the case studies (e.g. Pre-Application Consultation Reports) referenced a range of guidance documents, including: PAN 03/2010 "Community Engagement" (Glenchamber; Stronelairg), National Standards of Community Engagement (Carron Valley), regional or local guidance on community engagement (Burton Wold; Pen Y Cymoedd), Protocol for Public Engagement with Proposed Wind Energy Developments in Wales (Pen Y Cymoedd) and the Good Practice Wind Project (Clyde).

There was agreement across all interviews with developers that guidelines are necessary, but that there should be flexibility and autonomy for developers to design their own community engagement practices. In most of the cases we studied, the existing guidelines offered a helpful starting point, but developers consistently went over and above these and instead referred to their own in-house guidelines. However, given the acknowledgement that other developers do not conduct sufficient or satisfactory community engagement it was suggested that minimum standards are required to ensure good practice across the industry.

Good practice

The representatives of developers were asked in interviews what they felt good practice in community engagement necessitated. The responses are summarised here:

- Starting community engagement at an early stage (Burton Wold)
- Working with the local planning authority (Burton Wold)

- Keeping the dialogue open (Burton Wold)
- Tailoring the engagement to the community (Pen Y Cymoedd, SSE)
- Trying to deal with people's concerns (Pen y Cymoedd)
- Listening to and acting upon feedback wherever possible (SSE)
- Ensuring a good level of involvement, and removing barriers inhibiting involvement (Carron Valley)
- Giving feedback on actions taken (Carron Valley)
- Showing the process up front (for example being transparent about the length of the process, and what opportunities for engagement there are) (Carron Valley)
- Maintaining community engagement throughout the planning application, construction and operation of the wind farm (Carron Valley, SSE)
- Being open and honest with communities about the intentions for the project (SSE)

5.1 Case Studies of Good Practice in Community Engagement for Onshore Wind Farms:

European Case Studies

The following is a summary of case studies from Germany, Denmark, Sweden and France. A more detailed discussion of each of the case studies in given in Appendix 4:

Germany

Name of Wind Farm:	Rieseby
Developer/Operator:	Rieseby community and municipality Schlei-Ostsee, in cooperation with Plan 8 GmbH and Bürgerbeteiligung Saxtorf-Wind GmbH
Size of Proposed Development:	6 turbines, 36 MW
Current Status:	Proposed
Community Engagement Methods Used:	Public Meeting; Public Assembly; Draft Plan and Environmental Report
Points of Interest:	The wind farm location is supposed to be a suitable area, designated in the regional plan. However, the development necessitates an amendment of the local land use plan to define the location, exact positions and heights of the turbines.

Denmark

Name of Wind Farm:	Northern Jutland
Developer/Operator:	N/A
Size of Proposed Development:	183 MW over 15 sites
Current Status:	Operational
Community Engagement Methods Used:	Discussion forums; meetings; online maps; GIS models; reports; meetings between citizens, politicians and experts
Points of Interest:	The Northern Jutland case demonstrates influence of the public in early wind farm planning at pre-project stages

Sweden

Name of Wind Farm:	Havsnäs
Developer/Operator:	HgCapital & Nordisk Vindkraft (subsidiary of RES)
Size of Proposed Development:	48 turbines, 94.5MW
Current Status:	Operational since 2010
Community Engagement Methods Used:	Guided tours of construction site; Public meetings; Community Representative and Spokesperson
Points of Interest:	Collaboration between the developers and local citizens resulted in considerable relocation of turbines. The joint approach was nominated for a National Planning Prize in 2006 because of its good resource management, sound development and broad citizen participation.

France

Name of Wind Farm:	Aveyron
Developer/Operator:	N/A
Size of Proposed Development:	Proposed Wind Power Development Zone (WPDZ)
Current Status:	N/A
Community Engagement Methods Used:	Public Inquiry
Points of Interest:	Due to the absence of a national planning framework and in order to cope with the increasing number of planning applications, the Aveyron administration developed a local planning scheme. This started as an open negotiation of different viewpoints, but evolved into a zoning process to identify areas expected to have least impact from wind farms. However, projects proposed in designated zones remain contested due to lack of consideration of cumulative impacts in the zoning process.

Engagement Methods Used

A range of community engagement methods were used in the European cases studies. These include traditional engagement methods such as public meetings but also the use of digital tools such as online maps and GIS models. Additionally, a positive feature of the case studies from Denmark and Sweden is that community engagement was focussed at fostering dialogue and interaction both with and within the community. For example, at Havsnäs in Sweden a community representative and spokesperson was recruited to negotiate interests between the developer and the local community. In Northern Jutland, Denmark, discussion forums and meetings between citizens, politicians and experts were held to facilitate dialogue and exchange of ideas. Such processes may be important for creating shared understandings and going some way towards building consensus.

Acting on the Engagement

As noted above, in the UK case studies tangible evidence of if/how the findings of the engagement had informed proposals was hard to locate. Conversely, in some of the European case studies there is clear evidence of impact from community engagement. Notably, at Havsnäs the collaboration between the developers and local citizens resulted in considerable relocation of turbines from sensitive mountain areas to forested pre-alpine foothills, reflecting the consideration of local environmental interests. In Northern Jutland there is evidence of projects being downsized or relocated in response to public concerns.

Tangible impacts of community engagement may be important for communicating the value of community engagement and encouraging future participation.

Spatial Planning Approaches

The French, German and Danish case studies relate to community engagement in zoning or spatial planning processes rather than for individual proposed wind farms. This has implications for the nature of community engagement as well as the potential outcomes.

These spatial approaches allow for early community engagement to set preferred and/or protected areas and to highlight priorities for wind farm development. However, the case studies have clearly revealed that community engagement in these early processes does not preclude later opposition. In the case of Aveyron (France) the lack of consideration given to potential cumulative impacts from multiple wind farm developments during the zoning process led to later objections and public concern regarding specific proposed projects. Similarly, the Rieseby wind farm (Germany) is proposed in an area which had been designated as suitable for wind farm development in the regional plan. Nevertheless this has been the subject of local opposition and community engagement relating to the particular project is ongoing.

It is interesting to note that in the case of Pen Y Cymoedd (Wales) there were also public concerns raised about the effect of spatial planning approaches on the local area. For

example, the 'Say No To More South Wales Valley Wind Farms' Facebook Group states that: "What has happened as a result of TAN8 is that developers are now hovering over the area like vultures". An apparent lack of clear spatial planning and/or the communication of this planning also results in recurrent wind farm proposals in controversial areas, as stated by the 'Save Our Regional Park' protest group which has originated from a group opposing the Clyde wind farm, who state that "Windfarm developers never leave us in peace for long, we have two new applications, one in North Ayrshire and one in Inverclyde, but both in Clyde Muirshiel Regional Park." This suggests that early engagement about zoning areas may be useful in fostering acceptance for projects which are later proposed. This could mean that questions over the suitability of a particular area for wind farms are addressed at an earlier stage, helping to remove the uncertainty (as demonstrated above in the examples) about if and whether more applications will be forthcoming. However, in order to do so, this zoning has to fully take into account the likelihood and impact of multiple wind farm applications which may follow.

Community benefits – local jobs and suppliers

The Scottish Government's *Good Practice Principles for Community Benefits from Onshore Renewable Energy Developments* (2014) describes the way in which benefits to a community can range from direct financial payments, to investment in local infrastructure, and creating jobs for local people. The former has been considered above in relation to the UK case studies; we see the latter in evidence in some of the European case studies. For example, at Havsnäs, the development and construction of the wind farm was mostly done by local sub-contractors and workers who were trained for the job. As a result, the wind farm created 250 temporary and 13 permanent local jobs, representing a tangible and direct benefit to the community. Similar – though not as significant – schemes are initiated by SSE (Clyde and Stronelairg) and at Pen Y Cymoedd. For example, SSE hold "Meet the Supplier" events with their principal contractor to engage with local business communities. At Pen Y Cymoedd apprenticeships have been created associated with the development – in interview this was described as being a result of consultation responses received through community engagement.

However, it was also noted by a representative of the developer from Pen Y Cymoedd that an important barrier to good community engagement is the difficulty of engaging with organisations and local businesses. It was stated that not involving these actors in early community engagement means that:

> "You're missing key insights and key feedback into all manner of issues from, for example, economic development and the value that projects might bring. Once you've got planning as a developer you go, normally planning's taking so long that you're ready to go and by then talking about the supply chain is too late is the reality".

Removing barriers to early engagement with local businesses and potential contractors and/or encouraging such actors to participate in community engagement processes may be important for maximising local benefits and enabling opportunities for local job creation. The success described at Havsnäs indicates that this may be an area in which the Scottish and UK wind industry could learn from international experience.

6. Case Studies of Good Practice in Community Engagement for Offshore Wind Farms:

UK Case Studies

The following is a summary of case studies of public engagement for offshore wind farms in the UK; a more detailed discussion of each of these is in given in Appendix 5.

Scotland

Name of Wind Farm:	**Argyll Array**
Developer/Operator:	Scottish Power Renewables
Size of Proposed Development:	Initial scheme 1800 MW, up to 300 turbines
Current Status:	Abandoned at pre-planning stage
Community Engagement Methods Used:	Community Liaison Officer; Public Consultation; Consultation Meetings; One-to-one meetings
Points of Interest:	Originated from the Crown Estate's tendering round for offshore wind farm sites in the Scottish Territorial Waters in 2009. The Tiree Community Trust formed the Argyll Renewables Communities Consortium (ARC), along with the Islay Energy Trust and the Kintyre Community Trust. The consortium's objective is to identify means by which communities can actively participate in the planning and development of offshore wind and tidal energy projects to ensure best outcomes for the communities.

England

Name of Wind Farm:	**Triton Knoll**
Developer/Operator:	RWE
Size of Proposed Development:	600-900MW (reduced from 240 turbines, 1200 MW)
Current Status:	Approved
Community Engagement Methods Used:	Exhibitions; Website; Consultation with local authorities & statutory consultees; Newsletter; Open floor hearing; Feedback forms; Questionnaires; Written Comments
Points of Interest:	Early consultation was focussed at identifying suitable sites for an onshore substation. However, a strategic review of the onshore connection by National Grid interrupted all consultation activities in December 2010 and resulted in the separation of the cable route and onshore developments from the offshore wind farm. The application for the electricity systems is expected to be submitted in March 2015.

Wales

Name of Wind Farm:	Gwynt Y Mor
Developer/Operator:	RWE nPower
Size of Proposed Development:	160 turbines, 576 MW
Current Status:	Under Construction
Community Engagement Methods Used:	Newspaper advertisements; Press releases; Project website; Exhibitions; Information leaflet; Survey of tourists; Submission of written statements; Survey, interviews and focus groups re: community benefits
Points of Interest:	The proposal was controversial due to local residents' concerns about impacts on tourism and about the fairness of planning. As a consequence of protests, RWE conducted new research and submitted additional environmental assessments, which led to a revised layout.

Engagement Methods Used

As with the onshore case studies a range of engagement methods are being used in relation to proposed offshore wind farms. This is largely focussed at awareness raising (e.g. through exhibitions; websites; newspaper adverts and press releases) and consultation (e.g. through meetings; questionnaires and focus groups).

Focus of Community Engagement

The Triton Knoll case study highlights that the focus of community engagement may not always be the wind turbines. Rather in this case much of the developer's engagement efforts were focussed on the location of an onshore substation. Early consultation with local authorities and statutory consultees served to reduce the number of potential locations for the onshore substation. This was followed by non-statutory consultations with local communities via questionnaires to identify and further reduce potential locations for the substation. However, a strategic review of the onshore connection by National Grid interrupted all consultation activities in December 2010 and resulted in a separation of the whole project. Therefore, the cable route and onshore developments were separated from the offshore wind farm and the Statement of Community Consultation had to be revised. A planning application for the electricity systems is expected to be submitted in March 2015. Formal pre-consultations with communities and subsequent modifications indicate that the communities have exerted some influence on the future application and the decision about the substation.

Acting on Feedback

RWE (the developer of Triton Knoll) states that the objective of community engagement is to "provide an opportunity for the relevant local communities to put forward their ideas and have a role in developing proposals where they can have an influence" (RWE 2011:5). In the example above regarding the location of the substation there appears to be some evidence

that community engagement has been influential in this case. During the pre-application stage RWE declared their intention to "consider whether and how this feedback could influence any aspects of the offshore wind farm proposal before finalising an application for submission" (RWE 2011:5). RWE stated they would "carefully consider all issues raised during the pre-application consultation period" and that the Consultation Report is supposed to summarise and "explain how the views of consultees have been considered in developing the final application" (RWE 2011:13).

At Gwynt Y Mor RWE responded to local community opposition to the proposed wind farm by conducting new research and submitting additional environmental assessments, which led to a revised layout (DEVINE-WRIGHT 2012). However, there was considerable opposition to the wind farm, on the basis of cumulative effect (three other offshore wind farms will also be visible in addition to Gwynt Y Mor from along the North Wales coastline); landscape/seascape character change; and potential impact on tourism (the town from which the wind farm will be most visible, Llandudno, generates a fifth of all the tourist income in Wales). These concerns were exacerbated by local people feeling that the developer was not interested in consulting them, wasn't listening to their concerns, and didn't know (or care) about the local areas which would be impacted. For example, at some engagement events, there were no local people involved, and representatives from the developer were from London and Reading (HAGGETT, 2008; 2010).

What these examples demonstrate is the importance of engaging with local people in ways that are seen to be effective and meaningful for them (echoing The Scottish Government's (2014) *Good Practice Principles for Community Benefits from Onshore Renewable Energy Developments*). They also demonstrate that in spite of the extra time, money, resources involved because of public opposition (Gwynt Y Mor went to public inquiry), acceptance may not 'matter' – Gwynt Y Mor was approved, even with local opposition to it. However, our research suggests that good practice in engaging the public is always important, not least because of the subsequent impact on perceptions of other wind farms. We return to this point about the rationale for engagement again below.

Local Mobilisation

The Argyll Array case study is very interesting in demonstrating how community groups can proactively seek out and create engagement opportunities. In response to a lack of early community engagement, the Tiree Community Trust formed the Argyll Renewables Communities Consortium (ARC), jointly with the Islay Energy Trust and the Kintyre Community Trust (who also represented communities affected by proposed large offshore wind farms). The objective of the consortium was to identify means through which the communities could actively participate in the planning and development of offshore wind and tidal energy projects so as to ensure best outcomes for the communities. A first crucial step for ARC was taken when they successfully launched and commissioned a common socio-economic impact assessment scoping study for all three offshore sites. The activities

of the Community Trust and ARC led to them being recognised as an important stakeholder in the planning process, which is also evidenced by a thorough dialogue with Marine Scotland at the pre-application stage. This is an example of bottom-up mobilisation and effective community engagement initiated from within the community rather than by developers.

6.1 Case Studies of Good Practice in Community Engagement for Offshore Wind Farms:

European Case Studies

The following is a summary of engagement over offshore wind farms from case studies in Germany, Denmark and Sweden (we do not include France here as there are no offshore wind farm projects yet). A more detailed discussion of the case studies is in Appendix 5:

Germany

Name of Wind Farm:	**Baltic 1**
Developer/Operator:	EnBW
Size of Proposed Development:	21 turbines, 48.3 MW
Current Status:	Operational since May 2011
Community Engagement Methods Used:	Display of documents; opportunities to comment; hearings
Points of Interest:	Baltic 1 was regarded as a pilot project to provide local companies the chance to test developments in the offshore area and to compete at the increasing renewables market. Although the coastal communities perceived themselves to be affected by the proposal they were not considered as key stakeholders due to the distance to the wind farm and limited jurisdiction over the offshore area

Denmark

Name of Wind Farm:	**Middelgrunden**
Developer/Operator:	Energy E2 (now DONG) and the Middelgrunden Wind Turbine Cooperative
Size of Proposed Development:	20 turbines, 40 MW
Current Status:	Operational since 2000
Community Engagement Methods Used:	Exhibition; Website; Site visit; Public hearings; Consultation group
Points of Interest:	50 per cent owned by a cooperative consisting of 8553 individuals, organisations and local companies.

Sweden

Name of Wind Farm:	**Lillgrund**
Developer/Operator:	Vattenfall
Size of Proposed Development:	48 turbines, 110 MW
Current Status:	Operational since 2008
Community Engagement Methods Used:	Hearings; Information material; Exhibitions; Open meetings; Advertisements; Opinion Poll
Points of Interest:	The community engagement methods have been criticised as essentially one-way information provision.

Engagement Methods Used

The dominant engagement methods used in the European offshore case studies are exhibitions, hearings and information material. There is less evidence of innovative or comprehensive engagement techniques compared to the onshore case studies.

Community engagement relating to the Lillgrund wind farm (Sweden) has been extensive; but has been criticised for being little more than one-sided information provision (ALBRECHT et al. 2013). Early engagement methods included hearings, open meetings and exhibitions at which the public was informed about the proposed development (ALBRECHT et al. 2013). These steps, together with an opinion poll and widespread dissemination of information material, represented mandatory engagement activities prior to submission of the planning application. Further measures were undertaken after the project had been approved and during construction; this included promoting the progress and success of the development through exhibitions, forums and advertisements and conducting opinion polls up until the point the wind farm became operational (ZEA et al. 2012). These methods have been criticised for representing one-sided information provision and lacking meaningful engagement or dialogue with the public. Again, however, the issue of whether this 'matters' arises, as the wind farm was granted permission anyway, and we return to this in section 7.

Defining "Affected" Communities

The Baltic 1 case study (Germany) highlights the challenging nature of defining the relevant communities with whom to engage. After the proposed wind farm was granted planning permission, local communities attempted to file a lawsuit against the decision. However this was dismissed due to the communities being defined as legally non-affected given the large distance to the wind farm and the lack of jurisdiction over the offshore space (RUDOLPH 2013). This raises questions over how legitimacy of public concern/support is defined in relation to offshore planning processes and to what extent this is bound up with proximity. It is also related to people feeling a sense of 'ownership' over natural resources (such as landscapes and seascapes), even while they realise that they do not own them in a material sense (HAGGETT et al, 2014); and to the close cultural ties to the coast and seaside that exist, whereby "beaches have a special place in the nation's consciousness... They hold special meanings and create experiences which have lifelong echoes" (Tunstall and Penning-Roswell, 1998:1). So it may be that local people do not have any legal or material rights over the seascapes in question; but have an underlying perception that they should be consulted about any changes to them.

Cooperatives

The Middelgrunden wind farm (Denmark) is half owned by a cooperative. Members of this cooperative played a key role in facilitating community engagement processes. For example, a consultation group was created among cooperative members in order to inform

and consult the local community. This is a very different financial model than has been adopted for offshore wind in the UK (and while it is common for community-led schemes in England, is very rare in Scotland – HAGGETT et al., 2013). As used here, it meant that engagement was led from within the community (which was extensive); and in addition, changes were made to the number of turbines and layout of the wind farm as a direct result of that engagement. It is interesting to note that, as a result of these factors, even though it is in a very prominent location, there was widespread support and very little opposition to the Middelgrunden wind farm.

Feedback on Community Engagement

Our research has demonstrated that where changes are made on the basis of consultation responses; and where that is communicated, then there may be greater support or less opposition to a project. As mentioned above, the Middelgrunden wind farm was initially opposed by the Danish Nature Conservation Society and local residents. In response to concerns raised the proposed layout was altered and the number of turbines was reduced. Concerns were also addressed through a visit to a modern onshore wind farm (LARSEN et al. 2004; ALBRECHT et al 2013). Additionally concerted efforts were made to engage with the Conservation Society who subsequently changed their views. A second public hearing focussed on the changes that were made and the ways that public concerns had been addressed. Following this only a small number of individuals and particular interest groups such as fishermen and yachtsmen still opposed the project.

This case illustrates an example of where community engagement has demonstrably influenced proposals for the wind farm. Moreover, the feedback given to the community on the ways in which their concerns had been addressed appears to have had a significant positive impact in altering public opinions and increasing public acceptance of the project.

7. Trends in Good Practice in Wind Farms Community Engagement and Points of Interest

The case studies demonstrate that community engagement is conducted at a range of stages during planning and development processes. In most cases this begins at pre-planning and even in early scoping work and continues through construction and during the operational life of the wind farm. However, engagement takes different forms and is directed at different 'publics' during these stages. For example, engagement at the scoping phase is often targeted at statutory consultees and particular identified interest groups, whereas wider publics are engaged with during pre-application consultation and planning. This suggests that wider community engagement is typically reserved for when many of the key decisions regarding the design and location of the wind farm have been made. This also limits the possible range of outcomes to come from community engagement and the opportunities for community members to influence aspects of the proposed development. However, within the European onshore case studies there is evidence of community

engagement in early planning processes and/or spatial planning processes leading to substantive changes (for example relating to the locations or size of wind farm developments).

The wind farms which encountered least public opposition tend to be those in which more dialogical forms of engagement were used and where there was feedback to community members on how consultation responses had been addressed. Additionally, where community engagement was led from within the community (e.g. through a community spokesperson or a cooperative group) this also appeared to have a positive impact on community acceptance.

Our case studies demonstrate that a range of engagement methods are currently being used. The prevalent methods include: public exhibitions; meetings; publicity material; questionnaires; photomontages and feedback forms. However, there is evidence of more innovative methods being developed, for example; workshops instead of - or as well as - traditional meetings and digital methods such as crowd-sourcing and use of GIS maps. There is evidence that these wider and more innovative methods are having a positive impact on acceptance because they allow a wider range of responses in different forms, demonstrate effort on behalf of a developer, and allow more two-way interaction between developers and local people.

Level of engagement

The academic and practitioner literatures relating to public engagement acknowledge that a range of methods can be used reflecting different approaches to engagement. This literature typically classifies various 'levels' of public engagement which can be summarised as representing three broad approaches (AITKEN 2014):

- **Awareness Raising**: This layer of engagement is essentially concerned with information provision. The desired outcome is likely to be greater public acceptance or legitimacy for the project.
- **Consultation**: Limited forms of public feedback into decision-making processes. The aim is to gain an insight into public opinion, and to create a socially acceptable or appropriate policy or project.
- **Empowerment**: More participatory forms of public engagement, which give greater control to participants. The aim here is to work with the public, enabling them to play key roles in decision making, building social capital, and enhancing democracy.

This classification of engagement approaches offers a useful device for both the planning and evaluation of community engagement, and exploring the different goals which engagement might achieve. Importantly, the approaches are not mutually exclusive or hierarchical. Indeed, they may be conducted simultaneously or each may have valid roles to play at different stages of planning and development processes. Figure 1 below illustrates the range of methods used in our case studies and how these are seen to fit with the three approaches:

Figure 1: Classification of engagement methods used in case studies

The majority of methods used in all the case studies are focussed at awareness raising, highlighting the emphasis placed on information provision. Consultation is also a prevalent approach and in many instances is conducted in tandem with awareness raising, for example when views are invited at a meeting or in response to information provided at a public exhibition.

There is less evidence of engagement methods with a clear focus on empowerment. However, in the cases where community engagement was facilitated from within the community – for example, through a community liaison group or community spokesperson – this is seen to build capacity within the community and increase the representation of local interests in decision-making processes.

Interactive and deliberative workshops may play an empowering role in that they provide greater learning opportunities, build shared understandings amongst participants and potentially lead to consensus formation. Approaches such as these can be viewed as empowering citizens through building social capital and/or developing individuals' confidence and abilities to participate in civic life. However, it can be argued that any of the engagement methods might also be viewed as empowering if they provide clear evidence of impact. That is, if consultation responses are acted upon or responded to in meaningful ways the consultation process could be viewed as empowering. Currently, given the limited evidence of impacts of engagement in the majority of our case studies these approaches have typically not been classified as empowerment.

It might also be argued that substantive outcomes of wind farm developments, such as community benefits packages or community investment opportunities, could be included as empowerment. However, for the purposes of this review we are focussing on procedural community engagement approaches.

The different approaches to community engagement reflect different rationales and goals. In particular, the extent to which empowerment is viewed as a relevant focus of community engagement relating to wind farms depends on the understanding underpinning community engagement. The following section will therefore set out some of the reasons that community engagement is undertaken and what this means for the planning and development of wind farms.

What is the purpose of community engagement?

Community engagement is conducted for a variety of reasons. These can be instrumental: where engagement can serve particular purposes such as mitigating, overcoming or avoiding public opposition; normative: where communities should be engaged because it is the *right thing to do* or because they have valuable knowledge about their local area which should be drawn upon; or substantive: whereby "the goal of public engagement is to improve social outcomes in a deeper sense […] From this point of view, citizens are seen as subjects, not objects, of the process" (Wilsdon and Willis, 2004: 39).

We find that community engagement is used for all of these reasons. Our research demonstrates that it can be used for pragmatic purposes, to try and site a wind farm in a better place or more appropriately to the local environment – in order to remove objections to it: engagement in the *instrumental* sense described above. Good community engagement 'keeps people on side' and is more likely to lead to support (or less opposition) to the project, and a greater likelihood of planning success.

We find instances of a *normative* rationale too, with evidence that developers acknowledge the rights of people who have lived in communities for a long time, know those places well, and who should be allowed to comment on issues that they know about and will affect them. Some of the developers we interviewed told us that engagement shouldn't just be an 'add-on' but an integral part of the process, suggesting more than just an instrumental view.

However, we also find some evidence of *substantive* engagement, where engagement has been used not necessarily as a means of avoiding opposition, but of fostering ongoing positive relationships with the public. Whilst this is valuable in and of itself, it is also an important consideration when thinking about repowering and extensions; and the image of and support for other wind farms and renewable energy more generally. Our research finds that some developers feel as if they are 'on the back foot' with communities; that bad siting/poor engagement elsewhere means that they face negative perceptions and potential opposition before they have even begun. Developers conducting good engagement – which takes account of concerns and addresses them where possible – have the potential to spill

over into other wind farm projects and wind energy more generally. This is why engagement matters, even when opposition exists and wind farms are permitted. Furthermore, some developers had made efforts to construct long term relationships with host communities, and whilst this can be motivated by all three rationales (a desire to minimise opposition, to allow people to have a say, and to improve outcomes more generally), it certainly alludes to the importance of the latter.

The academic research on public responses to wind farm developments suggests that community engagement can play a significant role in reducing or avoiding public opposition to proposed developments. This is not just in the instrumental sense as discussed above, but relates more to perceptions of fairness and the normative rationale for conducting engagement. There is much evidence which suggests that a lack of engagement is one of the key factors that motivates opposition to wind farms (e.g. AITKEN, 2010; HAGGETT, 2010). People protest not only their questions have not been dealt with by the engagement processes but because they believe those processes themselves to be faulty. Indeed, GROSS (2007) compellingly demonstrates that there is a vital causal link between perceived fairness of process and fairness of outcomes; that if people feel they have been fairly, honestly and appropriately engaged in the decision-making processes about wind farms, then they are more likely to support (or at the very least, not oppose) the outcome, whatever that is.

Our research has identified examples of where community engagement has influenced proposals for the wind farm, and critically, feedback given to the community on the ways in which their concerns had been addressed had a significant positive impact in altering public opinions. So, both actions, and the perceptions of the process more generally can affect public acceptance of a project. This further emphasises the need to engage with people in a substantive sense – engagement can be about more than keeping people on side or avoiding the problems of opposition, but a way of improving outcomes much more widely.

As a final note it is worth saying that engagement alone about a proposed wind farm is not enough – it has to be a good project; and have good engagement about it. This resonates with the conclusions of the Scottish Government's (2014) *Good Practice Principles for Community Benefits from Onshore Renewable Energy Developments*, which makes clear that community benefits, however valuable, do not make a bad project good. We see this evidenced in our research, where a proposal incorporated a number of engagement activities that exceeded the legal requirements but was refused permission on landscape grounds. Engagement, for all the reasons discussed above, is important, but not sufficient alone, and may not thwart the emergence of opposition.

Engagement and benefits for communities

This fairness of process, and engagement that recognises people's rights and knowledge, resonates with the further issue of community benefits. At times, the involvement of communities can be limited to an exchange of information; but community benefits (which

can range from community funds to investment in local infrastructure) can be in addition to this. Indeed, they are often a tangible outcome from the engagement processes.

The Scottish Government has recently published *Good Practice Principles for Community Benefits from Onshore Renewable Energy Developments* (2014). Our findings correspond to many of the points in this document, notably:

1) Our research on engagement and the consultation document both acknowledge the need to rebalance the very often temporally and spatially removed benefits of wind farms, with the tangible, immediate and obvious disbenefits. Our research demonstrates that a thorough process of engagement is the first step which acknowledges this disjuncture; and that then offering benefits of some kind is a way to try and redress it.
2) Our research points to the importance of meaningful community engagement in the planning, development and operation of onshore wind farms. We find that in case studies of good practice, public inputs were listened to, valued and where appropriate and possible acted upon. Community benefits can be an appropriate topic for meaningful community engagement since this is an area where local knowledge and experience can, and should, feed into the design and operation of community benefits package. This may have positive impacts on community acceptance of wind farm projects but also ensure that community benefits packages respond to community needs and reflect community interests.
3) The consultation document has a consistent emphasis on the importance on the particular local context - the rule very definitely is that one size does not fit all – which our research very much supports. The examples of good practice are where developers used a 'case by case' approach to engagement. This means of course that developers need to be open-minded, flexible and accommodating, and willing to invest the necessary time and effort in understanding each individual community, the particular socio-economic, political, historical context, and the issues that are relevant there (which may be very different from even a neighbouring community). There should be scope for communities to be involved in shaping the consultation processes, with communities able to ask developers questions in their terms and about things that were of interest to them.
4) Our research demonstrates the need to start engaging with communities early – ideally pre-planning application – because there is then the greatest flexibility and opportunity to inform decision-making. Discussions of benefits should also be at these early stages, both to determine what might be most appropriate in a particular location, and to ensure that the issue of benefits does not seem like bribery if they are only mentioned later. Early engagement – which includes routine discussion about benefits could help to avoid the perception that they are being used to avoid this misperception.

5) Our research demonstrates the importance of developing ongoing relationships, building and maintaining trust between developers and communities. The consultation document suggests that the emphasis on the developer to be flexible, and to respond accordingly to the needs and timescales of the community, which is supported by our research. The processes of engagement should continue after initial views have been gathered from the community, and developers should provide feedback on how and why points were or were not accepted. In addition, there should always be clear point of contact, and maintenance of a commitment to the processes and outcomes, even when the developer changes.
6) Our research highlights the challenges in identifying communities with whom to engage. The draft document sets out a series of processes for identifying communities, engaging with them, and details the content of the consultation, in terms of where, who, what, and how this might take place. On the basis of our research, we suggest that this is a very helpful set of guidelines.

8. Implications and Learning Points for Scotland: what should 'good practice' mean?

Learning from different regimes and cases

This research has been an exploration and comparison of different planning regimes and case studies across Europe. The first key difference between the UK countries and the European case studies is the emphasis on consultation at the zoning/strategic plan development stage, before any applications are announced. What we can learn from this is that increased community engagement at regional/ local level in the development of strategic plans has the potential to alleviate opposition later on. The important caveat to this is that this early engagement has to assess the likelihood and impact of potential (cumulative) wind farm applications in the spatial region under study, otherwise opposition is still likely later when individual applications are announced.

In 2007, SPP6 pointed to the significance of development plans for the assessment of larger wind farms and invited planning authorities to incorporate wind farms in their development plans in order to provide greater planning certainty for wind farm proposals. However, local authorities seem to have responded rather slowly to this planning policy.

Marine Scotland's consultations on the draft plan of offshore wind farms in territorial waters can certainly be viewed as a very positive step in this direction, although in the context of efforts of the Crown Estate to bring offshore wind farms forward.

The second key difference between the European and UK countries is in the final decision making powers. Large wind farms are 'called in' by national governments in the latter, but usually remain for regions or municipalities to decide in the former. This relates to the difference in process discussed above, and that, broadly speaking, regions agree a strategic plan and then decide what goes in it. Decisions about large wind farms – which arguably

have the greatest impact – being made at a national level in the UK suggests a disassociation between the decision makers, and the places were those decisions will be felt.

Thirdly, there are examples in the European cases of where tangible benefits have been achieved in communities. This suggests that removing barriers to early engagement with local businesses and potential contractors and/or encouraging such actors to participate in community engagement processes may be important for maximising local benefits and enabling opportunities for local job creation.

A further difference is between, in particular, Denmark and the UK, where the co-operative model is well used in Denmark, but very rarely for a commercial scale wind farm in the UK. Previous recent research for ClimateXChange (HAGGETT et al, 2013) found that there is potential for greater use of the co-operative model in Scotland, and also for joint-ventures and joint partnerships between developers and communities. Research suggests that whilst complex, a joint model, whereby the community has a direct financial buy in and benefit from a wind farm, can significantly improve perceptions of that development. Whilst this is not the focus of this research, we suggest that there is a potential for greater use of these models, and that they are likely to significantly impact upon social acceptance if made more widely available. In particular, we found evidence that where community engagement is led from within the community this has positive impacts on local acceptance. Co-operative ownership models may lead more naturally to this form of community engagement.

However, despite these differences, there are many common factors which pertain to case studies (on- and offshore) and regimes in all countries studied. In all cases, we find the importance of: wide-ranging and innovative methods; methods which strive to facilitate dialogue; instances where action is taken on the basis of responses gathered; measures to keep engagement ongoing through all stages including approval and construction; the role of identifying and implementing tangible benefits. We also find that where minor influence only is granted, and people are not perceived to be affected – even though they may feel that they are – this tends to causes resentment, and the benefit of taking people and their concerns seriously has an impact on acceptance across all cases.

Good Practice

On the basis of our research, we suggest that 'good practice' in engaging communities about particular wind farm proposals, on and offshore can be defined according to the following principles (our Recommendations follow in section 9):

- Developers should be obligated to undertake community engagement throughout all stages (e.g. from pre-application, through to construction, operation and decommissioning). If the project developer changes, then the new developer/operator should be obligated to take on this engagement.

- Relatedly, and as noted in Circular 3/2013, they should be obliged to say how responses gathered during this engagement were (or were not) taken into account
- Engagement should start early; for developers this would be at an early stage of developing their plans, where adaptations in light of suggestions would be more easily made; also developers should be as open as possible about the development and engagement process at the start. Wider community engagement is typically conducted after consulting with statutory consultees, and when many of the key decisions regarding the design and location of the wind farm have been made. Our research suggests that this may be too late.
- Engagement on individual projects should be conceived of as an ongoing process, not just events during pre-application
- Engagement should be undertaken using wide ranging and extensive methods
- These methods should allow for a dialogue, not just a one way distribution of information
- They should be tailored to the particular location, using knowledge gathered about that place, and using methods and timings that are appropriate in each place
- Developers should support communities (who may be fatigued from engagement from multiple wind farms) in being able to participate, for example in terms of the means and timings, providing accessible channels through which community members can respond, and being flexible to adapt the engagement processes to suit that community
- Engagement should not just be seen as a way of avoiding opposition, but of respecting and valuing people's rights and expertise, and allowing for broader social outcomes (which may impact upon approval for that wind farm, any extensions, and wind energy more generally)

Guidelines

In the cases we examined, a range of guidance documents were used, including: 'PAN 03/2010 Community Engagement', 'National Standards of Community Engagement', regional or local guidance on community engagement, 'Protocol for Public Engagement with Proposed Wind Energy Developments in Wales' and the 'Good Practice Wind Project' guide.

These guidelines formed a useful starting point, but in the cases of good engagement that we studied, developers went above and beyond these standards, i.e. for pre-application consultation in the UK, by forming community liaison groups or appointing liaison officers to create a closer relationship and dialogue between the developers and the communities. Additionally, the establishment of community funds was not commanded by national standards before 2013, but has become a common instrument of good practice.

However, despite following standards which exceeded current guidelines, importantly the developers we spoke to also valued the flexibility to be able to adapt the processes to each particular location. They also said that other developers do not conduct sufficient or satisfactory community engagement, and suggested therefore that improved minimum standards are required to ensure good practice across the industry. This suggests that further guidance is required, which promotes more extensive, ongoing, dialogical engagement on the basis of which action should be taken wherever possible but which is flexible enough to be adapted to the specificities of each location. It also suggests that these improved minimum standards should be enforceable. More extensive guidance would not just be helpful to support and encourage better engagement in each location, but could have the potential to improve perceptions of wind energy more generally, as experience is shared and previous wind farm applications influence acceptance of present and future projects.

The findings of this research resonate with and develop the work of the 'Good Practice Wind' project report. That project also identifies the need for early communication, a dialogue between affected parties, the importance of using novel methods to engage people, and the need for a thorough assessment of likely impacts and the role of tangible benefits. What we also find in our research is the significance of good engagement for other wind farms and wind energy generally, and the significance of *perceptions* of process in informing acceptance and opposition.

Furthermore, our findings reinforce the National Standards for Community Engagement. Whilst these are aimed at public bodies conducting community engagement they have clear relevance and applicability for developers proposing wind farms, and on the basis of this research, we suggest that they could be adapted for wind farm developers. The standards point to the need to identify and involve all people and organisations with an interest in the focus of the engagement and to remove barriers to involvement. Additionally, they acknowledge the importance of learning about the particular context and developing community engagement approaches which are responsive to local needs and resources. Importantly, the standards highlight the importance of giving feedback to community members on the outcomes of engagement processes. In line with the empowerment approach described above they also suggest that community engagement should aim to develop skills, knowledge and confidence of participants. Based on our study we would suggest that there would be value in incorporating and building on these standards in specific guidance on community engagement for wind farms. Given the current diversity of guidance and toolkits relating to community engagement (for planning as well as other purposes), it would beneficial to adapt these various sources to develop specific, user-friendly guidance relating to community engagement for wind farms (or renewable energy projects). This would create a single, tailored resource that developers, communities and planning authorities could draw on more efficiently.

9. Recommendations

On the basis of this research, we make the following recommendations:

1) Developers should be obligated to undertake community engagement throughout all stages of planning, development and operation; and both developers and the planning authority should be obliged to report on how and why responses have been addressed. If the project developer changes, then the new developer should be obligated to take on this engagement. Current Pre-Application Consultation reporting mechanisms could be strengthened through more stringent requirements relating to detailing actions taken and/or amendments resulting from consultation processes.
2) Existing guidelines on community engagement (including the National Standards for Community Engagement) should be adapted to provide specific guidance relating to wind farms. They should include a clear steer on: starting engagement as early as possible with communities; maintaining ongoing relationships with those communities; using methods that are more wide-ranging than are currently commonly used, and which are appropriate to each particular location; using methods which ensure that there is a dialogue possible between local people and developers.
3) Consideration should be given to strengthening and expanding community engagement not only at pre-application, but also at the spatial planning stage for onshore wind farms, similar to the processes that Marine Scotland have used for offshore energy planning in territorial waters.
4) Guidance should include an onus on developers to support communities in being able to participate, for example in terms of the means and timings, providing accessible channels through which community members can respond, removing barriers to participation and being flexible to adapt the engagement processes to suit particular communities.

10. Conclusions

Engaging the public about on- and offshore wind farms matters. The methods used and auspices under which they are carried out affects acceptance of particular wind farms, and of wind energy more generally. People feel that they have a right to participate in decisions that affect them, and whilst that right is enshrined in the Planning Act, this does not necessary mean that in practice people feel that they have a voice. This matters because feeling that they are ignored or excluded from decision-making – even if they support the wind farm – is likely to turn into opposition. Not engaging people effectively misses the opportunity to take advantage of local knowledge, and risks muddying the waters for future developments. The wind farms which encountered greatest acceptance/least public opposition tend to be those in which more dialogical forms of engagement were used and where there was feedback to community members on how consultation responses had been addressed. Additionally, where community engagement was led from within the community (e.g. through a community spokesperson or a cooperative group) this also appeared to have a positive impact on community acceptance.

Appendix 1: Methods

The work was conducted through a number of stages:

1. Selection of European Countries for Review

The European countries included in this review were chosen to reflect a range of countries in terms of number of wind farm developments; differences in planning systems and anticipated transferability of experiences to Scotland.

A shortlist of countries was developed through a review of energy and planning policies and numbers and types of wind farm developments across Europe. We also drew on data available from the European Wind Energy Association on wind power capacity targets, national renewable energy action plans, and installed MW, in helping to draw up the short list.

The final list of countries was discussed and agreed with ClimateXChange and Scottish Government representatives before commencement of the second stage of the project.

2. Review

Once the countries and cases were identified, the research team conducted a review of academic and grey literature relating to community engagement for onshore and offshore wind power in these countries, together with a review of relevant policy documents and available reports from commercial developers, community developers, local authorities and government bodies.

This review identified relevant planning policies and guidance in the selected countries as well as examining the opportunities for community engagement within the various planning regimes. Through this review we also identified a number of case studies of good practice in community engagement with wind farms (both onshore and offshore).

3. Interviews

Interviews with representatives of developers, local councils, and community councils were conducted to complement the review. Interviewees were identified through our review of case studies and focused on case studies of wind farms in Scotland, England and Wales which have been identified as using good practice in community engagement. Interviews explored the approaches that developers took; their reasons for going beyond minimum requirements for community engagement; their perceptions of existing guidelines and requirements and; their reflections on the value of community engagement. Interviews with local councils and community councils focused on their perceptions of the process, how much opportunity and impact they felt the community had, and were used to build a fuller picture of the principles and processes of engagement in each case study.

4. Documentary Research

We were particularly interested to explore the impact of different engagement strategies on public acceptance of wind farms. To this end we conducted desk based research to identify evidence of support and opposition in each case study area. Available evidence came from opposition groups, local media coverage and documents produced by key local stakeholders. A content analysis was conducted to identify and examine the extent to which public support and/or opposition had been influenced by the engagement processes used.

5. Analysis

All the evidence collected through the case studies was reviewed and analysed by the research team. Following the content analysis, the second stage of data analysis took the form of describing the range of practices undertaken in each context (methods for community engagement, time frame in which they are used, participants involved, locations used, open or closed access, how responses are gathered and used); and then classifying these approaches according to the various approaches discussed in this report (awareness raising, consultation, empowerment). We also distinguished between what would be an overarching engagement strategy; and more specific techniques for putting this into practice.

Appendix 2: Expanded Discussion of Planning Regimes for Onshore Wind Farms in Case Study Countries

The following sections provide a summary of key points relating to planning processes and community engagement for onshore wind farms in Scotland, England, Wales, Germany, Denmark, Sweden and France.

1) Wind farm planning in Scotland

Since devolution, spatial planning jurisdiction for the Scottish territory has been exclusively assigned to the Scottish Government (Scottish Executive). The Scottish Government is therefore responsible for decisions concerning land use planning and management, and has its own planning policy and system which differs from the ones in England and Wales.

The Scottish Planning Act (2006) and the amendment of the Town and Country Planning (Scotland) Act (1997) introduced a three-tier hierarchy of developments, consisting of national, major and local developments, which are subject to different planning procedures (WARREN 2009). The general principle is that decisions should be made at the most local level, which devolves power for most developments to Local Authorities. Only larger infrastructure developments, such as wind farms with a capacity of more than 50MW, are directly controlled by the Scottish Government, according to the Electricity Act (1999), while respective Local Planning Authorities act as statutory consultees. All smaller wind farm projects are subject to Local Authorities (Councils and Loch Lomond & Trossachs National Park Authority) and fall under the Town and Country Planning Act. However, the Scottish Government reserves the right "to call in planning applications for ministerial decision in certain cases" (WARREN 2009:35), which has led to a revision of some local wind farm decisions. Likewise, depending on how applications were processed, applicants have the right to appeal to the Scottish Government if their proposals are rejected by Local Authorities. Some researchers have argued that the planning system is imbalanced due to the lack of rights of third parties to appeal if a proposal is approved against the wishes of opposing individuals or organisations (e.g. WARREN 2009).

Public participation in Scotland

The importance of public engagement in the Scottish planning system is clear: "Support or concern expressed on matters material to planning should be given careful consideration in developing plans and proposals and determining planning applications" (SPP2013:9), and public engagement should therefore be early, meaningful and proportionate. The participation of communities is regarded as a major theme in the modernisation of the planning process and important in planning for renewable energy, as it "can lead to better plans, better decisions and more satisfactory outcomes and can help to avoid delays in the planning process" (SPP2010:5)). It is expected that public engagement should "enable

community views to be reflected in development plans and development proposals" (SPP2010:5), which points to the normative capacity ascribed to the public to influence development plans and proposals. Moreover, communities should be given opportunities to get involved in the preparation of development plans and "legitimate public concern and support should be a consideration in planning decisions" (SPP2010:6). Development plans are concerned with land and infrastructure and "should provide clear guidance on what will and will not permitted and where" (SPP2010:3).

Although clear value is attached to the participation of communities where renewable projects are proposed, and statutory requirements are in place, *in practice* the scope of such engagement remains rather uncertain and can range from information provision and promotion of developments or active engagement and influence on the outcome of the development. While there are statutory standards for minimum requirements of community engagement at the pre-application stage of projects, community involvement in the preparation of development plans is subject to the planning authorities. There are several steps in the procedures of wind farm planning at which local communities and the wider public are informed and allowed to participate in the planning process.

Local Authorities in Scotland should create a spatial framework for onshore wind farm developments (ELLIS et al. 2013) and "local development plans should clearly set out the potential for wind turbine and wind farm development of all scales as part of the spatial framework (SPP2013:50). In contrast to previous planning policies, the "proposed removal of the 20MW threshold is intended to encourage all planning authorities to develop spatial frameworks for a full range of scales of wind farm developments" (SPP2013:52) and not only for major developments. The preparation of spatial frameworks should ensure that they "are subject to consultative processes for statutory development plans" (SPP2013:50). The draft of the Scottish Planning Policy 2013 also sets out criteria and defines areas which are unsuitable for onshore wind farms. First development plan schemes were published by planning authorities in 2009 (SPP2010:3) and will be updated annually. So, an opportunity for the public to participate in wind farm planning, prior to actual project proposals, is offered at pre-project stages in which wider development plans (public sector plans, local development plans, draft plans etc.) are prepared. Since Strategic Environmental Assessments (SEA) are used to improve decision-making across various planning sectors (JACKSON & ILLSLEY 2006), public participation, as an integral part of the SEA, has become a key step in early planning in Scotland. Development plans are expected to provide a broad spatial steer for onshore wind farms and a frame and detailed criteria for decision-making on wind farms in previously designated areas.

According to the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2011 smaller onshore wind farm development projects usually fall under Schedule 2 developments (more than 2 turbines, higher than 15m), which do not require a

EIA per se. However, “the planning authority must screen every application for Schedule 2 development in order to determine whether or not EIA is required” (Scottish Government Circular 3/2011:11), which leaves the necessity of an EIA at the planning authority’s discretion. In contrast, “it is stressed that EIA is not discretionary” (Circular 3/2011:4) and that an EIA is required for schedule 2 developments which are likely to have significant effects on the environment. Applicants may also voluntarily submit an Environmental Statement (ES) without any prior screenings. An EIA becomes relevant to community engagement insofar as the planning authority has to notify the public about the submission of an ES and the public can submit representations and comments on the ES. Moreover, all wind farm projects with a capacity larger than 20MW are classified as major developments requiring pre-application consultations, but not always an EIA. This additional community engagement requirement is the earliest statutory stage at which communities are informed about and can get engaged in particular project developments, even if locational aspects may have been initially discussed during the engagement on spatial frameworks and development plans.

The purpose of pre-application consultation is to better inform communities and provide them with an “opportunity to contribute their views before a formal planning application is submitted to the planning authority” (Circular 3/2013:8). The pre-application dialogue between the applicant and the community aims to “improve the quality of planning applications, mitigate negative impacts where possible, address misunderstandings, and to air and to address where practicable any community issues” (Circular 3/2013:9). Minimum requirements for the consultation with relevant community councils that are within or adjoin the proposed sites must comprise at least one public event which must be advertised with a notice of at least seven days (Circular 3/2013). Despite the statutory character of the pre-application’s consultation, the “prospective applicant is under no obligation to take on board community views, or directly reflect them in any subsequent application” (Circular 3/2013:9).

Community views can be made to the planning authority at the planning application stage before the authority determines the application. But upon completion of the consultation, the applicant must prepare a pre-application consultation report to be submitted alongside the planning application. The report should specify how and who has been consulted and how this complies with statutory requirements. Legislation does not specify the content of the report, but a useful minimum is considered to “set out how the applicant has responded to the comments made, including whether and the extent to which the proposals have changed as a result of PAC” (Circular 3/2013:14). Councils usually provide guidance on the scope and content of the report. The Planning Authority can validate the quality of the public event and may “conclude that the events were so ineffectual that the applicant has failed to carry out the required step” (Circular 3/2013:24). After submission to the Planning Authority, the public has a 21 day window to submit formal representations on the

application to the Planning Authority. The decision will be made on the basis of the received comments and representations from the public and other organisations as one of a number of material considerations and will also take account of local development plan and national policies.

In terms of larger wind farm developments (>50MW) determined by the Scottish Government, public engagement is also expected to begin at the pre-scoping stage. During the scoping stage, in which the requirements for the forthcoming EIA are identified, the applicant submits a scoping report. Based on this report, the planning authority consults statutory consultees. While the draft application is prepared for submission during the pre-application stage, the public is also notified about the application. A consultation timeframe of 28 days is provided for the public to respond and comment on the application. A potential submission of additional information by the developer is subject to another full consultation of 28 days. A public inquiry must be convened if local authorities, in their role as statutory consultees, object to the application. Pre-determination hearings are required in certain cases where major developments "are significantly contrary to the development plan and for all national developments" (Circular 3/2013:34). Planning authorities must specify the procedures and format of the hearing and provide applicants as well as people who submitted representations with the opportunity to speak and ask questions. Circular 03/2013 specifies some procedures for the hearing which should be considered by the planning authority.

Implementation of community engagement and influence of communities in Scotland

Community can either be defined by a location or a common value, interest and background (PAN 3/2010:4) and their engagement should establish an effective relationship with individuals and groups based on three principles (PAN 3/2010:2):

- It must be meaningful and appropriate
- It must happen at an early stage to influence the shape of plans and proposals
- It is essential for people or interest groups to get involved in the preparation of development plans as this is where decisions on the strategy, for growth or protection, are made

Community Councils are formally consulted when development plans are being prepared, during pre-application consultations and when a planning application has been submitted. Community councils can also inform the Planning Authority about their wish to be consulted (PAN 3/2010:22). So they often take a proactive role to ensure that their views, concerns and representations are communicated to the planning authority. In terms of wind farms, planning authorities should consider "likely impacts on communities, including long term and significant impact on amenity" (SPP 2010:39). Since there are various steps at which the general public and local communities are invited to participate in the planning process, the

questions are rather how community consultations are organised, what is done with the public input, and how this may influence the outcome. A more tokenistic and box-ticking approach with no real impact on the outcome may easily lead to a cynical understanding of future consultations and provoke resistance to future developments (WARREN 2009). The scope of public participation needs to find "a balance between too much and too little consultation" (WARREN 2009:414). Extensive consultation may render the planning process complex, lengthy and costly, while too little participation may encounter opposition and may delegitimise the project.

Once an application and ES for a wind farm development have been submitted the local community can comment on the information provided and submit written representations within a prescribed timeframe. This step of community engagement is largely pre-structured by law and the consideration of these representations lies with the discretionary power of the planning authority, and thus remains rather obscure for the public. However, the developer should inform the public about the screening and may consult with the public at the scoping stage of the EIA (PAN 1/2013:13). In contrast, the earlier statutory pre-application consultation provides some voluntarily flexibility for the developer to engage with local communities beyond the legal requirements, which can also be continued over the entire planning process through "the establishment of formal community liaison arrangements as a mechanism for regular discussion" (PAN 3/2010:8) (e.g. good neighbour agreements). There are National Standards of Community Engagement which should be considered and applied to any engagement with communities for both development plan preparations and pre-application consultations (PAN 3/2010:27).

2) Wind Farm Planning in England

The planning process for onshore wind farm projects in England depends on the size of the proposed development, whereas the threshold is determined by a capacity of 50 MW. According to the Planning Act 2008, wind farms with a capacity of more than 50 MW are directly determined by the Secretary of State for Energy and Climate Change (DECC, UK Government). Wind farm proposals with less than 50 MW fall under the jurisdiction of Local Planning Authorities according to the Town and Country Planning Act 1990.

The planning policy for onshore wind farms is set out in the National Planning Policy Framework (NPPF), the National Policy Statement for Renewable Energy Infrastructure and Planning Practice Guidance for Renewable and Low Carbon Energy that was published in 2013. The NPPF expects that all communities should help increase the use and supply of renewable energy, which does not imply that the delivery of renewable energy should override environmental concerns and concerns of local communities. "It is important that the planning concerns of local communities are properly heard in matters that directly

affect them" (DCLG 2013a:4). The guidance suggests compliance with local plans as the starting point for the consideration of any renewable energy developments in an area.

Wind farm proposals larger than 50 MW are categorised as Nationally Significant Infrastructure Projects (NSIP) which require 'development consent' rather than planning permission. Planning applications are supposed to be processed within 12 months, which reflects a streamlined procedure with strict timeframes (POWER & COWELL 2012). The Planning Inspectorate examines these projects and makes a recommendation to the Secretary of State for Energy and Climate Change. The planning process of such wind farm projects usually requires an EIA. The Secretary will make a decision in accordance with the National Policy Statement on Energy Infrastructure and relevant local plans.

Smaller wind farms with a capacity of less than 50 MW are subject to the Local Planning Authority where they are proposed. The UK Government Circular 2/1999 supplements that "the likelihood of significant effects will generally depend upon the scale of the development, and its visual impact, as well as potential noise impacts. EIA is more likely to be required for commercial developments of five or more turbines, or more than 5 MW of new generating capacity." This implies that an EIA is required for all commercial wind farms. Proposals rejected by Local Authorities may lead to appeals by the applicants which may again lead to further costs awarded against the local authority.

Public Participation in England

Similar to Scotland, England also pushes for enhanced consultation practices with local communities, which culminated in compulsory pre-application consultations for those wind farm proposal applying for development consent (>50 MW)) (DCLG 2013b:5). Effective pre-applications consultation are supposed to lead to planning applications that are better developed and better understood by the public, allowing for shorter and more efficient application processes. This is meant to have various benefits for all actors involved. The applicant and local authorities are expected to work together to develop unique plans for consultations that are proportionate to the size of the development and match the local community context, instead of standardised approaches. Relevant authorities are also allowed to make representations about the adequacy of consultations (DCLG 2013b). Pre-application consultations are also the first opportunity for local communities to get involved in the planning process for large onshore wind developments.

With regard to developments smaller than 50 MW, the Local Planning Authority will publicise the proposed developments after the formal submission of the planning application by the applicant. The Planning Authority will also set a timeframe for the public to view and comment on the proposal. However, the applicant may also initiate their own public consultation process prior to the submission of the application.

It has recently been announced that pre-application consultations are also to become a compulsory part for smaller developments which are not classified as NSIPs (DECC 2013). So, pre-application consultations with local communities are also meant to be applied for developments determined by Local Authorities. Besides the emerging pre-application consultations, local communities and the wider public are still allowed to make comments on the Environmental Statement and to make representations after the planning application has been submitted to either the Local Authority or DECC, depending on the size of the project.

Implementation of community engagement in England

Good practice guidance for community engagement is currently being developed in partnership with community and industry stakeholders, and is expected to be published in 2014 (DECC 2013:19). This has been one result of a consultation process into community engagement practices and costs of wind farm planning.

Apart from flexible and case-specific pre-application consultations for large wind farms, community engagement in England is predefined by strict timeframes set out in the Planning Act 2009 and Town and Country Act 1990. During the examination process of a proposed wind farm project, local communities and members of the wider public can register as an interested party to be updated on the development progress. They can also submit written comments and representations, or request to speak at a hearing. There is also a chance for legal challenges after the decision.

Moreover, community benefit packages are an increasingly established way to get communities involved in the planning process as well as in post-decision cooperation. STRACHAN & JONES (2012:183) list three core elements of these packages: “annual agreed payment”, “bonus paid on the wind farm’s output”, and “a further one-off payment, usually paid while the wind farm is being constructed”. Since there are no strict regulations for community benefits, other than the suggestions by CSE (2005), these benefit packages have usually been arranged on a voluntary basis between the developer and affected communities located in areas close to the wind farm (STRACHAN & JONES 2012). Only recently the UK Government urged for a mandatory increase in community benefits of £5000/MW/year (DECC 2013).

3) Wind farm planning in Wales

Wind farm planning in Wales has widely followed the norms provided by the UK Government. Thus, wind farm developments larger than 50 MW are likewise determined by DECC in accordance with the Planning Inspectorate. Since devolution in 1999, the Welsh

Assembly acquired powers to produce planning policy and development control of local planning authorities (COWELL 2007). So, wind farm developments with a capacity of less than 50 MW are approved by Local Planning Authorities in Wales, according to the 'Town and Country Planning Act (Development Management Procedure) (Wales) 2012'. An EIA is also required if a wind farm is likely to have environmental impacts.

However, the Welsh Assembly Government also influenced the planning process by implementing a Technical Advice Note 8 (TAN 8) which set out a centrally directed spatial strategy that introduced seven 'strategic search areas' (SSA). Those areas are presumed to be in favour of large wind farm developments (POWER & COWELL 2012). A large-scale wind farm is defined by a capacity of more than 25 MW. Each of the strategic search areas is supposed to contribute to the 800MW goal of onshore wind energy by 2020. But the designation of those areas appears to be restrictive towards large developments outside the designated areas (POWER & COWELL 2012). Most of the land that overlaps with the strategic search areas for wind energy developments is managed by the Forestry Commission Wales, which selects the bids from developers interested in developing these areas.

Community engagement in Wales

The TAN8 outlines expectations for active and early engagement with local communities about a proposed wind farm development. Community Engagement in wind farm planning is a matter that should be addressed in a partnership approach between the developer and local authorities. "Developers, in consultation with local planning authorities, should take an active role in engaging with the local community on renewable energy proposals. This should include pre-application discussion and provision of background information on the renewable energy technology that is proposed" (WAG 2005:8).

Moreover, a 'protocol for public engagement' (CSE 2007) specifies the policy background and good practices of public engagement in wind farm planning in Wales. It provides a very detailed and comprehensive guidance for public engagement in order to exemplify how such "undertakings may be delivered in the specific context of wind energy projects" (CSE 2007:8). This non-statutory and non-prescriptive guidance should be adopted by developers, local authorities and communities as an obligation in order to comply with the outlined standards. It explains the scope of public engagement, from the provision of information to collaboration, at different planning stages and sketches out further engagement strategies.

More recent practice guidance published by the Welsh Assembly (WAG 2011) regards community involvement as a foundation for social and economic benefits rather than the opportunity to influence the outcome of the project.

4) Wind Farm Planning in Germany

Planning in Germany is based on a bottom-up system, whereas local authorities designate areas that are deemed suitable or unsuitable for wind farm deployment (SZARKA 2007). Regional planning links planning of the *Länder* (federal state level) with the town and country level (municipal level) (OHL & EICHHORN 2010). The planning instrument at the municipal level is land-use planning (*Bauleitplanung*) which is determined through the land use plan (*Flächenutzungplan*) and the local zoning plan (*Bebauungsplan*) that specify the land use of particular areas in the overall planning context. So, regional planning plays a key role in the German planning system as it regulates the interplay of all the different land use plans and coordinates intercommunal goals and requirements. Hence, spatial (regional) planning predetermines municipal (communal, local) planning but is also influenced by municipal planning. However, the organisational types and determinations of regional planning are stipulated in the regional development plans which vary between the different federal states. These plans also describe priority, suitable, restricted and excluded areas for particular land uses. The identification of priority and suitable areas is not standardised in Germany, but has to follow certain criteria established in Conservation and Pollution Control Acts, which, nevertheless, leaves relatively wide freedom to the regional planning authorities.

Priority areas prioritise a particular land use in that area but do not exclude other land uses, as long as they do not interfere with each other. The designation of suitable areas for wind farms prohibits the development of wind farms outside suitable areas in a region (OHL & EICHHORN 2010; GEIBLER 2013). The scale of these areas determines and controls the scale of wind energy supply at the regional level. Regional plans that only designate exclusion areas are illegitimate as negative planning (KARL 2006). The increasing designation of suitable and priority areas at the regional level is supposed to counteract the bilateral processes between private or commercial developers and municipal authorities, which led to the dispersed and fragmented siting of smaller wind farms in the 1990s (OHL & EICHHORN 2010). But this lack of regulation also contributed to the large amount of wind energy capacity in Germany. Thus, the regional development plans in the federal states have been successively refined and modified over the last years to cope with the increasing demand to site wind farms and other renewables. Likewise, municipal land use plans have also been amended to accommodate wind farms. However, if the municipal land use plans are deemed sufficiently planned and adjusted to the goals of spatial planning (town and country planning) there may be no need to regulate particular land uses at the regional level. However, if the regional level designates particular areas, the municipal authorities may still differentiate these areas and concretise wind farm developments in these areas (e.g. reduce the number of turbines, designation of concentration zones), which has to be stipulated in the land use plans and differs between the federal states. The general public, local authorities and organisations can repeatedly comment on and influence the elaboration of local and regional development plans.

The first step at which communities and local residents can engage in wind farm planning is via a participatory and consultation process to comment on drafts of the spatial, regional development plans and land use plans. Submitted representations and comments have to be weighed against other interests before a development plan is approved. The approval of land use plans as the most decentralised planning instruments requires a two-tier process of public participation. An early public participation serves to inform people about the plans and gather comments on the plans. The form and implementation of this process depends on the municipality which drafts the plan. The second step includes a public display of the drafted plans, to which people may submit comments and representations, and reflects the final step before the assessment of a land use plan and its decision (council order). However, all these processes do not necessarily include wind farms only, but also any other land uses, though there are also particular segment plans for wind energy.

The planning and licensing of onshore wind farms is assigned to the *Länder* (federal states) and falls under the jurisdiction of the Lower Nature Conservation Agencies (regional level)[2]. Only the cluster of at least 3 turbines is defined as a wind farm. Large infrastructure developments are usually subject to a regional planning procedure (*Raumordnungsverfahren, ROV*) that precedes the licensing procedure. There is no need for a regional planning procedure if a wind farm is planned in a previously designated priority or suitable area. A ROV is only required if an EIA-binding wind farm project is proposed beyond the purview of designated areas (outskirt areas, *Außenbereich*)[3]. Otherwise, the ROV necessitates a round of consultations of affected agencies, organisations and communities. In most cases it is prohibited to build new wind farms outside the designated areas.

The licensing of actual wind farm projects is regulated through the Federal Control of Pollution Act (*Bundesimmissionsschutzgesetz, BImSchG*). The licensing procedure in accordance with the BImSchG combines other regulatory decisions, such as the building permit and environmental impact mitigation regulations. At project stage, according to the BImschG, the consultation and participation of the public, organisations, associations and interest groups is not obligatory for all wind farm developments and depends on the necessity of an EIA. Wind turbines that are lower than 50m are only subject to a basic building license. Only wind farms of more than 20 turbines or wind turbines that are taller than 50m are subject to an EIA. Smaller wind farms that are taller than 50m are subject to a site-related screening (3-5 turbines) or general screening (6-19 turbines), which are applied

[2] The legal basis for wind farm approval was changed in 2004 and was transferred from local authorities to the regional level. However, this took some pressure from the local authorities, but also decision-making power.
[3] At the beginning, before wind farms were explicitly included in the land use and regional plans, wind farms had been privileged in the outskirt areas that had not been designated for other uses. This was intended to keep other areas turbine-free and to prevent an unregulated and fragmented sprawl of wind turbines in the northern federal states (BRUNS et al. 2011)

to determine the necessity of an EIA. The screening event involves the consultation of expert agencies. If the wind farm is not supposed to cause any environmental impacts, the licensing follows a simplified procedure without public participation (3 months). In contrast, the formal procedure (7 months) including the implementation of an EIA consists of (I) a consultation stage of one month during which the public can comment on the plan and is allowed to submit representations to the licensing agency, and (II) a public hearing (*Erörterungstermin*) during which objections are discussed. A public announcement of the proposal and the display of application documents precede the consultation phase. The subsequent hearing is a public event with the consultees and objectors, and can be scheduled over several days, depending on the project and responses. All these regulations apply to every federal state and also to proposed extensions of existing wind farms. Only the prescribed minimum distances between wind turbines and residential areas differ between the different federal states. The repowering of wind farms requires a new license as this process usually affects wind turbines taller than 50m. Moreover, according to planning law, a citizen's wind farm that is characterised through various conceptual involvements and financial investments of local communities and residents has to be assessed in the same way as any other wind farm.

In contrast to the UK, there is no legal requirement for the developer to consult and engage with local communities during the pre-application process. The consultation and engagement of local communities by the developer beyond the licensing process is rather uncommon in Germany since wind farms have often been developed in a partnership approach with communities or have originated from citizen initiatives. But this has often caused disputes about the distribution of costs and benefits between different communities or within communities. The planning of smaller wind farms which do not fall under the BImSchG does not require public consultations, unless requested by the developer. Although the BImSchG concedes a predefined period of public consultation, the licensing procedure according to the BImSchG does not provide for an obligatory civic involvement in the decision-making process. The formal public participation process does not ensure any influence of the citizens in the final decision-making process. Communities are rather responsible for public relations activities in order to inform residents about their intentions or the progress of planned projects. Because of the non-obligatory involvement of the local public, many federal states point to and recommend an early, transparent and informal engagement with citizens in order to achieve favourable planning results and better acceptance. Such informal participation instruments are mentioned by GERMAN ASSOCIATION OF TOWNS AND MUNICIPALITIES (2009) and include the participation in planning and profits of repowered wind farms. They suggest a qualitative landscape structure analysis, visualisations, moderated workshops, community meetings, meetings with local residents, information events by the developer and visits of repowered wind farms as methods of engagement with affected citizens. Other studies (BMVBS 2012, RWE AG 2012, UNIVERSITÄT LEIPZIG 2013) also highlight the participation of the public in large infrastructure projects

related to the energy transition and give suggestions of how the public can be involved in planning. Despite these growing recommendations there is no definite guidance of good practice in onshore wind farm planning. The question in Germany seems to be more about the practices of early involvement of citizens in planning, the designation or modification of wind farm areas, rather than about actual project developments, as the elaboration of land use plans can define the role of citizens in the development of projects in designated areas. Actual projects revolve around the questions of how citizens can financially partake and how wind farms are financed and built, either in partnership with a private company, in cooperation with neighbouring communities or individually.

In summary, the spatial, planning-related regulation and bottom-up governance allow for the search for less conflictual sites by including local citizens, the prevention of the wind turbine construction in protected areas and a higher acceptance due to a cautious designation (FÄRBER 2012:34). But a less formal and more innovative strategy of involving citizens in the development of plans and designation of suitable areas is expected to be even more beneficial. However, very early engagement of communities in land use planning and the common involvement of citizens in impelling wind farm plans, does not prevent the emergence of objections from neighbouring communities and from within a community.

5) Wind farm planning in Denmark

Denmark is the forerunner of utilisation of modern wind energy. The early years in the 1970s and 1980s witnessed a boom of citizen-led bottom up initiatives to install smaller wind turbines in communities. Legal ownership restrictions led to cooperative-like full liability companies and general partnerships to develop wind energy. The approval of wind turbines was the responsibility of local municipalities, which interpreted the legal regulations differently in accordance with the local politics. Hence, the licensing efforts for the applicants varied between the different municipalities (BRUNS et al. 2011). I n 1999 the competence of wind farm planning was given to the counties' regional planning (OLESEN et al. 2002), which prepared local regional planning guidance, whilst municipalities were the local planning authorities that created inclusion and exclusion zones for wind farms (SZARKA 2007). These zones were designated in a bottom up approach through consultations and public hearings. Since 2009 the municipalities have again been "responsible for securing the necessary planning basis for wind turbines with a total height of up to 150 metres in the form of designated wind turbine areas with associated guidelines in the municipal plan" (DEA 2009:12). The Environmental Centres of the Ministry of Environment acts as the planning authority for wind turbines taller than 150m, but also monitors and advises on municipal plans.

As part of the regional planning, the county should designate areas for wind energy including the size and height of potential wind turbines. In addition, municipalities can also

designate areas for wind energy as part of their municipal planning, but only within the areas identified through regional planning. Planning permission can only be obtained for projects proposed within the designated areas and usually requires a local plan that specifies the location, size, height and capacity of the turbines. However, there are restricted areas in which wind farms are prohibited, such as costal zones, around historic monuments, adjacent to woodland and landmarks (FRASER 2002, DEA 2009).

Only small single turbines of less than 25m can be sited beyond the designated areas and without local plans. The siting of more than 3 turbines or turbines whose height exceeds 80m requires an EIA. If no EIA is required, the local plan must address visual and environmental impacts. The development of regional, municipal and local plans as well as the implementation of EIAs includes public consultations and hearings. The written statements and representations have to be addressed by the county or municipality respectively (OLESEN et al. 2002). So, the regulations for municipal planning should ensure a continuous involvement of citizens and associations in the planning process and designation of wind energy areas (DEA 2009). Particular stakeholders (interest groups, national associations, Ministry of Environment) can bring complaints regarding the planning decision to the Nature Complaints Board. A decision by the county can only be overruled by the Nature Complaints Board or by a court.

The regulations for the siting of wind turbines are set out in the Danish Planning Act and implemented in Wind Turbine Circular of 2009. The licensing process for specific wind turbine projects is now usually advanced by the municipality in collaboration with the applicant. The applicant must notify the respective municipality about its intention and the municipality has to draft a discussion paper to invite proposals from citizens on the content and scope of the EIA (idea phase, pre-public phase). The planning must also comply with requirements of environmental assessments of plans and programmes, and includes consultations with authorities, regional and national bodies as well as neighbouring municipalities. By using this feedback the municipality “draws up guidelines on the further local planning in a supplement to the municipal plan and determines the scope of the EIA (DEA 2009:13). The proposed plan must then be announced and the documents undergo a consultation period of at least 8 weeks during which neighbours, landowners, authorities etc. can submit written objections, comments or alternative proposals (public phase). This may be complemented by drawing up a new or amended local plan, if necessary. The EIA must include a description of the project, its likely impacts, long-term cumulative impacts, mitigation measures, alternatives to the proposed projects and a non-technical summary. The decision for a wind farm project should also be assessed by means of particular criteria listed in the “Statuary order on planning and planning permissions for wind turbines in rural areas” (OLESEN et al. 2002). The planning process can also comprise citizen meetings. Objections and comments have to be processed accordingly and any revisions of the project require another public phase before a decision can be made. Similar to the plans and

designations of zone, particular stakeholders can also file complaints against the decision by the municipality. This licensing procedure applies to all wind farm projects, no matter whether they are initiated by individuals, cooperatives or private companies. Smaller projects that do not require an EIA are only screened by the local councils, but small wind farm proposals in particular locations near settlements and existing wind turbines require additional visual and environmental assessments in order to assess cumulative impacts.

In Denmark, the local public is encouraged to directly engage in all stages of wind farm planning, in the designation of wind farm zones as well as in the planning of specific projects. Methods of public participation comprise public meetings, written statements or leaving comments and preferences at planning websites. Thus, citizens can influence the wind farm sites as well as the appearance of wind farms. This significant degree of bottom-up participation and public involvement is meant to have led to grater community acceptance (SZARKA 2007). Moreover, the longstanding promotion of cooperative wind farms and the investment in local and supralocal wind farm projects, also contributed to financial benefits of individuals and communities. In 2008, the Danish Wind Turbine Secretariat was established as a national planning consultancy in order to assist and support municipalities throughout the whole planning process. Repowering is considered as an opportunity to improve former planning mistakes in terms of eradicating poor siting decisions by continuous planning cycles of municipal planning and installing more efficient turbines (FRASER 2002).

6) Wind farm planning in Sweden

Wind farm planning in Sweden is primarily the responsibility of municipalities, even though national and public interest have to be taken into account. Apart from setting national planning targets and the regional co-ordination of planning, the national level does not have much direct influence on the actual planning process. These national planning targets are broken down to county-level targets in order to utilise them as a planning tool for the County Administrative Boards and municipalities, but without providing them direct planning guidance. These boards can reject municipal plans if they do not sufficiently take national targets and interests into account (PETTERSSON et al. 2010). County Administrative Boards also deal with appeals against building permits, the review of environmental permits, and are also involved in the identification process for areas of national interest for wind power (BERGEK 2010). Areas for the national interest of wind power were initiated by the Swedish Government in 2002. These areas exclude the development of projects emerging from other interests. Based on the key criterion of 3800kWh/m^2/year 49 areas of national interest of wind power were identified in 13 counties (BERGEK 2010).

Each municipality is required to create a legally non-binding comprehensive plan that aims to balance various interests within the municipality. Additional detailed development plans

that cover particular areas are legally binding for authorities and individuals. During the preparation of the plans municipalities are required to consult stakeholders such as central government bodies, associations and individuals. Some municipalities include wind power in their comprehensive plan in order to identify suitable and restricted areas, whereas other municipalities include wind power in detailed plans which specify the location, number of turbines and further site-specific characteristics. Thus, local governments are allowed to formulate their policy goals and can also determine how these goals are achieved (KHAN 2003). Projects that do not comply with the detailed and comprehensive plans are rejected right away (BERGEK 2010). So, municipalities have to assent to "the establishment of windmills at a certain location in order for the installation to actually take place" (PETTERSSON et al. 2010:3119). This suggests that the receptiveness and reluctance to install wind farms varies between the municipalities through the implementation of diverging planning requirements and participative measures (PETTERSSON et al. 2010).

The legal framework for wind power in Sweden consists of several laws and regulations, of which the Environmental Code and the Building and Planning Act regulate the installation of wind turbines (KHAN 2003; BERGEK 2010). The type of permit depends on the capacity of the wind farm, site characteristics and the number of turbines (ÅSTRAND & NEIJ 2006). Apart from municipal planning, the other component of Swedish wind farm planning refers to environmental concessions anchored in the Environmental Code. The code outlines basic resource management provisions, balances various interests against each other and evaluates the compliance of developments with certain environmental requirements (SÖDERHOLM et al. 2007, PETTERSSON et al. 2010). According to the Environmental Code, the state government has to initially approve projects and is therefore responsible for environmental permits for wind farms with a capacity greater than 10MW (SÖDERHOLM et al. 2007). Environmental permits for wind farms between 1 and 10 MW are issued by the county, and by the municipality for less than 1 MW. However, the municipality is in charge of the building permit as part of the municipal land-use planning (KHAN 2003). Specific projects require a detailed development plan as well as an environmental permit. The public consultation process for the detailed plan is organised by the local authority while the company applies for the environmental permit and organises the consultation process during the legally required EIA. The Environmental Code contains particular restrictive rules, such as the 'localisation rule' requiring an objective assessment of site-specific characteristics to find the best locations for wind turbines and to minimise impacts, which, however, also entail further obstacles to a straightforward siting process (PETTERSSON et al. 2010, SÖDERHOLM & PETTERSSON 2011). However, today most wind farm projects are no longer regulated by the Planning and Building Act which puts more power in the hands of local governments. Wind farms are now mostly regulated and approved through the Environmental Code, which entails a "shift from local political deliberation to national judicial arbitration" (OLES & HAMMARLUND 2011:479), while others (PETTERSSON et al. 2010) still highlight the decentralisation of Swedish wind power planning.

Public Participation in Sweden

The virtues of stakeholder participation in planning in Sweden are described in the Planning and Building Act as being favourable to planning by increasing its efficiency, transparency and legitimacy. Nonetheless, there is no legal requirement to involve stakeholders in energy planning legislation, although stakeholder participation is often recommended by national and regional authorities and is an obligatory part of land-use planning and the handling of the environmental application of projects. The traditional approach to planning in Sweden has been consultation with the public during the preparation of the plan proposals, which is however often regarded as convincing the public of the assets of a plan (INVER 2009). There is great scope for local governments to organise this participatory process which is usually conducted through meetings, exhibitions and written comments (KHAN 2003), while other and more innovative methods, such as workshops and citizen panels, have only been used at an experimental stage (INVER 2009, INVER et al. 2010). This has led to the issue that "the way in which citizen participation is integrated into the planning process may differ a lot across Swedish municipalities" (SÖDERHOLM et al. 2007:394). The participation process for the comprehensive plans aims for a broader public, whereas the development of detailed plans for particular areas only involves stakeholders and individuals likely to be affected by the actual development. The development of comprehensive plans in Sweden offers some opportunities to involve the public at an early stage of planning, even though these plans are not binding.

However, in contrast, there are some limitations at the project level. The Environmental Code prescribes early public hearings and later consultations with authorities and the public (CORVELLEC & RISBERG 2007), but the public only enters the planning process at a relatively late phase when the project draft plan already exists. As in the UK, the developers have to report on their early public hearing when submitting the application. The public hearings are often exploited as an exercise to convince the audience of the positive features of the project and to allay or neutralise any concerns (CORVELLEC & RISBERG 2007). A problem is that the public only becomes directly involved after the application for the environmental permit and preparations for the detailed development plan have been made, and thus after the decision towards the site has been made (KHAN 2004). Several rounds of consultation during the planning process provide the opportunity to influence planning throughout the project, as developers may modify their plans after each round (KHAN 2004). But in land-use planning consulted opinions and concerns from the public are not binding for the decision-makers, although they have to reply to each comment to justify their decision if no changes are made. People also have the right to appeal against a decision, which often thwarts the installation of wind farms (PETTERSSON et al. 2010) or hampers and delays developments (SÖDERHOLM et al. 2007) at later planning stages. Due to their late active involvement in the

siting of actual projects the public is therefore urged to argue for and defend their interests against counter-interests, rather than entering a deliberative decision-making process.

7) Wind Farm Planning in France

The development of wind energy in France started later and progressed at a slower pace than in other European countries (JOBERT et al. 2007). Renewable energy policies have also been subject to various amendments which impinged on the planning and siting of wind farms (see NADAI 2007). In 2000, there was no specific planning framework for wind turbines at the national level, which resulted in the development of different innovative local planning schemes (NADAI 2012). Before the introduction of a new energy policy law in 2005, single wind farms were not allowed to exceed 12 MW, and as of 2003 a project with more than 2.5MW required a public inquiry. Before this, there had been no obligation for departments and municipalities to include wind farms in their spatial plans which resulted in increased uncertainty for developers about the identification of suitable sites (CLER 2004). The statutory and legal insecurity led to a difficult planning situation during the earlier years of wind farm planning in France (JOBERT et al. 2007). This uncertainty has been addressed by new regulations.

French wind farm planning shifted from a centralised regulation to a more decentralised framework that facilitates regional decision-making powers (NADAI 2007; NADAI & LABUSSIERE 2009), which however seem, in comparison to other countries, less favourable to the successful siting of wind farms. The new and current French system for wind farm planning can be “described as a flexible decentralised planning for energy policy” (NADAI 2007:2724). Each regional authority has to create regional wind power plans (Schema Regional Eolien=SRE), which present the top-level wind planning tool. These plans set out the region’s capacity target for wind power and identify areas where wind turbines could be built. The development of these plans should take account of existing parameters, such as wind resources, grid connection and protected and restrained areas, and should also be based on wide consultations with relevant parties.

A similar instrument has also been established for the superordinate administrative level (department / prefect) in 2005. This approach makes use of ‘wind power development zones’ (WPDZ) which must also be embedded in SREs. In order to benefit from the power purchase obligation (feed-in) the wind farm must be located in WPDZ and must comprise at least 5 turbines. WPDZs were originally introduced to regulate the framework for power purchase obligations but have become a planning tool in practice.

The designation of a WPDZ resides with the department prefect at request of a municipality or a public institution for inter-municipal cooperation (NADAI 2007). The application for a WPDZ is subject to prior approval of local authorities, in whose territory the WPDZ is

proposed. The public or third parties are not allowed to request the designation of a WPDZ, but are entitled to obtain information regarding the WPDZ application and inspect planning documents. Likewise, developers are not allowed to submit applications for WPDZ, but often support communities in preparing an application. While preparing an application the general public interest has to be taken into account sufficiently. The WPDZ application must consider the wind potential of an area, the possibility of grid connection as well as aspects of environmental and landscape protection. Those criteria are then applied by the prefect to define the features of the zone, such as the geographical demarcation and maximum production capacity. Affected and neighbouring communities are invited to comment on the application after its submission. The 'regional office for industry, research and environment' then makes the decision about the WPDZ. The application can only be refused on grounds of the legal requirement of grid connection, energy potential and protection of nature and environment. In case of a rejection the applicant community can lodge an appeal against the decision of the prefect. A positive decision can also be challenged. Moreover, the applicant has the chance to amend the geographical territory of its initial plan. This bottom-up planning process of WPDZs and the decision made by the departmental prefect is supposed to benefit from the input of local actors and provide greater legitimacy for wind farms (NADAI & LABUSSIERE 2009).

Wind farms in France are now liable to the new ICPE regime (facilities classified in view of protecting the environment) introduced in 2010, and are thus understood as facilities that are classified as environmentally hazardous. An ICPE procedure has to be undertaken in addition to a building permit application. The ICPE regulations also concern the provision of financial guarantees, the company's liability, the cessation of the operation, the decommissioning of the facility and the restoration of the site. According to ICPE the authorisation of wind farms with a height of 50m or a capacity of 20MW require a building permit, impact study and public inquiry as well as additional financial guarantees of the applicant. Smaller wind farms are only subject to a registration which does not require any impact studies or public inquiries. In this case the decision is made by the prefect after the municipal councils were heard. However, a registration procedure can be converted into an authorisation procedure if environmental impacts or cumulative effects are likely to occur. An EIA is a major part of the building permit and includes a landscape impact study (Cler 2004). The ICPE application has to be submitted at the same time as the building permit application, but the authority must verify whether the project requires an ICPE authorisation before deciding on the building permit. The ICPE licensing procedure contains environmental assessments as well as a public inquiry. The environmental impact studies include assessments of the site and assessments of cumulative effects with existing and planned wind farm projects. The developer can request a preliminary assessment on the scope and content of the impact study. The public inquiry lasts for one month and the participation process should comply with EU legislations. The applicant may reply to comments made during the procedure and may undertake substantial modifications to the

project in response to the comments. The ICPE regulations aim to standardise and streamline a national uniform approach to wind farm siting which has previously been regulated at the regional authorities' discretion. However, the actual licenses for a wind farm are still granted by the prefects. A third party is guaranteed a period of 6 months to challenge a decision after it has been announced. The developer has 2 months to proceed against a potential refusal of the wind farm. In summary, the new ICPE legislation treats wind farms as problematic and presents them as fraught with environmental and financial risks.

Public Participation in France

There was a large leeway for authorities to involve different stakeholders and only the new legislation introduced a stricter consultation of particular stakeholders under the EIA and the designation of WPDZs. A first opportunity for communities to get involved arises from the legal requirements to propose a WPDZ and to be consulted during its obligatory application process.

In contrast to the designation of suitable areas, the engagement of communities, individuals and the general public during the planning of actual project appears rather limited. During the initial project design phase, the public can be engaged through public meetings at which developers inform about their projects and local residents can communicate their interests, concerns and questions. Moreover, developers may publish leaflets about the progress and establish project websites to keep the public informed about the projects. At an early stage during the planning process for onshore wind farms local residents are consulted within the context of feasibility studies. Another opportunity for public consultation (public inquiry) is provided during the administrative process after the application documents were submitted (construction permit request). These steps are associated with the EIA. During this last phase of the approval procedure local citizens are invited to comment on the impact study, which can be done through petitions and elements of counter-expertise (NADAI & LABUSSIERE 2009). The official public consultation period should last more than 15 days. The date and place of the consultation has to be announced by the relevant authority 8 days prior to its start. After the inquiry the developer is obliged to compile a report that summarises the gathered comments, concerns and questions of the public. This document should then be reviewed, validated and published by the planning authority (QUATREHOMME 2012).
All these measures seem to serve to inform local residents and communities rather than providing them with clear opportunities to participate in and influence the planning of projects.

Despite the various non-obligatory opportunities, the mandatory public inquiry during the administrative procession of the project and after the submission of all project-relevant documents is deemed too late for the public to exert influence effectively (QUATREHOMME

2012; FAYEIN et al. 2011). Earlier public involvement opportunities during the project design stage are not legally required, but sometimes offered by the developer. Moreover, a public inquiry (hearing) representing the key instrument of public consultation during the approval procedure is only legally required for the siting of wind turbines taller than 50m.

Appendix 3: Expanded Discussion of Planning Regimes for Offshore Wind Farms in Case Study Countries

1) Offshore wind farm planning in Scotland

Due to the Scotland Act 1998 jurisdictions over energy are divided between the UK and Scotland (WARREN 2009). Energy policy and regulations are the responsibilities of the central UK government, while planning powers and the promotion of energy efficiency are devolved to the Scottish Government. Since devolution, planning jurisdiction for the Scottish Territorial Waters has also been assigned to the Scottish Government. Moreover, Scotland has exclusively devolved power for marine planning over the EEZ off the Scottish coast. Following the UK Marine and Coastal Access Act 2009, a new legislative framework for the marine environment was established by the Marine Scotland Act 2010. These provisions have been introduced to allow for a more effective management of competing demands in the marine environment and uses of marine resources. As part of these responsibilities Marine Scotland, the directorate of the Scottish Government in charge of the management of the sea, has undertaken a Sectoral Marine Plan for Offshore Wind in Scottish Territorial Waters (2011), which contains proposals for offshore wind developments at the regional level. The identification process of the most appropriate sites required a strategic environmental assessment (SEA) that included consultations with the public and statutory consultees and socio-economic assessments. These steps at this stage were conducted by the Offshore Renewables Planning and Policy Team of Marine Scotland.

The programme of offshore wind power in Scottish Territorial Waters began in 2008 when the Crown Estate, which manages and leases land and sea of the UK, invited developers to nominate sites. This led to ten exclusive agreements for ten sites to progress to the application process for a license (JAY 2012). The construction of marine renewables requires a Marine License as well as Section 36 consent (Electricity Act 1998). Marine Scotland initiated a simplified and holistic consenting regime that combines Section 36 and Marine License applications to streamline the application process. Moreover, Marine Scotland also developed a 'Marine Licensing and Consent Manual' (2012) which provides guidance and assistance for developers, regulators and advisors by setting out the roles and responsibilities of all actors involved in planning and licensing process.

The marine licensing process for renewables is enshrined in the Marine Scotland Act 2010 and conducted by the Licensing Operations Team of Marine Scotland. The licensing process involves pre-application, screening and scoping stages that serve the development of the environmental impacts assessment, in order to identify likely environmental impacts of particular developments, which must be compiled in an Environmental Statement (ES). The ES has to be published to give the public the opportunity to present their views on the project and ES.

For large marine projects, pre-application consultation may become relevant in order to ensure that communities become engaged in the early decision-making process for a marine license. After the license application submission the proposal has to be locally and nationally advertised in order to provide individuals with the opportunity to comment on the proposal and to make representations (MARINE SCOTLAND 2012). Scottish Ministers are the licensing authority and the Licensing Operations Team issues the license for successful applications on their behalf. All developments to be established in Scottish territorial waters need to be granted a license. Reasons to revoke a license include "a change in circumstances relating to the environment or human health, increased scientific knowledge relating to either of the above matters, in the interests of safety of navigation; for any other reason that appears to Scottish Ministers to be relevant" (MARINE SCOTLAND 2012:6). This implies that Scottish Ministers will have the final say about building consent. The planning and licensing process for offshore wind farms is accompanied and advised by statutory consultees, such as SNH, JNCC, Fisheries Committee and local authorities.

A key problem emerges from the non-consideration of local communities in the site designation and tendering round through the Crown Estate. But the parallel identification of suitable sites through the Scottish Government, which also included the ones designated by the Crown Estate, involved a broad consultation of the general public. Based on the quantity of feedback, comments and representation a number of proposals were taken from the offshore wind farm draft plan, which points towards a certain influence of the public in early decision-making. But it seems as if the consultation was about abandoning or progressing proposed sites rather than modifying and reshaping proposed offshore wind farm sites by dissecting the consulted feedback in detail.

2) Offshore wind farm planning in England

Since most offshore wind farms are usually characterised by a larger capacity than onshore wind farms, offshore wind farm planning is dealt with by the central government. Offshore wind power planning in England (and Wales) has been progressed in three different blocks so far (Rounds 1-3), plus an additional round for extensions of Round 1 schemes as well as the previously mentioned schemes in Scottish Territorial Waters. The draft plans that enable later rounds were subject to strategic environmental assessments (SEA), which also included consultations with the public, environmental authorities and other bodies. All rounds were initiated by the Crown Estate, but with increasingly limited freedom of developers to choose sites. While developers were invited to nominate preferred sites in the first round, potential zones for later rounds were predefined by the Crown Estate and made available in a competitive tendering process (JAY 2011). Thus, the progression of Round 3 involves two stages; the zone identification through strategic planning (SEA) by DECC and the Crown Estate, and the identification of suitable areas within the zones and the specific project

planning implemented by the developer. Although the Crown Estate does not own the seabed beyond the 12nm limit, it was given responsibility for managing the renewable energy zones that were established in the EEZ. Local authorities have only a consultative role in offshore wind farms (TOKE 2011), even though their role was strengthened by upgrading them from non-statutory to statutory consultees for Round 2 developments (JAY 2011). Local authorities are not allowed to veto against offshore wind farms because they cannot demand a public inquiry due to the fact that offshore wind farms are not within their boundaries and jurisdiction (JAY 2008, TOKE 2011, GIBSON & HOWSAM 2010). Greater involvement and power of local authorities in the consenting process may lead to more planning appeals by the developers and a final decision by the central government again, as often exercised for onshore wind farms.

Due to their larger capacity, the planning process for offshore wind farms is organised centrally and broadly follows the same principles as applied for large onshore wind farms. Offshore wind farms now require a marine license which replaced three separate licenses for navigation, coastal protection and for an electricity power plant demanded for earlier schemes. The Marine Management Organisation (MMO) is responsible for the licensing of wind farms between 1 and 100 MW which are determined under the Marine and Coastal Access Bill. Larger capacities qualify as nationally significant infrastructure developments and are subject to the Planning Act 2008 which is enforced by the Planning Inspectorate that replaced the Infrastructure Planning Commission (IPC) in 2012. The Planning Inspectorate gives advice to the Secretary of State who makes the final decision. National Policy Statements (NPS) were introduced along with the Planning Act, which set out a framework for the implementation of national infrastructure strategies and provide the primary basis for decision-making. The objectives and planning implications of the Government for the development of nationally significant infrastructure concerning the renewable energy sector, including offshore wind farms, were introduced in 2011 (DECC 2011). This NPS for renewable energy does not dwell upon the need for public consultations, but explicitly points at the need to engage with various statutory consultees that can provide particular support on certain aspects of offshore wind farm planning (e.g. impacts on navigation, birds, marine mammals, fish, fishing seabed etc.).

However, the Planning Act 2008 clearly demands the duty to consult local authorities, communities and particular stakeholders located within the affected area or with interests in the affected land after making diligent inquiry. This also applies if the area of a local authority is adjacent to the area at stake. Theoretically, there are three opportunities for the public to participate in the planning of infrastructure projects. These stages include the consultations during the development of NPS, during the pre-application processes and finally during the examination of applications (HAGGETT 2011). To ensure the early consideration of public interests and to understand impacts of particular projects, the wealth of consultations (as well as environmental assessments) must be undertaken before

the application submission. Consultation is regarded as a “critical part of the development process and should be undertaken with the public, relevant Local Authorities and key stakeholders with an interest in offshore wind farms, at the earliest opportunity during the development of projects” (DECC 2009:11). Thus, the applicant is requested to develop a Statement of Community Consultation in collaboration with local authorities, which expounds the strategy of how the applicant intends to consult local communities about the proposal. This statement must then be made available for inspections by the public and the consultation process must comply with the proposals set out in the statement. The pre-consultation efforts must eventually be detailed in a consultation report, which should also describe how consultation responses were considered and “how the application was influenced by those responses, outlining any changes made as a result and showing how significant relevant responses will be addressed” (DCLG 2012:18).

The Department for Communities and Local Government published guidance on pre-application consultation in 2009 (updated in 2012, DCLG 2012), which also offers clear advice on consultation for offshore developments. It is stated that, “the geographical proximity of a proposed development to land is likely to dictate the level of engagement by local authorities and their communities” (DCLG 2012:10). So, geographical proximity is regarded as the key criteria for the consultation of local authorities and communities. This statutory consultation duty is justified by potential land-based developments, visual impacts and construction traffic impacts. Pre-application consultation should help the developer to determine who to consult in the planning process. Affected local authorities and communities should be treated as the main consultant for the Statement of Community Consultation, which has to be submitted as part of the application documents. There is no statutory requirement to consult specific local authorities if an offshore proposal does not feature any terrestrial developments (DCLG 2012). This also implies that local authorities do not need to reply to consultation requests related to the project or to the Statement of Community Consultation, as long as they feel unaffected by the development. However, even if the potential impacts are negligible developers are, nonetheless, “expected to inform relevant coastal authorities and communities of the proposed project and to give them a chance to take part in a consultation on the development” (DCLG 2012:11). It is also recommended that “the level of interest shown by local authorities and communities” should “dictate the degree and depth of consultation required” (DCLG 2012:11). A pragmatic approach to consultation “in proportion to the impacts on communities and the size of the project” should ensure that local communities “are kept informed of proposals and offered the chance to participate in shaping them” (DCLG 2012:11). Large projects with longer development proposals should involve iterative consultations with stakeholders to discuss development options first and to gather feedback on preferred options at a later stage, which can overrun the prescribed minimum consultation period determined in the Planning Act. Substantial changes of the projects are also required to be re-consulted with all relevant stakeholders and communities (DCLG 2012). The planning authority can refuse

the application on grounds of a deficient compliance with procedural requirements for consultation. This guidance was withdrawn and replaced by a new version in January 2013 that focuses on nationally significant developments, but did not alter or advance the guidance for offshore developments.

Even if the views of stakeholders and wider public were consulted during the strategic environmental impact assessments and the licensing process, in practice the extent of the actual influence on the decision-making remains in question, as opposition has often been marginalised and hardly informed the project substantially, and development goals have prevailed against locally-expressed concerns (JAY 2011). Ambiguities within the pre-application consultation under the Planning Act emerge from the unclear involvement of local authorities and the indefinite timescales for public consultation (GIBSON & HOWSAM 2010), and the responsibility of applicants to design the public consultation process (HAGGETT 2011). The applicant must consult local authorities in order to develop the consultation strategy with communities, which may lead to different approaches by different applicants. Moreover, the Planning Act says that applicants must have regard to relevant consultation responses, "but it is not clear which responses these might be, or how responses will or must be incorporated" (HAGGETT 2011:21) into proposals, which leaves much freedom and uncertainty to the applicants.

3) Offshore wind farm planning in Wales

Natural Resources Wales is the licensing authority for developments in coastal waters off the Welsh coast. However, since offshore wind farms usually exceed 50MW the central UK government undertakes the licensing process for offshore wind farms in the coastal waters off Wales too. Therefore, the same guidance for offshore wind farm planning and consultation also applies to large wind farms off the Welsh coast. But even though the Planning Inspectorate and MMO issues consent for wind farms, Welsh Ministers issue Marine Licenses for offshore developments in territorial waters off Wales (DECC 2011), regardless of the wind farm capacity. The Welsh Assembly Government acted as a consultee to the SEA process for Round 3. The 'Protocol for Public Engagement with Proposed Wind Energy Developments in Wales' that sets out detailed guidance for public engagement in wind farm planning does not refer to offshore developments.

4) Offshore wind farm planning in Germany

In Germany, the offshore area is generally considered as public space, in which different interests, claims and forms of usage meet and compete. Hence, offshore wind energy activities are also conceived as public, which necessitates a deliberation of other traditional uses of the offshore space to achieve a successful coexistence, and which makes permanent developments within the offshore area subject to planning. Offshore planning and project

licensing is divided at the border between the Territorial Waters (0-12 nautical miles, nm) and the Exclusive Economic Zone (EEZ, 12-200nm). A federal government agency, the Federal Maritime and Hydrographic Agency (BSH), carries out the application procedure and decides on the approval of offshore wind farms in the Exclusive Economic Zone. In contrast, the federal states are responsible for spatial planning in coastal waters within the 12 nautical mile (nm) zone that is included in the regional development plans and land development plans, respectively. Hence, there are basically two different legal frameworks and approval procedures for offshore wind farm projects in Germany depending on the location of the planned wind farm.

Offshore wind farm planning in the German EEZ

There are two different marine spatial plans (*Raumordnungsplan*) for the German North Sea and for the Baltic Sea. These plans describe and regulate various usages and interests in the Exclusive Economic Zone (EEZ) of the North and Baltic Sea. The objective is to provide a secure base for planning offshore energy facilities and other marine industries and to decrease potential conflicts between different usages. These marine spatial plans also define priority areas for offshore wind energy. Such priority areas are reserved for offshore wind facilities only and exclude other projects. The marine spatial plan was initiated at the federal level by the Federal Ministry of Transport, Building and Urban Development.

The licensing procedure for particular proposals in the EEZ is called plan approval procedure (*Planfeststellungsverfahren*) and is conducted by the BSH, and regulated through the Federal Maritime Responsibilities Act (*Seeaufgabengesetz*) in conjunction with the Marine Facilities Ordinance (*Seeanlagenverordnung, SeeAnlV*). The plan approval procedure serves the determination of the permissibility of a development proposal with regard to all affected public interests. Similar to onshore planning, a proposal of more than 20 turbines requires an accompanying EIA. There are no other permissions, licenses or grants required, other than the plan approval procedure. As the approval of offshore wind farms in the EEZ is a non-discretional administrative act, wind farm developers have a legal claim to approval unless one of two reasons for denying approval is met (Portman et al. 2009:3600). An offshore wind farm project will be denied if the project is likely to “impair the safety and efficiency of navigation or poses a threat to the marine environment” (BSH 2005), unless suitable offsets can be made. The approval procedure contains several rounds of consultation and includes comments on the project application from competent authorities and public bodies, such as Federal Environment Agency, Federal Agency for Nature Conservation, Mining Authority, and Waterways and Shipping Directorates. Further steps of the approval procedure contain possibilities for public inspections, public notifications, hearings and additional comments from broader authorities (fisheries, nature protection, commercial shipping etc.). Subsequent to this round of participation and statements, the wind farm operators are given the opportunity to present their project at a conference and

to discuss conflicting interests and the scope of necessary investigations concerning environmental impacts, which will be the basis for an environmental impact assessment (EIA). Among other guidelines, a standard conception for the investigation of environmental impacts is provided by the Federal Maritime and Hydrographic Agency (BSH). Additionally, a risk analysis of collision risks with vessels is also obligatory for the developers. These documents are promulgated again and are asked to be commented by competent authorities. The results concerning environmental protection, navigation safety and conflicts with other interests and uses are discussed with all relevant stakeholders. The documents can be revised and amended by the applicant, before being presented to the public, who are subsequently allowed to review the documents. However, hearings are restricted to competent groups and authorities; and laws and statutes lack in definitions and valuations, so that the final decision is often left at the discretion of the BSH (PORTMAN et al. 2009:3601).

Moreover, it is necessary to involve the respective federal states at an early stage of the procedure as they have to approve the facilities of grid connection (cables) through the coastal waters. This is carried out by a regional planning procedure (*Raumordnungsverfaghren*), as it is applied for approving offshore wind farm developments in coastal waters. Thus, several institutions, agencies and authorities at different levels are integrated in the complex and protracted planning and decision-making process.

There is no responsibility to prove the profitability and operating efficiency of the wind farm. This needs to be considered by the operator before making the application. Before introducing the marine spatial plans for the North Sea and Baltic Sea in 2009 a sufficient consideration of conflicting interests in the EEZ was hardly possible, as highlighted by ZEILER et al. (2005:72). Due to reasons of nature conservation and tourism, the majority of offshore wind farms are planned and approved further seawards in the EEZ (ZEILER et al. 2005). Just a few wind farms are allowed to be constructed at coastal water sites. But the greater distance from the coast is coupled with higher connection costs which have to be defrayed by the network operators. Thus, geographical conditions together with policy regulations impose financial tensions between the developers and the network operators.

Offshore wind farm planning in German territorial waters

Approving wind farms in coastal waters is subject to another legal regulation as this area belongs to the German sovereign territory. Thus, the same approval procedures as on land are applied offshore, since the respective coastal federal states are responsible for licensing wind farms within the territorial waters. The approval and implementation are regulated by the Federal Control of Pollution Act (*Bundes-Immissionsschutzgesetz, BImSchG*). The construction of a cluster of at least three wind turbines requires an approach according to the Federal Control of Pollution Act (BImSchG), in the same way it would be applied to infrastructure projects on land. This implies that there is no specific ordinance for

constructing offshore wind farms in coastal waters and the same provisions apply as on land (WUSTLICH & HEUGEL 2006). The general purpose of this act is "to protect human beings, animals and plants, soil, water, the atmosphere as well as cultural objects and other material goods against any harmful effects on the environment and to prevent the emergence of any such effects" (BMU 2007:6). So this act rather deals with immediate effects of the proposed infrastructure projects instead of indirect consequences. The complex licensing procedure must be carried out by the responsible agencies of the federal states, usually based within the Ministry of Environment of the respective federal countries, and include several steps of public participation and an environmental impact assessment (EIA). The approval procedure following the BImSchG is a public procedure which necessitates public announcements about the projects and permits everyone to bring in objections against the projects. Also, complete environmental impacts being conducted in an EIA need to be considered and examined thoroughly. There is no need for further authorisations from further authorities as other authority decisions related to the installation are incorporated in the licensing process (WUSTLICH & HEUGEL 2006).

According to essential space-consuming developments on land, a regional planning procedure (*Raumordnungsverfahren, ROV*) conducted by the respective regional planning agencies (federal state) is additionally required, in which all relevant indirect impacts are ascertained, described and evaluated. First attempts to consider, cope with and settle conflicts of competing usages, economic effects and an assessment of interests are established in this step. This regional planning procedure usually precedes the licensing procedure according to the Federal Control of Pollution Act[4]. Hence, two planning institutions at federal state level are involved in the approval of offshore wind farms in coastal waters. But due to large areas of natural preserves (e.g. Wadden Sea) and shipping routes at the German coast, offshore wind farms play a minor role within the 12 nautical mile zone and only a few have been approved so far.

Public Participation and Engagement in Germany

The plan approval process for wind farms in the EEZ includes two rounds of consultation, but they are not deemed as "truly deliberative in the sense of an open-ended debate" (BRUNS & GEE 2009:152). There is no formal pre-application consultation and the first round of consultation starts with the submission of the application. The participation process is rather shaped through centralised hearings and a mutual exchange of information. Transparency is only achieved through the information provision by the BSH to particular stakeholders. The first consultation round is aimed at balancing interests and therefore involves key national stakeholders whose interests might be affected and who may

[4] A prior ROV is not required if a wind farm is planned in a previously designated suitable area for wind energy, which mostly applies for onshore wind farms. Due to missing priority areas in territorial waters, a ROV is very likely to be implemented prior to the licensing process.

influence the size, shape and location of the wind farm. Based on the feedback from the statutory consultees, that applicant may alter and re-submit the application. The second round includes a broader range of stakeholders who receive information and are allowed to comment on the proposals, but, in reality, their objections do not lead to any changes of the proposals (BRUNS & GEE 2009). The general public does not exert any influence on proposed offshore wind farms and are only informed late in the process (BRUNS & GEE 2009). Thus, national and international interests are reflected in the first round and may lead to changes of the proposal, whereas local interests through municipalities and local nature conservation organisations are involved in the second round of consultation but with little or no opportunity to influence the decision-making process. This leads to an uneven distribution of the representativeness of various stakeholders, whereas national statutory consultees dominate local interest in the planning process (BRUNS & GEE 2009). In contrast to environmental organisation, coastal communities are not legitimised to litigate against an offshore wind farm in court (PESTKE 2008). The guarantee of communities as self-governing entities does not affiliate rights to exercise ecological interests for the general public (PESTKE 2008:189), which denies its *locus standi*. Visual and economic interests of communities are not regarded as affected either, due to the large distance to the EEZ.

Table 2 Participation possibilities during offshore wind farm planning in EEZ (amended, BRUNS & GEE 2008:152)

Stage	Stakeholder	Form of participation
Screening	applicant & BSH	
First round of consultation (begin of procedure)	selected national statutory consultees	written comments
Second round of consultation	- large group of statutory consultees	- written comments
	- general public	- public display of documents
	- applicant, BSH, statutory consultees	- application conference
	- applicant	- presentation of EIA
	- statutory consultees	- comments on EIA
	- applicant, BSH, statutory. consultees	- public hearing
Decision	BSH	

The consultation and participation processes for offshore wind farms in coastal waters differs from the ones applied for developments in EEZ and their implementation may also

vary between the different federal states. The planning and licensing process for offshore wind farms in territorial waters is usually divided in a regional planning procedure (ROV) and an approval procedure (licensing according to BimSchG). A screening conference with the applicant, the licensing authority and public agencies, that may be affected and are expected to provide advice, is convened to determine the scope of necessary assessments. There is no formal pre-application consultation and the participation process is initiated once the application documents are submitted to the planning authority. Upon submission the application documents are sent to public agencies and statutory consultees, and displayed in communities. The public participation process for individual citizens is characterised by the submission of written comments and representations, to the same extent as exercised by public agencies. However, responses from expert stakeholders are deemed more relevant and valuable. The compatibility of the proposal with the environment and people is usually assessed by means of the comments, representations, independent inquiries and hearings. A hearing (*Erörterungstermin*) with public agencies and representatives of communities is convened for particularly conflict-laden environments. The ROV closes with the creation of a not legally effective Regional Planning Evaluation (*Landesplanereische Beurteiling*) which recommends a refusal or the progress of the proposal to the licensing stage.[5] The following licensing stage serves the clarification of particular issues of the license, construction, appearance and operation of the development, after general conflicts had been addressed in the prior planning procedure. The licensing procedure usually contains an EIA and public participation, as offshore wind farms concern the construction of more than 20 turbines (WUSTLICH & HEUGEL 2006). The participation of the public and public agencies involves the opportunity to submit written comments again. However, unlike certain agencies, coastal communities and residents are not regarded as statutory consultees due to a lack of jurisdiction over the offshore area as their municipality does not extend beyond the shoreline. They are not granted particular rights due to their local un-affectedness and are merely allowed to submit written comments as any other person who might be interested in the proposal. Thus, communities do not have much influence in informing the outcome of the decision-making process. Representatives of communities are additionally allowed to attend the hearing to discuss their concerns with the licensing authority, developer and other public agencies. But the hearing as well as the whole licensing process is often characterised through a 'announce-defend' mentality (BURNINGHAM 2000), and often leads to particular technical restrictions and imposts under which a license is granted. As HAGGETT (2011) demonstrates in a different context, a hearing or inquiry is the only chance that local people will get to express and discuss their concerns will often be at the end.

Table 3 Participation possibilities during offshore wind farm planning territorial waters

Stage	Stakeholder	Form of participation

[5] However, some ROV for particularly large-scale and conflict-laden proposals (e.g. airports, motorways etc.) make use of mediation processes, dialogue forums, and public hearings with communities.

Screening	Applicant, planning authority, affected agencies	Application conference, discussion
First round of consultation (planning procedure)	- public agencies, statutory consultees	- written comments
	- general public	- display of documents; written comments
	- local communities	- display of documents; written comments (public hearing on-site)
	- public agencies, consultees, applicant, planning authority, communities	- hearing
Second round of consultation (licensing procedure)	- larger group of public agencies and consultees	- written comments
	- general public	- public display of documents; written comments
	- applicant, licensing authority, consultees, community representatives	- public hearing
Decision	Licensing Authority (Lower Environmental Agency), Ministry of Environment of Federal State	

5) Offshore wind farm planning in Denmark

In 2007 a report by the Committee for Future Offshore Wind Turbine Locations mapped out 23 possible areas for offshore wind turbines that had previously been identified, examined and consulted. The development of these sites should take place in a prioritised order, taking into account economic consequences in terms of installation costs and expected energy production. The conditions of offshore wind farm planning in Denmark are regulated through the Danish Promotion of Renewables Act 2008. Similar to Scotland and the rest of the UK, Denmark also streamlined licensing of offshore wind farms and the Danish Energy Agency (DEA) acts as a 'one-stop shop' for the planning and erection of offshore wind farms. The Danish Energy Agency also integrates permits from other authorities, arranges consultations with relevant stakeholders and issues all required licenses. Three different

licenses for offshore wind projects are granted by the DEA - a license to carry out preliminary investigations, a license to establish offshore wind turbines and a license to exploit wind power for a certain period and electricity production – which are granted successively. In addition, offshore wind farms are subject to an EIA, for which guidelines were developed by the DEA. There are two different approaches for the establishment of offshore wind farms in Denmark. DEA may run a government tender procedure, through which a tender is announced for a project of a specific project within a specifically defined geographical area. The decision for an applicant is made on financial grounds of lowest possible costs, as the applicant has to submit a quotation for a price at which the applicant is willing to produce electricity in form of fixed feed-in tariffs. The second approach is an open-door procedure, through which a developer chooses a site in a specific area. These sites must not overlap with the previously designated areas in the 'Future Offshore Wind Power Sites – 2025'. The application for a license of preliminary investigation requires minimum standards and is subject to a hearing with other authorities in order to rule out conflicts with other major public interests.

"Consultation and public hearing are key components of environmental impact assessments" (DEA 2013a:30) and usually involve citizens, organisations and relevant authorities. An internal hearing of relevant authorities including municipalities along the coastline as well as national authorities should precede the issue of a license for preliminary investigations. A public hearing is announced after the submission of the EIA report and lasts for eight weeks and provides interest groups and the general public to comment on the proposal and EIA report (DEA 2009). However, the Act does not specify any other or additional engagement methods for the local and wider public, but the planning of earlier offshore wind projects (Horns Rev 1 and Mittelgrunden) were based on several hearings with local stakeholders. Furthermore, if an offshore project is likely to cause transboundary effects, "neighbouring countries will have to be notified and consulted according to the Espoo Convention" (DEA 2013a:30). The Danish Promotion of Renewables Act introduced in 2008 also included new schemes, such as the option-to-purchase scheme and loss-of-value scheme (DEA 2009), which are supposed to increase the acceptance of the local public. Individually affected parties and environmental organisation may appeal a decision from the DEA to the Energy Board of Appeal within four weeks after the decision.

In contrast to plans of England, Wales and Germany to refrain from wind farms in coastal waters, Denmark is currently advancing 6 nearshore areas for wind power (DEA 2013b). DEA is undertaking a single comprehensive tendering round for 6 areas, at least 4km off the shoreline, to expand the offshore wind capacity by 450MW. All areas were subject to a thorough planning and selection process including geophysical, geotechnical and environmental assessments, assessments of establishment and operating costs, local dialogue and support. Enterprises or consortia that were awarded concession contract are allowed to progress detailed planning activities and prepare the final project for approval.

Local citizens will be provided the opportunity to purchase wind turbine shares for the nearshore turbines, which is assumed to increase local interest and backing for the nearshore wind farms. Local citizens who live permanently in a radius of 16km from the wind farm are allowed to purchase wind turbine shares. The developer must offer at least 20% of the ownership shares to local citizens, which had only applied to onshore wind farms before (DEA 2013b). Tenders with a greater share of local ownership are financially supported and favoured in the tendering round. This and lower development costs are the key drivers for these areas. Nearshore wind farms will also be liable to the loss-of-value-scheme, which forces the developer to partially offset the loss of value of real property.

In summary, the Danish model is supposed to provide a quick and cost-effective process for individual projects and the whole offshore wind industry. Even if the actual handling of public hearings and the treatment of consultation responses remain blurry, public participation is guaranteed in the same way as the participation of national agencies and statutory consultees. However, the consultation of the general public usually takes place after the initial proposal has been submitted, nonetheless this does not rule out a later alteration of the proposal.

6) Offshore Wind Farms in Sweden

Similar to Germany, the planning system and legal preconditions for offshore wind farms in Sweden are separated between the territorial waters and the EEZ. But unlike Germany, territorial waters in Sweden belong to the coastal municipality which exerts the same powers as for territorial land-use planning. Nevertheless, the influence and impeding effects of the municipalities are regarded as less problematic than for onshore wind farms (SÖDERHOLM & Pettersson 2011) due to fewer interests and less distinct conflicts involved. In contrast, the central government is responsible for developments in the EEZ. A GIS-system, VindGIS, is used to overlay clashing interests in the EEZ.

Since the administrative areas of municipalities extend to territorial waters, they are also required to plan these areas. So, the coastal waters must also be covered by the guiding comprehensive plan, but can also be included in detailed binding plans. The municipal comprehensive plans should describe how areas of national interest, which have also been identified for the offshore area, are safeguarded. In 2012 only 4 out of 80 coastal municipalities in Sweden attempted planning efforts for the offshore area. The preparation of marine spatial planning was initiated in 2010 in order to simplify and guide the licensing in and the management of offshore waters, and to create a comprehensive basis for decisions on activities and protections. A new institution, the Swedish Agency for Marine and Water Management, was found to guide and direct this process and has commissioned work on drafting a marine spatial plan. The national marine spatial plan should facilitate municipal planning of the sea and should be carried out in collaboration with municipalities

in order to avoid conflicts of the overlapping plans. Therefore, municipalities must be invited to participate in the planning process and to comment on the marine plans. Municipalities and the public are provided with several opportunities to comment on the draft plan at various stages during the planning process. The legislation of marine spatial planning was supposed to be adopted by the end of 2013. Leaving these coming changes out of consideration, the Swedish preconditions for offshore wind farms have been regarded as more favourable than the ones determining the siting of onshore wind farms (SÖDERHOLM & PETTERSSON 2011).

In terms of siting actual wind farm projects, two permits, for environmental hazardous activities and water operations, as well as an EIA are required for all offshore wind farms installations larger than 1MW within the territorial waters. Both procedures can however be coordinated (SÖDERHOLM & PETTERSSON 2011). Offshore wind projects planned in the EEZ only require one permit that is granted by the central government. The planning procedure for the EEZ follows general consideration rules of the Environmental Code, but does not apply territorial planning legislations, and is thus regarded as more straightforward (SÖDERHOLM & PETTERSSON 2011). All offshore wind farm proposals are subject to an EIA, which must be conducted before permit applications are submitted. This also involves formal consultation processes with various stakeholders upon which the project can be modified with regard to the consulted information. The norms of the consultation process are regulated by the Environmental Code and involve the county administrative boards, public authorities, municipalities, as well as the concerned public and organisations. No offshore projects can be launched without having consulted Swedish Board of Fisheries, the Swedish Maritime Administration and local fishermen (CORVELLEC & RISBERG 2007).

7) Offshore wind farms in France

The French Government first launched a tender for the construction of offshore wind farms in 2011 (WESTERBERG ET AL. 2013), although initial preparations date back to 2005 (BILGILI et al. 2011). The first tenders were awarded in April 2012. Offshore wind farms are excluded from the WPDZ regulations, but are also subject to an EIA which includes the onshore hinterland.

A particular procedure for large infrastructure projects of national interest in France that cost more than €300m is the so-called Public Debate. It was organised by the National Commission of Public Debate (CNDP) for all four offshore wind farms of the first tender round and lasted for 2 months in 2012. The purpose of these debates is to ensure that the public is kept informed about the projects and that people can express opinions and concerns. All these large-scale projects should be subject to a series of public meetings held in a certain radius around the project sites. Issues addressed in the debates include impacts on the onshore and offshore environment and landscape as well as potential impacts on

fishing, tourism and navigation. The results of the debate have to be put down in a report, upon which the developer decides on a further progress. However, the results of the debates are not binding to the developers, but may result in amendments of the projects. Each project debate is usually accompanied by a dedicated website created by the CNDP which serves the dialogue with the public and particular stakeholders.

In the case of the offshore wind farm off Courseulles-sur-Mer (450MW, 75 turbines) planned by a consortium consisting of EDF, DONG Energy and wpd Offshore (EOC 2013), the public debate comprised 11 meetings attended by 1742 people and 2 schools visits within a period of 16 weeks. The meetings were supported by exhibition boards, photomontages and various experts from different fields who discussed various impacts of the wind farm. The CNDP rates the debate as quite conclusive in terms of the dissemination of knowledge about the project and gathering concerns of the public. But some people and organisations also criticised “the limitations of this dialogue they believe to be merely informative, as the project has already been decided upon” (CNDP 2013:117). Indeed, the majority of aspects of the wind farm seem to have already been settled and discussed in other forums by the time the public debate was launched, which limited the scope of the debate (CNDP 2013). Other than the commitment by the contracting authority to conciliate the project with remembrance issues in the Normandy which were raised during the debate (CNDP 2013), there has been no further evidence of how and to what extent the public debate may have informed the wind farm project. In addition to the public debate, the developers are committed to different consultation measures with the public and affected stakeholders. They aim to provide information material for local people and tourists, to support the creation of new tourism activities and to initiate a dialogue with local fishermen about fishing issues.

Appendix 4: Expanded Discussion of Onshore Wind Farms Case Studies

1) Scotland Case Studies

a) Stronelairg Wind Farm

Stronelairg wind farm is a large wind project proposed by SSE and located in the Monadhliath Mountains east of Loch Ness. The planning application for the original scheme which comprised 84 turbines with a capacity of 300MW was submitted in June 2012. The decision by the Scottish Government is expected later in 2014. Highland Council, as a key statutory consultee, did not object to the wind farm but raised a number of conditions after visiting the site. In order to comply with these conditions SSE removed some turbines from the proposal, repositioned one turbine and reduced the height of ten turbines. The redesigned project will have a capacity of 240MW if consent is granted. The scoping layout included 144 which were reduced to 88 turbines due to ornithological, habitat-related and visual impacts. Therefore, the proposed project is claimed by the developer to be "carefully designed to avoid being seen from the main tourist routes and iconic attractions". The decision by the Highland Council to raise no objection against the Stronelairg proposal provoked the John Muir Trust to take legal action against the approval, as the advice to the council is deemed "flawed and fundamentally in conflict with the existing local and national planning policy". Moreover, the wind farm proposal is opposed by SNH, SEPA and other local and national groups, which contradict the decision of the council.

Community engagement involved two exhibitions during the scoping and pre-application stages, which were widely announced. The scoping report was presented to statutory and non-statutory consultees, including community councils, in order to gather feedback on the proposal and to help define the scope of the EIA. The first round of exhibitions was held between 29th and 31st March 2011, which served to gather views and comments from the local public and to identify any local concerns and issues, which "will be considered during the EIA and may influence the design of the site". 12 members of the public attended these exhibitions in total. A second round of exhibitions was held on 31st May and 1st June 2012 and served to communicate the results of the EIA, the final design of the wind farm and the subsequent application process by means of discussions, exhibition boards and photomontages. These exhibitions were attended by 44 members of the public. With agreement of the Highland Council, these exhibitions were held in combination with the Bhlaraidh wind farm application by SSE (west of Loch Ness) in order to demonstrate a joint planning approach with the same local area. Updates have been provided at community council meetings and through their website throughout the EIA. These practices form the pre-application consultation process of SSE and comply with the minimum standards prescribed by Scottish Government and served "to inform the local community of the proposals and take on board any comments received by the public prior to submission of a full planning application." After the submission of the planning application, the official

consultation period provides consultees, the public and third parties were provided with the opportunity to comment on the proposal by writing directly to the planning authority.

Other measures to consult local communities are supposed to be adopted at later stages. A community liaison group will be set up to provide "the community with information about key construction activities" and as "a mechanism by which concerns from within the community can be shared and discussed". A community liaison officer is also intended to be employed to keep the community informed about the progress during the construction. However, this option seems to be considered only for the construction of the consented wind farm and not during earlier planning stages. While outlining their community engagement strategy, SSE variously refers to their practices applied during the successful planning and construction of the Glendoe Hydro Electric scheme which is located west of the proposed wind farm. The consultation strategy during the construction appears to serve only as information provision rather than a mutual exchange and discussion of concerns, and influence of the communities, as reflected in SSE's general statement: "Throughout the life of our projects, we aim to work positively with the local community and keep people informed about what we are doing." In the scoping opinion they list and refer to the 'PAN 03/2010 Community Engagement', amongst others, as a land use document which is may be relevant to this proposal. The Environmental Statement also comprised a detailed community engagement report, which describes the steps undertaken to inform and consult adjacent communities.

Other promoted ways of getting the community engaged in the planning and construction of the wind farm are based on economic rationales. SSE intends to create a community benefit fund, similar to that which has already been done for other developments. They also highlight the opportunity for local companies and businesses to offer their services for the construction work and related practices during an open day, depending on the local skills and services available. Construction and maintenances tasks are also likely to rely on local services, which would bring economic benefits to local area. Long-term benefits are also promoted through the possibility of apprenticeships schemes.

b) Clyde Wind Farm

Clyde Wind Farm was opened in September 2012 and is the largest onshore wind farm in Scotland with a capacity of 350 MW from 152 turbines. An Environmental Statement was prepared over two years and was accompanied by a series of consultation events with more than 50 statutory and non-statutory consultees. These involved 12 roadshow exhibitions and a permanent exhibition at a hotel. Moreover, about half of all households in the main villages were visited. The developer also established a schools education programme about wind farms in North Ayrshire, initiated an open day, and proposed a viewing platform at the site. Consultations were used to obtain initial feedback on the proposal, identify concerns, review survey findings and discuss opportunities related to the wind farm proposal. This

consultation process is claimed to have led to 50 changes in the original plan without specifying these changes in more detail, other than a reduction of turbines from 197 to 161, the relocation of a few turbines and the creation of 13 new layouts of the wind farm.

However, the planning committee of the South Lanarkshire Council objected to the wind farm due to unacceptable landscape and visual impacts, contradictions to local plans and national guidance. The objection from the Council necessitated a Public Local Inquiry undertaken between August and October 2006, during which consultees, community councils and individuals were heard and allowed to present oral evidence. Consultation responses were received from 20 organisations and 170 objection letters were sent from the public. Although the wind farm would cause significant adverse visual, landscape and environmental effects, some of which are reversible, the Reporter recommended that Scottish Ministers grant consent to the wind farm, but also listed a large number of construction-related conditions that have to be met and also suggested to delete a few turbines, which eventually led to the 152 turbines. The Reporter also stressed the meaning and positive features of the wind farm, but that the presence or absence of voluntarily proposed financial schemes for communities, such as development funds, should not be taken into account when assessing whether a specific proposal is acceptable or not. Clyde wind farm has Scotland's largest Community Investment Fund of £875,000 per year that goes to community projects and regional development funds in South Lanarkshire, Dumfries and Galloway, and Scottish Borders.

The developer SSE is currently proposing an extension of 162 MW and the respective planning application for 54 turbines was submitted in September 2012. The project design is claimed to be informed by the findings of the public consultation process and results from the EIA. Although local residents raised concerns about the extension they did not object as the Clyde wind farm is seen as a precedent that has already been created. Likewise, the councils of Scottish Borders and South Lanarkshire did not object to the extension either. In the Addendum of its Planning Statement, the developer refers to Good Practice Wind Project, states to be a partner in the project and therefore claims that the key objectives of the GP Wind Project are reflected in the Addendum as far as practicably possible, even though the GPWP was published after their EIA addendum. The Environmental Statement refers to a separate Pre-Application Consultation Report which is supposed to provide details on the consultation process, but the Report could not be accessed.

c) Glenchamber Wind Farm

The 11 turbine Glenchamber wind farm was consented in July 2012 after an appeal by the developer RES. In the first instance, the wind farm proposal was refused by Dumfries & Galloway Council, which acted as the planning authority. The proposal was rejected on grounds of significant and unacceptable environmental effects on the visual amenity, and on the historic landscape character of the Plateau Moorland that will be overwhelmed by the

turbines. Another reason was adverse effects on flight safety based on an objection from the Ministry of Defence which was later withdrawn. RES appealed against this decision and after a very detailed consideration of arguments and statements by key consultees, the Reporter granted planning permission subject to 26 conditions.

The developer, RES, states that "meaningful and productive consultation requires a more detailed approach which goes above and beyond the minimum". Early community engagement should therefore facilitate a constructive consultation process, help to understand and address concerns, assist the public in understanding benefits and impacts, add value and improve quality of the proposal and help define the structure of community benefits. In its PAC-Report the developer not just refers to good practice guidelines in Scotland, but also evaluates how the different standards of the 'PAN 81 03/2010' were used in the consultation process. So, the consultation process included comprehensive community engagement practices, which facilitated a mutual communication of information and concerns prior to the application submission. A community liaison group was established as a forum for discussing issues and concerns, after key stakeholders had been identified in accordance with Dumfries & Galloway Council. Methods involved in the consultation process were set out in the Proposal of Application Notice, which included community council meetings, the community liaison group, a public exhibition, meetings with key stakeholders, door-to-door meetings, newsletters and emails, questionnaires and comment cards, as well as an independent telephone survey. The telephone survey was conducted by an independent consultant. The Community Relations Manager and Project Manager were particularly trained in 'public and stakeholder engagement', 'negotiation skills' and 'conflict resolution'. RES also offered the opportunity to visit an operating wind farm, which was cancelled due to a lack of interest. However, the local council rejected the wind farm proposal in the first instance, despite these exceptional efforts made towards public engagement. The subsequent appeal involved a public hearing.

Although RES clearly exceeded the minimum consultation standards, as local people were asked about their views and concerns and were given different opportunities to leave comments on the project, and a detailed listing of the findings of each step of the consultation process is provided in the PAC-report, it remains rather unclear how these consultations have eventually informed and influenced the outcome of the proposal, other than the outline of their responses to key comments from stakeholders. RES declares to "have listened to all the comments received and have made amendments to the proposal where necessary", which found expression in the change of the layout of the wind farm and a reduced number of turbines.

d) Carron Valley Wind Farm

The Carron Valley Wind Farm was a proposed scheme of 15 turbines with a total capacity of 45MW that was rejected by the Scottish Government in July 2013. The project was the first one proposed by 'Partnership for Renewables' (PfR), which was established by the Carbon Trust in 2006 to facilitate renewable energy projects on land controlled by public sector bodies. The Carron Valley Wind Farm was the first project put forward in partnership with the forestry body. In February 2013 the developer appealed against the refusal of planning permission from Stirling Council due to cumulative adverse landscape effects that are contrary to local plans and policies. Most grounds of appeal are limited to the impacts of the wind farm on visual amenity and landscape character that are regarded as acceptable, as the wind farm is claimed to be carefully located and designed to minimise potential effects on the overall quality and amenity of the landscape. However, the Reporter assigned by the Scottish Ministers upheld the cumulative landscape-related impacts in the Carron Valley and refused the planning permission.

In contrast to the refusal of the project, the developer undertook substantial consultations, which are referred to as 'best practice measures'. Indeed, the developer claims to have undertaken the pre-application consultation in accordance with good practices measures listed in PAN 81 3/2010 and National Standards of Community Engagement. This strategy included: making people aware of the development as early as possible, providing people with enough information to enable them to make an effective contribution to the consultation, ensuring that information is easily understandable and making people aware of the planning process. At first glance, this strategy seems to serve the purpose of a one-sided information provision, but the practical implementation of the consultation programme involved a number of activities that exceeded the legal requirements. The pre-application consultation consisted of three public exhibitions with exhibition boards and various meetings with local interest groups as well as and community councils that went beyond the information of statutory consultees. These were undertaken between October 2011 and June 2011. A particular feature was the creation of a microsite of the wind farm in order to illustrate the appearance of the proposal. Despite various announcements, the exhibitions evidenced a rather low level of attendance because of a relatively small number of households in the area and because local people are supposed to suffer from 'developer fatigue' caused by previous developments in this area.

The feedback mechanism of the public consultations process was achieved through discussions and feedback forms at the exhibitions. The PAC-report of PfR also stands out by revealing the 'impact of community feedback on the proposal'. So, comments during early meetings with local council resulted in a substantial reduction of wind turbines (60 to 15) and the removal of particular area from the plan, whose development would have caused significant effects on the visual amenity. PfR was aware of other wind farm proposals that had already been taken forward in the Carron Valley and made local people reluctant to

support further developments. That is why PfR regarded community engagement as an important step to prepare a proposal that takes people's views into account and that addresses issues that other developments had encountered before. Even though the Carron Valley Wind Farm may not be considered as good practice in engaging and mobilising local communities, the project clearly demonstrated that consulted views and concerns informed the appearance of the proposal.

2) England Case Study: Burton Wold Wind Farm South

Burton Wold Wind Farm South is an extension of the Burton Wold Wind Farm that consists of 10 turbines with a consented northern extension of seven turbines. The southern extension adds another five turbines and with a total capacity of 11.5MW and was approved by the planning committee of Kettering Borough Council in March 2012. The developer, Infinergy, proposed a pre-application community involvement strategy in order to inform the adjacent communities about the project, although no legal regulations dictate such a process for a relatively small wind farm. The need for a pre-application consultation is rationalised with Infinergy's general planning approach for wind farms and the influence of the council. Based on this information, the consultation process is meant to be particularly tailored to local needs. So, the collaboration between the developer and the council to create an efficient and beneficial for the local community context complies with UK's demands and standards concerning the planning of large wind farms (>50MW). The consultation process was thus informed by the 'Statement of Community Involvement' produced by the North Northamptonshire Joint Planning Unit, which suggests that consultation may include briefs and meetings with councils, public exhibitions, leaflets and letters, and adverts and press releases. In addition, Infinergy's general approach to community involvement includes consultations with local councils, interest groups and residents, a dedicated project website, the circulation of an information booklet as well as widely advertised Community Open Days prior to the submission of the planning application.

The practical implementation of the consultation process made use of consultation zones that covered residents directly neighbouring the wind farm site and a wider zone including thousands of households, with both of which a proactive dialogue should be established. Kettering Borough Council requested the developer to directly consult a number of Parish Councils. Moreover, Infinergy also decided to consult Parish Councils that are not situated in Kettering, but may be concerned as well. Open days were held at two Parish Councils and included display panels with visualisations and issues about the development with particular focus on the cumulative effects with the already existing turbines. Infinergy staff, environmental and acoustics consultants were help to address the raised issues, questions and concerns of local residents. Visitors were asked to provide feedback through questionnaires comment cards, and were asked to hand in suggestions regarding a

community benefit fund. The open days were attended by 138 people. Moreover, Infinergy also set up a free-phone number, a free-post system and a consultation website through which people could get in touch with the developer. An information booklet was circulated to 5.300 households in the wider consultation zone, and a 'door knocking exercise' was undertaken in the immediate vicinity of the wind farm site (micro-consultation zone) to ensure people are aware of the project and to promote a new initiative, the Local Energy Organisation. The door-to-door exercise "has proven to be very useful as it gave these residents an opportunity to find out more and ask immediate questions addressed directly to the developer before make up their mind". Furthermore, Infinergy was also invited to take part in a workshop with pupils about wind energy and climate change.

The Local Energy Organisation (LEO) is an initiative by Infinergy through which households directly neighbouring a wind farm can benefit by receiving discounted green energy. The organisation is run by local residents and serves to ensure the provision of electricity at a reduced rate through revenues from the wind farm. The scheme was developed in consultation with local residents who repeatedly expressed interest in attaining electricity from the wind farm and at reduced rates.

Although Infinergy's PAC-report provides a meticulous list as well as detailed quantitative and qualitative analysis of all the feedback gathered through the various communication channels, there is no hint as to how this feedback may have informed the proposal. It is only declared that the repeatedly articulated issue of TV interferences will be properly addressed if permission is granted.

3) Wales Case Study: Pent Y Cymoedd Wind Farm

Pen Y Cymoedd Wind Farm was granted planning permission in May 2012 consists of 76 turbines with a total capacity of 256 MW. It was developed by Nuon Renewables which has now been renamed with the name of its parent company Vattenfall. The wind farm is currently being constructed by Vattenfall with a SSA managed by the Welsh Forestry Commission. Neath Port Talbot Council, in its role as a key consultee, did not object to the wind farm but imposed a number of conditions.

Interestingly, Nuon Renewables appointed the planning and delivery of the consultation process to an external company, BDOR Limited, which also drafted the statement of consultation. So, the planning application was accompanied by a very detailed statement of consultation that explains the superordinate regulations, describes the engagement activities undertaken and provides a thorough evaluation of the consultation process. This report declares "there are no formal requirements or standards set in the Welsh planning system for community involvement or consultation on planning applications". But BDOR drew on three sources to establish the parameters when developing the community

involvement strategy: the Community Involvement Scheme for Rhondda Cynon Taf Council (CIS), the aforementioned Protocol for Public Engagement with Proposed Wind Energy Developments in Wales and TAN 8. In particular, the steps of consultation process seem to be aligned to the principles set out in the CIS.

The first step involved arranging initial meetings with the Neath Port Talbot and Rhondda Cynon Taf Councils in order to discuss a collaborative development of the consultation programme as prescribed by UK regulations. Before the appointment of BDOR, initial awareness raising work had already started, and a decision for a newsletter and website had already been made. A next step involved advertised open drop-in session which reflected the first chance of local residents to get in touch with the developer, to learn about the projects and to discuss its development. People were found surprised by the fact that their involvement could refine the project. Around 600 people attended the nine drop-in events and were asked to indicate on map where they live. Visitors were also asked to leave comments on common wind farm issues that were deduced from previous experiences and to raise other concerns. The drop-in sessions were followed by two poorly attended workshops for stakeholders from community councils and organisations, which had to be redefined as round table discussions about the emerging issues from the drop-in events and community benefits. Further steps included a survey exercised as door-to-door interviews and another round of drop-in events to gather views on the project and to interact with local residents. The second drop-in session served the purpose of demonstrating how Nuon responded to the issues that had been raised during the first session and through other consultation activities. Another key stakeholder workshop was held prior to the submission of the planning application in order to make people aware of the final proposal and the further planning process. The results of all consultation events were fed back to the attendees. After the approval, information about the construction progress is continuously being communicated to the local communities through ad-hoc meetings and newsletters.

4) Germany Case Study: Rieseby Wind Farm

A recent example of early engagement practices of wind farm planning in Germany is provided by the Rieseby wind farm. Rieseby is a small community (~2700 inhabitants) in the eastern part of the federal country of Schleswig Holstein. The planned wind farm consisting of six turbines with a total capacity of ~36MW was initiated by the Rieseby community and the collective municipality Schlei-Ostsee, in cooperation with the local project developers Plan 8 GmbH and Bürgerbeteiligung Saxtorf-Wind GmbH. The wind farm is supposed to be located in a suitable area that had been designated in the regional plan. However, the development necessitates an amendment of the local land use plan in order to define the location, exact positions and heights of the turbines. This process of local land use planning (Bauleitplanung) as the very first planning step requires an early involvement of the public. The public was first involved in December 2013 through a public meeting within the

community of Rieseby which served to introduce the purpose and goals of the plan. A second opportunity for the citizens to contribute to the plan was a public assembly of residents held later in December 2013. The well-attended assembly was accompanied by the mayor, the project developers and representatives of planning authorities who responded to questions and concerns of local residents. The developers and experts also provided initial insights in earlier environmental assessments, compensatory measures, distances to dwellings, acoustic and flicker prognoses and visualisations. Possibilities of financial participation for affected citizens were outlined in addition to the technical assessments. Statements and questions from this public involvement were recorded in protocols. Forthcoming steps of the early involvement in land use planning comprise the formal submission of representations and comments of interested parties and individuals, which have to be considered and weighed by the community of Rieseby and planners (WINDPARK RIESEBY 2013).

However, protest against the plan emerged soon after its announcement and despite the early involvement of local residents, because the positions of the turbines were believed to be fixed before the public was even involved. Protesters attempt to make the local public aware of the actual developments and wind farm design, and to encourage more citizens to participate in coming planning stages in order to contribute to and modify the plan (ECKERNFÖRDER ZEITUNG 2014).

The next steps after the early involvement of the public in land use planning include the early engagement of public bodies, the development and publication of a draft plan and environmental report. The general public and public bodies will then be formally consulted and will have the opportunity to comment on these documents. Representations and comments will then be proved and considered in the plan where possible. Revised plans will have to be disseminated and consulted again. After the commencement of the land use plan, the wind turbines will be subject to an approval procedure according to the BImSchG (WINDPARK RIESEBY 2013). Since the planned wind farm consist of six turbines that are taller than 50m a general screening with experts has to determine the necessity of an EIA, which then requires another round of public consultations, usually in the form of written comments and hearings. However, this example, even if at an early stage, clearly reflects the fact that early involvement of local citizens and financial participation does not guarantee a shared acceptance by all stakeholders.

5) Denmark Case Study: Northern Jutland

The county of Northern Jutland covers the northernmost region of Denmark exposed to both The North Sea and Baltic Sea and has pioneered in the development of wind energy. The development of wind farms has culminated in this area over the past decades and the wind farms are therefore older than in other parts of Denmark (MÖLLER 2006, 2010). In 2000

the number of turbines exceeded more than 1000 wind turbines in an area of 6200km^2 (MÖLLER 2006). This number decreased in the following year due to end-of-lifetime decommissioning and repowering. But new and larger turbines were also proposed in existing planning zones in order to concentrate them in wind farms and to get rid of badly located single turbines (FRASER 2002).

In 2006, the municipalities of Northern Jutland were requested to progress the detailed planning of potential wind farm sites that had been described in the draft regional plan of 2005 and to amend the plan. A progress report in 2007 included 51 potential wind energy projects suggested by the municipalities as well as some new sites for which municipal planning had already commenced. All potential projects were appraised with a turbine capacity of 2MW and a height 0f 100-150m (SPERLING et al., forthcoming). In order to identify suitable zones for new wind turbines, Northern Jutland County created an artificial landscape GIS model which provided a photo-realistic presentation of a landscape in a relation to a proposed wind farm (HANSEN 2004). The involvement of the public in decision-making on wind farm zones in Northern Jutland has been fulfilled by a combination of public meetings, discussion forums, reports, online maps, and meetings between citizens, politicians and experts, which went beyond the information level of participation (HANSEN 2004).

The revised wind power potential of Northern Jutland, suggested by municipalities, amounts to 183MW allotted to 15 sites (SPERLING et al., forthcoming). Only two of the local plans for the 15 sites did not face any objections, which prolonged and delayed the planning processes for most projects between 2005 and 2009. A number of projects were delayed, downsized or relocated due to public opposition, which resulted in an uncertain and ambiguous implementation of the municipal plans. The reasons for mismatches between anticipated and installed capacities differ from municipality to municipality and can be found in lengthy EIAs, abandonments of sites due to public protests, different planning approaches for individual sites and the whole municipality, and the trend to concentrate large wind turbines in few sites (SPERLING et al. forthcoming). However, the example of Northern Jutland reflects a comprehensive influence of the public in early wind farm planning at pre-project stages.

6) Sweden Case Study: Havsnäs wind farm

Havsnäs wind farm is the largest onshore wind farm in Sweden and commenced operation in 2010. It is owned by HgCapital and Nordisk Vindkraft, a subsidiary of RES. The wind farm consists of 48 turbines (94.5MW in total) that are located in a remote area in the municipality of Strömsund in central Sweden.

The municipality area had been open-minded about a wind farm project in Havsnäs and included the area in its comprehensive plan as being suitable for wind energy. From the beginning of the planning process there has been an extensive dialogue between the developers and the community in order to progress the planning work in a joint approach. The collaboration between the developers and local citizens resulted in a considerable relocation of the turbines from sensitive mountain areas to forested pre-alpine foothills, which reflects the consideration of local environmental interests. The joint approach was nominated for a National Planning Prize in 2006 because of its good resource management, sound development and broad citizen participation (NORDISK VINDKRAFT 2014a). This joint approach made also use of a community representative and spokesperson, who negotiated interests between the developer and the Havsnäs community. Nordisk Vindkraft provided a lot of detailed information about their plans and intentions at various public meetings and explained how they intend to take local views into account and to integrate them into the final plan, and how the community could be compensated for any inconvenient impacts. Furthermore, there were also guides who offered guided tours to the construction sites in order to inform interested residents about the construction process (WETTIN & JIVEN, no date). The development and construction of the wind farm was mostly done by local sub-contractors and workers which were also particularly trained for this job. Thus, the wind farm created 250 temporary and 13 permanent local jobs. Nordisk Vindraft also published a guide (in Swedish) on their planning approach including their strategies towards community engagement. Apart from the wind farm development, the developer also intends to invest in other infrastructure projects within affected host communities in order to compensate them for potential impacts and to endorse local development (NORDISK VINDKRAFT 2014b).

7) France Case Study: Aveyron wind energy

The region of Aveyron in southern France is one of the windiest areas in the country. Due to the absence of a national planning framework and in order to cope with the increasing number of planning applications, the Aveyron administration developed a local planning scheme, which was issued in 2005 (NADAÏ 2012). This work was undertaken by a commission consisting of several administrative bodies of the department as well as the non-state actor of the National Park Administration (PNRGC). The procedure started as an open negotiation of different viewpoints, but evolved into a zoning process to identify areas of least impact of wind farms, which reflected a shift from a qualitative assessment of suitable landscape to the logic of zoning (NADAÏ 2012). However, the planning of projects within favourable zones remained ambiguous as cumulative effects had not been carefully considered and only appeared at the project stages, which have then led to increased local opposition. The new national law in 2003 introduced planning permits, impact studies and public inquiries which provided the department administration with more guidance on the assessment of planned wind farm projects. The environmental authority of Aveyron was put in charge of the final approval of wind farm projects, but also consulted other local authorities in the decision-

making process. Another contribution on the decision was made by the commissioner of the public inquiry who gathered view from citizens. The public could also send written representations to the department prefect (NADAÏ & LABUSSIÉRE 2009).

A first application for a WPDZ in Aveyron which covered only one village with an already approved large wind farm (Salles-Curen, 87MW) was rejected on grounds of an insufficient consideration of landscape impacts, but clearly pointed towards the fact that Aveyron administration was not keen on designating other wind farm areas. As a result the Aveyron prefect urged all mayors to pursue an inter-communal process to designate a new WPDZ along a particular landscape type which was eventually approved (NADAÏ & LABUSSIÉRE 2009). This final introduction of WPDZ in 2007 provided the new administration with further clarity in progressing wind farm developments, and local actors with further opportunities to get engaged in the planning process. But a moratorium was imposed temporarily on all wind farm projects until all WPDZ had been provided to the authorities. The Aveyron administration determined the perimeters of the WPDZ and local councillors coordinated wind power developments within the zones. In addition, the PNRGC created a guide for the development of WPDZ to complement official documents and offered funding for those communities that followed these guidelines (NADAÏ 2012).

The public inquiry, as one of the last steps in the approval procedure, provided local citizens with the opportunity to present their views and concerns by submitting comments on the application and impact studies. But opposition in Aveyron grew as citizens had no other choice than responding to and commenting on projects that had already been well advanced. By 2007, there were ten anti-wind farm groups campaigning against particular projects and the increasing density of wind turbines. Despite the growing opposition, all public inquiries since 2002 have concluded positively, but some of them resulted in modification of the wind farms (NADAÏ & LABUSSIÉRE 2009). So, the critical public had some influence on the appearance of the wind farm projects in the WPDZ, even if more weight was given to a few well-articulated favourable comments and the unarticulated majority undermining a larger number of less well-articulated representations. Thus, public inquiries in Aveyron as the key opportunity of public participation featured some marginal regulatory power to inform the outcome of planning (NADAÏ & LABUSSIÉRE 2009).

Appendix 5: Expanded Discussion of Offshore Wind Farms Case Studies

1) Scotland Case Study: Argyll Array

The proposal for the Argyll Array wind farm site originated from the Crown Estate's tendering round for offshore wind farm sites in the Scottish Territorial Waters in 2009. Scottish Power Renewables (SPR) was granted exclusivity rights from the Crown Estate to examine the feasibility of the Argyll Array site southwest of the Isle of Tiree. The project proposal was officially announced by the Crown Estate on 12th February 2009. The original proposed wind farm site had a capacity of up to 1800MW and could have accommodated up to 300 turbines. But in October 2012 the original site of 360 km^2 was downscaled due to likely impacts on basking sharks and great northern divers. Moreover, SPR announced a delay of the Argyll Array planning application and postponed the submission of the Environmental Statement to the second half of 2014, which was justified with additional environmental assessments with regard to environmental issues that have been encountered. A year later, in December 2013, SPR eventually announced the abandonment of the project due to its impossible financial viability in the short term.

The official media announcement of the proposal in February 2009 encountered protest and interest by the residents of the adjacent island of Tiree, as they had been unaware about the proposal until the day it was announced. Since then, the islanders have had divided opinions about the proposed Argyll Array wind farm due to its scale and close proximity to the island. Tiree Community Development Trust, which fulfils the task of a council, remained in a neutral position and regards the wind farm as an opportunity to counteract the slowly progressing economic and social decline of the island. In contrast, this uncritical stance led to the formation of a protest group (No Tiree Array) which draws attention to the potential adverse social and economic impacts of a large-scale wind farm on the rural island. Due to the early exclusion of the local communities by the Crown Estate, the Tiree Community Trust formed the Argyll Renewables Communities Consortium (ARC), along with the Islay Energy Trust and the Kintyre Community Trust, which also represented communities that faced large offshore wind farm proposals. The objective of the consortium is to identify means through which the communities can actively participate in the planning and development of offshore wind and tidal energy projects to ensure best outcomes for the communities. This goal is framed by a belief that collaboration between communities, developers and licensing authorities leads to an optimisation of the planning process and to better outcomes for all stakeholders. A first crucial step for ARC was taken when they successfully launched and commissioned a socio-economic impact assessment scoping study for all three offshore sites, as they believed that onshore impacts are only taken into account inadequately within the given strategic environmental assessments. After incipient enthusiast activities the collaboration seems to have cooled down since the individual wind farm developments have progressed to the project stage and the Kintyre

proposal has been dropped. The activities of the community Trust and ARC made them recognised as an important stakeholder in the planning process. Other than the Community Trust, the protest group is not considered as a key stakeholder.

The planning process began with the scoping of the site by SPR to provide the baseline for further environmental impact assessments and to identify the key issues linked to the project. The aim of this study was to 'map' the onshore implications arising from the four scenarios identified by the developer relating to the associated construction, operational, and maintenance requirements of the wind farm. The study was also looking to optimise the socio economic benefit to the island and mitigate the negative consequences of each scenario. A scoping opinion was published by Marine Scotland in March 2011. Parallel to the scoping work by SPR, Marine Scotland worked on a Draft Plan for Offshore Wind Energy in Scottish Territorial Waters (2010), including a public consultation process, and also compiled a Marine Sectoral Plan for Offshore Wind Energy in Scottish Territorial Waters (2011), both of which included the Argyll Array site. Those strategic assessments considered all proposed offshore wind farm projects together.

The Scottish Government also called for more engagement with the community on Tiree and for more involvement of key stakeholders in the planning process at the individual project stage and therefore proposed a scenario and master planning approach (Marine Scotland 2011:7). Argyll and Bute Council and the residents on Tiree felt that the proposal had the potential to hugely impact the island. The need for engagement to understand the local views and local consequences for the island was clear.

Marine Scotland and Argyll and Bute Council therefore worked together to promote developer-community engagement on the island, to examine and better understand potential onshore implications associated with the proposal. This also involved the participation of key partner organisations - The Crown Estate, Tiree Community Development Trust, Highlands and Islands Enterprise and ScottishPower Renewables (the developer). The community consultation involved one baseline visit, three consultation events on Tiree, one consultation event with the Tiree Association in Glasgow, and a number of one-to-one business meetings held with local business interests and with specialist interest /representatives and other groups. In early 2011, SPR even engaged a Tiree Community Liaison officer living on Tiree, in order to deal with the community's concerns more closely and regularly. An onshore scenario mapping (Master Plan) including the developer SPR, Argyll & Bute Council, Marine Scotland and the Tiree Community was eventually initiated in 2011 in order to discuss the preferences, socio-economic impacts and costs of different operation and maintenance (O&M) strategies for the wind farm. This process included a number of consultation meetings on Tiree, including exhibitions looking at potential impacts on the community, their concerns and needs. Residents were also

asked to provide feedback on the planning process, assessments and to mark locations from where they want to have some photomontages. A final report of the onshore scenario mapping which details the varying implications of four O&M scenarios was published in November 2012.

In summary, representatives of the community co-shaped the engagement and planning process, and citizens were consulted during the development of the marine plan as well as at the project level. The Community Trust was actively engaged in the master planning process which focused on operational issues of the wind farm and may thus inform the decision-making process and final appearance of the wind farm. However, at the moment it remains unclear if the proposal will reach the application and licensing stage and to what extent the community influenced the master planning process and what scenario will be adopted.

The approach used for the Argyll Array has been similarly applied by east coast planning authorities regarding the Moray Firth and Forth and Tay developments, to provide engagement and an understanding of similar socio economic factors. Two scenario mapping exercises are therefore underway.

2) England Case Study: Triton Knoll Offshore Wind Farm

Triton Knoll is a proposed offshore wind farm by RWE which is supposed to be located 33km off the coast of Lincolnshire. With an initial capacity 1200MW based on 240 turbines, it would have been the world's largest offshore wind farm. However, the developer has recently announced a substantial reduction in the size of the wind farm due to economic and competitive reasons, although, the initial proposal had already been approved in July 2013 by the UK Government.

Since the project is classified as a Nationally Significant Infrastructure, all the legal requirement of such as project had to be considered. Thus, the whole planning process for Triton Knoll comprised various steps of statutory and non-statutory consultation. The first period of consultation addressed statutory consultees in order to define the scope of Environmental Statement. These consultations lasted for several years and had significant influence on the project in terms of site boundaries, layout and the scope of the EIA. In 2009, the developer began consultations with the local authorities on the content of the Statement for Community Consultation (SoCC) which contained the wind farm as well as potential onshore developments and concluded with the publication of the Statement. At the same time the consultation with local authorities and statutory consultees served to reduce the number of potential locations for the onshore substation. This was followed by non-statutory consultations with local communities via questionnaires to identify and further reduce potential locations for the substation. However, a strategic review of the

onshore connection by National Grid interrupted all consultation activities in December 2010 and resulted in a separation of the whole project. Therefore, the cable route and onshore developments were separated from the offshore wind farm and the Statement of Community Consultation had to be revised. Formal consultations with prescribed bodies, local authorities and local communities were then undertaken as the final step of the pre-application stage.

The objective of community consultation is to "provide an opportunity for the relevant local communities to put forward their ideas and have a role in developing proposals where they can have an influence" (RWE 2011:5). Community consultation provides a forum to inform local communities about the planning process (wind farm, cable route, onshore substation), but also creates a process itself through which communities can comment on the formal process. In accordance with the Statement of Community Engagement public exhibitions were held at five different locations from which the wind farm could be visible (Zone of Theoretical Visibility). Visitors to the events were informed through exhibition boards and handouts, and had the opportunity to inspect documents with preliminary environmental information and complete feedback forms. All authorities and public bodies which participated in the development of the SoCC had been informed about the public exhibitions beforehand. Likewise, the formal consultation period was advertised through the website, public notice boards and parish councils. Newsletters providing updates on consultations and the application were also sent to marine users and councils for dissemination within relevant communities. The engagement period also involved the consultation of elected representatives. Updates were listed on the project website and disseminated through local media, and documents of preliminary environmental information were exhibited at local libraries (RWE 2012a). Since there is no legal obligation to consider the consulted feedback of the pre-application stages, RWE declared their will to "consider whether and how this feedback could influence any aspects of the offshore wind farm proposal before finalising an application for submission" (RWE 2011:5). RWE stated they would "carefully consider all issues raised during the pre-application consultation period" and that the Consultation Report is supposed to summarise and "explain how the views of consultees have been considered in developing the final application" (RWE 2011:13). Another consultation of key issues was carried out after the formal consultation to discuss and resolve outstanding concerns, which were addressed in the application where possible.

The following post-application process included specific hearings with expert stakeholders, and an open floor hearing with all interested parties, as well as a prescribed period for written comments and representation on the application.

Attempts were made to address all of the issues raised by parish councils and members of public during the pre-application consultation, and individually responded to them in the

final application through environmental, visual and safety assessments. Common fears towards visual impacts could be alleviated because of the large distance of the turbines from the coast and were also cleared through photomontages (see RWE 2012b). More significant issues for coastal residents and communities emerged from the onshore developments concerning the required cable connection and substation, which are handled in a separate procedure. The application for the electricity systems is expected to be submitted in March 2015. Formal pre-consultations with communities and subsequent modifications already indicate that the communities exerted some influence on the future application and the decision about the substation. However, the principles of this consultation process were criticised by some people as the site is claimed to be already defined and only technical details were open to consideration. In this regard, protest groups formed to oppose the siting if the substation in their vicinity. The recent reduction of the wind farm will also have consequences for the substation, the design and location of which is meant to be opened up to consultation with local communities again.

3) Wales Case Study: Gwynt Y Mor

Gwynt Y Mor will be the largest wind farm in Wales with a capacity 576 MW from 160 turbines and will be located 16km off the coast of the seaside town of Llandudno. It is currently under construction and is due to be fully operational in 2014. The developer is the German energy giant RWE npower. The proposal was submitted in 2005 and encountered resistance from local residents but also from statutory consultees such as local authorities (HAGGETT, 2008; DEVINE-WRIGHT 2012). Local residents formed a protest group ('Save our Scenery') which composed a significant dossier of objections and lobbied local MPs against the wind farm. The early engagement process with local residents involved newspaper advertisements, press releases, a project website, information leaflets and survey to gather tourist opinions, which rather point to a one-sided information provision. A series of public exhibition were held by independent contractors just before the application was submitted (DEVINE-WRIGHT 2012; HAGGETT, 2008). In the course of the licensing procedure statutory consultees and members of public also submitted written statements. As a consequence of the ongoing protests, RWE conducted new research and submitted additional environmental assessments, which led to a revised layout (DEVINE-WRIGHT 2012). Despite continuing protests the project was granted planning consent by DECC in 2008. The Gwynt-Y-Mor proposal turned out to be controversial because local residents were concerned about impacts on the tourism economy and the fairness of planning.

More recently an independent market research company was commissioned to undertake a survey to ascertain opinions on how a community benefit fund of £768.000 p.a. should be distributed and managed. This consultation process included a series of focus groups, in-depth interviews, drop-in sessions and an online questionnaire to identify the priorities of communities. The funding zone is likely to stretch over four counties, and the shape and

structure of the fund will be announced once the wind farm is fully operational in 2014. Moreover, a tourism fund of £690.000 over three years from the beginning of the construction will be managed in cooperation with Conwy and Denbigshire Councils to support local tourism activities.

4) Germany Case Study: Baltic 1 Offshore Wind Farm

Baltic 1 is the first commercial offshore wind farm in Germany and commissioned operation in May 2011. The wind farm consists of 21 turbines with a total capacity of 48.3MW and is located 16 km north of the Fischland-Darβ-Zingst peninsula, in the Baltic Sea off the federal state of Mecklenburg-Vorpommern. Baltic 1 was regarded as a pilot project to provide local companies with the opportunity to test developments in the offshore area and to compete at the increasing renewables market. Although the planning process had initially been accompanied by a regional developer, the approved project was taken over by the national energy giant EnBW based in southern Germany. The communities of Prerow and Zingst situated on the peninsula and directly facing the wind farm sites heavily opposed the proposal. So did the district of Rügen, whose administrative area covers the island of the same name located 28km east of the wind farm, and which even spoke out against wind farms in their local development plan. A protest group developed from the two local communities, which was later turned in a local political party in order to gain more influence in local politics and the wind farm. This group was even elected to become the largest faction in Prerow and gained the mayor's office in 2004. Likewise, the mayor of Zingst also opposed the wind farm plan and supported the protest group.

The planning procedure was initiated in August 2004 and conducted by the Ministry of Labour, Building and Regional Development. During the regional planning procedure all relevant communities were asked to display all documentations and to inform the public about the project, who could comment on it until 4th October 2004. A hearing was held in the community of Zingst on 8th Dec 2004 "with the objective to initiate a dialogue about the raised arguments between affected people, the developer and public agencies and to propound additional issues" (MABL-MV 2005a:15). The issues discussed focussed on shipping safety, environmental interests, scenery, visibility and tourism. In the end, the wind farm was allowed to go ahead despite the concerns of communities and local environmental groups. The key reason stated for the permission for the project to progress to the licensing process was given by its "pilot character", related to a small wind farm and the opportunity for local investors and companies to gather experience in the offshore industry. Another factor was supposed to be the joint grid connection with the larger Kriegers Flak wind farm (now Baltic 2) in the EEZ. The planning authority regarded the whole planning process as a mutual learning process between the developer and the ministry, as both had been inexperienced in developing offshore wind farms.

During the subsequent licensing procedure all public agencies, communities and individuals were given the opportunity again to comment on the project and its previous assessments and evaluations. But new assessments were conducted, too. This engagement process of public participation also included a public hearing which had to be extended to three days because of the number of people who objected to the wind farm and the number of issues discussed. So, local resistance was largely articulated through the means provided by the planning and licensing process. The community of Prerow listed 800 flaws of the proposal. These flaws did not just include formal and procedural flaws, which also harked back to the regional planning procedure, but also reasons of how the community would be adversely affected by the wind farm which were perceived to be depicted incorrectly in the assessments. Consequently, with more than 700 pages (including attachments) the engagement responses turned out to be very profound, detailed and excessive because of the meticulous consideration of any kind of aspects that were addressed in the assessments. They also criticised the lack of time provided for the preparation of their consultation response. The regional tourism association also commissioned a study on potential tourism effects. Finally, communities also unsuccessfully tried to file a lawsuit against the positive wind farm decision, but were dismissed as not having a legal standing due to their legal non-affectedness because of the large distance to the wind farm site and the lacking jurisdiction over the offshore space. A financial participation in the wind farm was rejected by the mayor on grounds of bribery.

Despite the massive local opposition from coastal communities, the construction of the wind farm was not prevented. This somehow points at a deficient influence of local stakeholders in the planning process. But it remains rather unclear to what extent the protest group and local communities have influenced the final decision of the wind farm, apart from prolonging the process, initiating and arguing for additional assessments, and perhaps triggering some operational restrictions and conditions. Some of the concerns of local people were addressed but overruled through independent assessments with contrary results (i.e. tourism impacts), and criticised on epistemological grounds by communities thereafter. The licensing authority puts more value in the comments from expert stakeholders, rather than the coastal communities which are deemed as being less affected by offshore wind farms. Although the coastal communities may feel affected by offshore wind farms in the same way as if it was built within their municipality, they were not fully considered as a key stakeholders due to their legal unaffectedness based on the distance to the wind farm and limited jurisdiction over the offshore area[6]. Another problem arises from the parallel designation of suitable offshore wind farm sites including the extension of Spatial Development Programme to the territorial waters and the planning of Baltic 1. Baltic 1 progressed while its site was simultaneously identified as a suitable area, even though that the programme states that the coastal waters of the Baltic Sea allow only for

[6] This also overruled the general rejection of wind turbines enshrined in the local development plan of the Rügen district.

very limited possibilities for offshore wind farms due to competing interests such as shipping, environmental, visual and recreational interests (MABL-MV 2005b:67).

5) Denmark Case Study: Middelgrunden

Established in 2000, Middelgrunden was one of the first Danish offshore wind farms and the largest wind farm based on joint ownership. It consists of 20 turbines with a total capacity of 40MW and is located 2km outside of Copenhagen. Its site had been previously designated in the national action plan for offshore wind. The wind farm is partially owned by the Copenhagen based company Energy E2 (now DONG) (50%) and by the Middelgrunden Wind Turbine Cooperative. The cooperative was formed by 8553 members consisting of individuals, organisations and local companies (LARSEN et al. 2005).

The idea for the wind farm arose in 1996 and was proposed by the Copenhagen Environment and Energy Office (CEEO) with support of a group of local people who allied in the cooperative. The cooperation with the energy company owned by the municipality of Copenhagen was arranged only at a later stage. These strong links between the municipality, authorities and local people were an important precondition for the successful development of the project. The wind farm was finally approved in 1999. Before the final decision the project was subject to extensive public hearings and a consultation group was created among the members of the cooperative in order to inform and consult people on the ongoing process.

A first hearing was held in 1997 and served to inform the public about the plans and the initial layout of 27 turbines. The hearing lasted for three months and involved authorities, local people and citizens. 50,000 people received information from the cooperative and several thousand people gathered information from a dedicated project website and exhibitions. The project was then opposed by the Danish Nature Conservation Society as well as local residents who feared visual intrusions and noise. As a result of this hearing the criticised layout was changed and the number of turbines was reduced. Concerns were also addressed through a visit to a modern onshore wind farm (LARSEN et al. 2004; ALBRECHT et al 2013). Also a specific involvement and flow of information towards the Conservation Society changed their views. At second hearing a year later that mostly focussed on the changes and previous concerns of the public, a revised curvy layout was introduced which was met with large support of many stakeholders. Only a small number of individuals and particular interest groups such as fishermen and yachtsmen still rejected the project. Principal approval was granted in May 1999. After that a third public hearing served to discuss on the prior EIA and potential impacts during the construction phase. The final approval of the wind farm was granted by the Danish Energy Agency in December 1999.

The extensive dialogue and consultations of citizens and interested parties during the planning stages as well as the modifications in response to the consulted information reflect the influence of the public in shaping the design and location of the wind farm. The public was involved in planning through information provision, was engaged in decision-making and finally participated through a financial involvement (ZEA et al. 2012). However, a broad attitude survey was only undertaken during the construction stage and did not have any effects on the final decision.

6) Sweden Case Study: Lillgrund offshore wind farm

A case study that is meant to have improved acceptance through extensive dialogue and communication with local residents and authorities is Lillgrund offshore wind farm in the Baltic Sea (ALBRECHT et al. 2013). Lillgrund has been operating since 2008 and is still the largest offshore wind farm in Sweden (48 turbines/110MW). A broad and extensive communication strategy was tailored to a target group, to reach as many individuals as possible in every phase of the planning process (ALBRECHT et al. 2013).

However, the limited influence of the public and local citizens, despite various participation methods, is also reflected in the example of Lillgrund offshore wind farm. Early engagement methods included hearings, open meetings and exhibitions at which the public was informed and educated about the proposed development in order to dispel myths about wind power (ALBRECHT et al. 2013). These steps, along with a first opinion poll and a widespread dissemination of information material, comprise the essential methods of public participation before the application was submitted. Further measures were undertaken after the project had been approved and while it was under construction. The progress and success of the development was illustrated through further exhibitions, forums and advertisements and continuously monitored by means of opinion polls until it commenced operation (ZEA et al. 2012). All these extensive measures and public relations work "resulted in a great deal of positive attention" (ALBRECHT et al. 2013:24), but these methods of information provision mirror only a one-way flow of information and did very rarely stretch towards a consultation of or dialogue with the public. ZEA et al. (2012) only regard the opinion polls as an option to articulate a potential rejection of the wind farm project. Thus, the "public participation methods used did not allow the public to make suggestions or to participate in the decision making process" (ZEA et al. 2012:42).

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