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Public Acceptability

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Table of contents

1.	Introduction	3
2.	Background	4
2.1	LEGAL FRAMEWORKS	5
2.2	STRATEGIES FOR PUBLIC ACCEPTANCE	7
3.	Experiences from wind energy	10
3.1	EXPERIENCE FROM DENMARK	11
3.2	EXPERIENCE FROM SWEDEN	14
3.3	CONCLUSIONS	16
4.	Wave energy	17
5.	General conclusions	18
5.1	IDENTIFICATION OF PROBLEM AREAS	18
5.2	GENERAL RECOMMENDATIONS	18
5.3	RECOMMENDATIONS FOR RTD PROGRAMMES	18
6.	References	19
7.	Appendix 1	21
8.	Appendix 2	22

1. Introduction

The objectives of this work package have been to identify potential barriers and benefits regarding social acceptance in relation to the expected development of wave energy, and to present recommendations concerning this subject based on experience from the wave energy devices that are currently being deployed, and from other renewable energy technologies.

For this purpose, developers of wave energy and tidal schemes have been approached and information gathered. However, as the experience regarding social acceptance and wave energy is more than sparse (see section 4), experiences from especially wind energy have been included in this report, and recommendations and conclusions are primarily based hereupon. Given the low level of practical experience with wave power, methods developed for wind energy, described below, may be utilised as guidelines for securing fruitful involvement of the public in the project planning phase and thereby avoiding adverse public reactions.

In Appendix 1 conclusions by Pat Mc Cullen (ESB International) regarding ways to improve the public interest for wave power in Ireland have been attached, as these conclusions are not only valid on a local scale, i.e. for Ireland, but for all countries with a potential for wave energy.

In Appendix 2 selected conclusions from a UK qualitative public attitude research study on cumulative effects of wind turbines are presented, as these conclusions are regarded as being highly relevant in the development of wave energy projects.

2. Background

Given the inherent “harmonic nature” of wave and tidal energy, as renewables, it is crucial that the development of these energy sources is acceptable to a large majority of the public. It is therefore crucial that developers should not presume on public acceptance. Furthermore, from a more pragmatic, economic point of view, it is currently of vital importance for renewables that they are supported by the political system: As long as externalities are not internalised in the price of fossil fuels and nuclear energy [1] the development of wave and tidal energy is dependent of some sort of subsidies which will be very difficult to receive, if not impossible, if the energy source is not publicly acceptable.

The preconditions for achieving a broad acceptance from a large majority of the public are present: Opinion polls from e.g. Denmark show that renewable energy in general (in this case wind and solar energy) are the preferred energy sources, if people could choose themselves [2]. We can however not presume local acceptance based on national surveys.

Public acceptability is however sometimes seen as an increasing constraint on the exploitation of renewable energy. Despite what seems to be a high level of national support for the development of renewable energy, attitudes towards specific projects among authorities and the public can be negative, and conflicts appear within the process of planning and approval. Experiences from studies made of the public opinion of wind energy show that attitudes can be highly variable, dynamic and sometimes contradictory. It is important to note that public opinion can be divided between representative national views, usually considering issues in a more abstract and distanced way, and local views based upon the potential or actual experience of particular developments.

It is the experience that the perceived environmental impacts are of special importance to the public, in particular the local public, and as wave energy is currently characterised by a number of different technologies, onshore, near-shore and offshore, and as each device will have specific impacts, it is only possible to give a general presentation of the subject of public acceptability. It can however be expected that onshore and near-shore projects – due to especially visual concerns - make extra demands on developers regarding information to and involvement of the local public, in order to secure the

highest possible level of acceptance. The information about the use of technology must present the wanted effects in ways that are acceptable to the public.

Social acceptance of renewable energy has often been characterized by a NIMBY (not in my backyard) syndrome. The NIMBY-explanation is however a too simplistic way of explaining all variables involved when determining the general and local public acceptance of a specific project. This means that the question of social acceptance really has many components, e.g:

- the general attitude towards renewable energy in the population as a whole,
- the acceptance within the subpopulation that will experience the local impacts,
- the legal framework for public consultation and involvement, and
- the management strategies for public (and economic) involvement.

2.1 LEGAL FRAMEWORKS

The legal frameworks for public consultation and participation in future large-scale wave energy projects are national directives fulfilling the requirements of the EU Environmental Impact Assessment (EIA) directives [3] (see report on work package 3.3), as private and public projects that are likely to have significant effects on the environment must be subject to an EIA before they can be allowed to proceed.

Furthermore, the public should in future be consulted earlier than today in a project planning phase regarding the effects of certain plans and programmes on the environment, according to the European Directive 2001/42/EC, the so-called SEA Directive, which must be transposed into national laws by July 2004.

2.1.1 EIA

The main purpose of the EIA is to examine, in detail, the impacts of the project, and this also includes a requirement for a running public consultation.

The public that is likely to be concerned about a project must be informed and consulted, but each member state defines individually the details of these arrangements, resulting in numerous potential approaches. Often the public experiences no realistic opportunity to have an effect on the scale and layout of the project.

Although national relevant authorities have the responsibility to safeguard that these consultations are carried out in an appropriate and sufficient way, often the process of information and consultation is carried out by the developer without any involvement

from the responsible authority and with no knowledge about the sometimes dramatic consequences of an inadequate dialogue with the public.

In the EIA also the true potential of the project lays hidden. Hence, the relevant issues of an EIA will prove to be relevant also to the decisions made during the planning phase of a project. If the scope of an EIA also covers social impacts of a development, this will prove to be an important foundation for a dialogue with the concerned population. Even better, there will be an understanding of what population perceive themselves as affected and what their concerns are when it comes to specific wave energy projects. It should therefore be known who to address, when to address and how to address. If there is no understanding of the local social contexts and important issues for the concerned population, this cannot be known. Also there will be no opportunity to follow up on the mitigation measures taken or document experienced effects as opposed to perceived ones. Something which might prove essential to coming projects and company goodwill.

An EIA might prove to be the foundation needed for the appropriate adjustment of the project to the prevailing circumstances. Hence, it is not only supposed to be a document (Environmental Impact Statement - EIS) presented to the authorities, but a dynamic process, a framework and tool for the project development. An EIA involves a flexible procedure where amendments to the original proposal constantly are weighed against all different aspects of the project. Mitigation is discussed in order to arrive at the most acceptable form of development. It is impossible to understand, which mitigation measures that are relevant, if there is no open dialogue between different concerned parties.

2.1.2 The SEA Directive

The EIA Directive has recently been supplemented by the European Directive 2001/42/EC “on the assessment of the effects of certain plans and programmes on the environment”, known as the “strategic environmental assessment” or SEA Directive. The SEA Directive must be transposed into national laws by July 2004 and is expected to apply to plans for offshore renewable developments.

Where an SEA is required, the authority responsible for the plan or programme will need to:

- prepare an environmental report on the likely significant effects of the proposed plan or programme, including reasonable alternatives. In deciding on the content

and level of detail, the authority will need to consult environmental authorities defined by Member States

- give the environmental authority and the wider public “an early and effective opportunity within appropriate time frames to express their opinion on the draft plan or programme and accompanying environmental report before the adoption of the plan” [4]
- take into account the environmental report, the opinions expressed by the relevant authorities *and the public* and the results of any transboundary consultations, during the preparation of the plan or programme and before it is adopted [ibid.].

The following information must be available to the public:

- the adopted plan or programme
- a summary of how environmental considerations have been integrated into the plan/programme and how the SEA report and consultations have been taken into account
- the reasons for choosing the plan/programme adopted, over of the other reasonable alternatives dealt with
- arrangements for monitoring environmental impacts.

In the UK the government has decided to carry out formal SEAs already before the Directive is in force, as the SEA is seen as a helpful support to the development and refinement of plans for expansion of the offshore wind farm industry. The first phase of SEA work focussing on three strategic offshore wind regions has therefore been commissioned. For further details, please refer to the DTI “Future Offshore” report [5].

As the UK government wishes to provide an appropriate planning framework not only for offshore wind but also for other offshore technologies, and to ensure that the development of such a framework is properly integrated into the SEA process, the provisions under the SEA directive are expected, in general, to apply to tidal stream and wave power projects [ibid.].

2.2 STRATEGIES FOR PUBLIC ACCEPTANCE

There are many different forms of public participation, but basically the public can be involved in a project in three major ways [4], [7] and [8]:

- through information about ongoing development (information),
- through involvement in the decision making process (planning participation),

- through financial involvement in the project (financial participation).

2.2.1 Information strategy

The most common approach is to quite passively inform people and carry out the minimum requirements regarding consultation. People are in such cases almost never offered a direct influence on the decision making.

This is due to imagined disadvantages and misconceptions, mainly such as [3]:

- public participation may worsen the situation,
- public participation might be inefficient,
- it is impossible to satisfy all interests so you might as well not try,
- public participation may expand the scope of the conflict.

Often this strategy is based on the assumption that the local public opposition can be overcome by rational decisions made by experts, and that people will eventually get used to change. However, infrastructural development is no longer automatically looked upon as a common good as we move deeper in to the post industrial society.

2.2.2 Planning participation

Another strategy is to directly involve the local public early in the planning phase, and incorporate the recommendations into the project at an early state. The purpose of this strategy is to give the local population a motivation to accept change by, for example, giving them a say in the planning of the project which will generate an interest and also eliminate misconceived threats. The "risk" of this strategy is that the public debate generates so much awareness that it delays the whole planning procedure. A delay, which on the other hand is unavoidable when permits are appealed against and projects face the threat of never being realised.

However, if the channels for a dialogue are kept open and looked after, potential threats can be mitigated before a more general protest is formed. There will be a sense of control over the development of the project and the dialogue with the concerned public will not be handed over to misinformation by media.

If a sense of control is created through an open and dynamic dialogue, the confidence of the public can be achieved. This is a very efficient way to navigate towards not only a successful outcome of a project but also future confidence in renewable energy developments.

The advantages of public participation in the planning process may thereby include:

- an essential improvement of planning decisions and balancing of different aspects,
- increased awareness of public concerns,
- an increased understanding of possible cooperation between opposing parties,
- elimination of misinformation and misconception of threats,
- future confidence and acceptance.

For an example of specific experiences with the planning participation management strategy, please see section 3.1 and 3.2.

2.2.3 Financial participation

In some offshore wind projects the public has been involved as owners of (part of) the farms e.g. when buying shares, and thereby sharing potential economic risks and profits from the project. This is the case for instance at the Middelgrunden and the planned German Butendiek offshore projects.

One obvious advantage from public financial involvement is the fact that the specific project and the specific energy source in each shareholder will have a (mostly well-informed) advocator who can spread information to relatives, friends and colleagues, thereby increasing public interest and acceptability.

As described in section 3.1, it is believed that the strong public participation, including the public financial participation in the Middelgrunden offshore wind project, was an important pre-condition for the success of the project, where the public resistance has been surprisingly small compared to the visual impact from 20 2 MW turbines near many recreational areas in Copenhagen.

Conclusions

If multiple parties are involved in the decision making, the social and environmental impacts can be properly addressed and the conflicts reduced. Conflicting interests can be illuminated in a pedagogic way early in the process. This improves the possibilities to compare facts such as the pros and cons of renewable energy in relation to the effects of other energy sources. The risk of public involvement is relatively small due to the experience that people who tend to accept the process also tend to accept its outcome [8].

3. Experiences from wind energy

In general, opinion polls in countries like the Netherlands, Germany, Denmark and the UK show that more than 70 percent of the population are in favour of using more wind energy [10], [11], [12] and [13]. In the UK, a summary of opinion surveys indicates that 8 out of 10 support local wind projects [14].

Regarding tourism¹, a German study on effects from on- and offshore wind farms indicated that offshore wind farms would generally be accepted by tourists as long as the farms were not situated too near the coastline [15]. A recent study (September 2002) of the effects from onshore wind farms on tourists, a study commissioned jointly by the British Wind Energy Association and the Scottish Renewables Forum, found that 91% said the presence of wind farms in the specific area made no difference [16].

The surveys show that wind farms in general are much more popular than what one could believe from reading e.g. letters to the editors in various newspapers and may indeed become tourist attractions instead of scaring off tourist, as often claimed by wind power opponents.

In Sweden, however preliminary results from a study on public acceptance from 1988 to 2002 show the opposite: The tourists are in general more negative to wind turbines, because they want to enjoy the unspoiled nature, whereas the reaction on planned offshore projects among the local public is often more positive [17].

There is all reason to believe that wave energy may become equally accepted, or even become more popular - in general, a particular advantage of offshore renewables is regarded to be their potential for greater public acceptability, because of lower visual impact [5].

The acceptability of wave and tidal energy is however depending on e.g. the degree of environmental impacts, the strategies chosen regarding public information and involvement, and the ability of the wave energy community to get good press coverage. One important lesson to learn from the field of wind energy is that one as an advocate

¹ Tourists are of course very important to the local public, due to the potential income, or loss of income if the tourists stay away.

must avoid a polarisation of the dialogue with the public. Then you get a debate in which you must defend and not a useful dialogue in which you can explain.

Although the experiences from offshore wind do not give any steadfast conclusions, the following general hypotheses, which are also broadly valid for wave power, can be derived:

- public acceptance in general is high but falls when it comes to our own living surroundings,
- coastal areas are more sensitive to change because of great recreational values,
- local acceptance seems to increase after the installation, provided that no disturbances are experienced,²
- public acceptance increases with the level of information and economic involvement.

In the following sections specific examples of different strategies for public involvement in wind energy projects are presented.³ The purpose is to give wave energy developers and relevant authorities some ideas on how to secure public acceptance, regardless of the choice of management strategy/public participation strategy.

3.1 EXPERIENCE FROM DENMARK

In Denmark many people are involved in wind energy projects, approximately 150,000 families, due to environmental concerns and/or the possibility of receiving some financial benefits.

² This is clearly illustrated in the experience from the Danish Tunoe Knob offshore wind farm that was the focus of massive protests before and during the installation in 1995, but now, after it has been proved that the turbines do not disturb birds, fish, seals or humans, is broadly accepted [18].

³ The Danish and Swedish experiences were first published in [19]

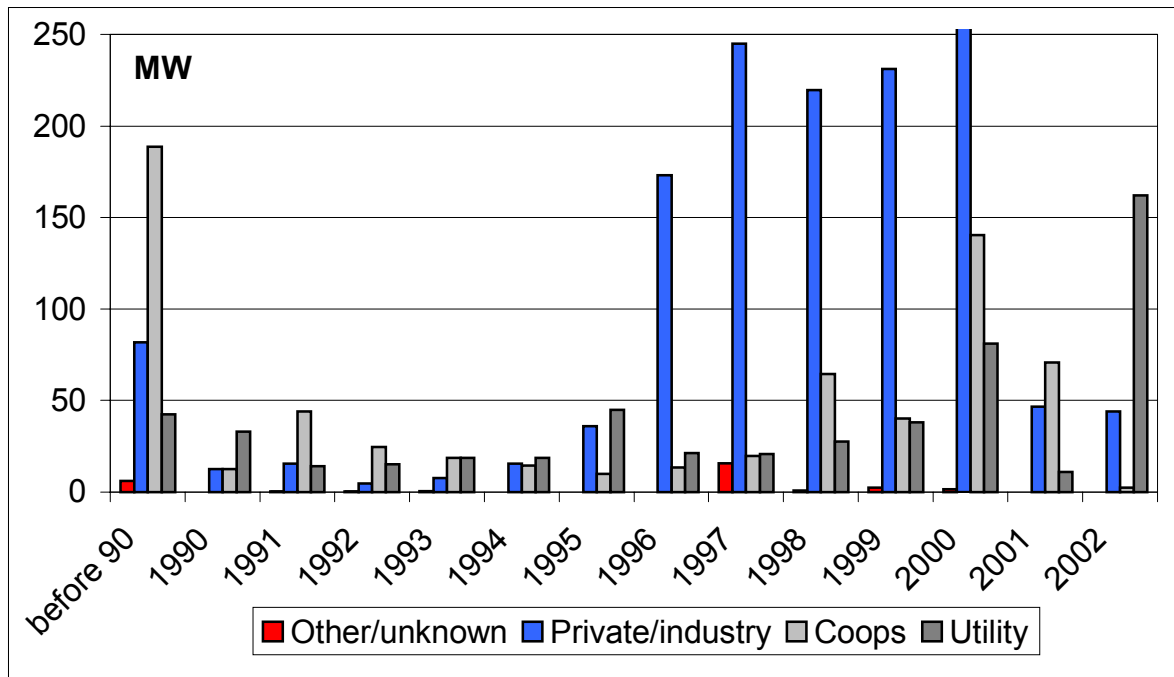


Figure 1 Development in ownership of wind farms in Denmark MW installed power each year [22].

The cooperatives, where mostly local people share expenses and income from a wind turbine, have played an important role, especially providing acceptance at a local level, where the possibility of resistance is otherwise high due to visual or noise impacts. In general there is a broad acceptance to wind energy in Denmark – opinion surveys result in at least 70% being in favour of wind energy, whereas about 5% are against [2].

3.1.1 The Middelgrunden project

The project consists of twenty 2 MW Bonus turbines, half of them owned by the local utility and the other half by Middelgrunden Wind Turbine Cooperative. 8,500 people, primarily in the local area, have joined the cooperative, which makes it the world's largest wind turbine cooperative, typically investing 2,850 EUR, corresponding to the production of 5,000 kWh/year.

In 1996, the Copenhagen Environment and Energy Office (CEEEO) took the initiative to organize the project, after the location of Middelgrunden, 3 km from Copenhagen harbour, had been pointed out as a potential site in the Danish Action Plan for Offshore Wind [21]. Together with CEEEO a group of local people formed the Middelgrunden Wind Turbine Cooperative and cooperation with Copenhagen Energy was established. As the Municipality of Copenhagen owns Copenhagen Energy, a close link to politicians was thereby also established. The locally based commitment, along with

cooperation between the cooperative, the local utilities, and the municipality of Copenhagen, constituted a significant precondition for the development of the project.

The original project dating back to 1997 consisted of 27 turbines placed in three rows. After the public hearing in 1997, where this layout was criticised, the farm layout was changed to a slightly curved line and the number of turbines had to be decreased to 20. The authorities raised a number of questions that were answered during the publicly funded pre-investigations. During the hearing in 1997 24 positive and 8 critical answers were received.

Behind these figures, a comprehensive information work is hidden, both in relation to relevant authorities and NGO's and in relation to the many future shareholders in the cooperative.

For instance, locals were worried about potential noise impact from the farm, but after a demonstration tour to a modern on-shore wind turbine, the locals were convinced that there would be no noise impact from the Middelgrunden turbines.

Information to the potential shareholders was in the beginning primarily carried out with the purpose of securing a sufficient number of pre-subscriptions. This turned out to be a success, and the interest of more than 10,000 local people was a proof of a strong local support, which could be useful in the approval phase.

A part of the shareholders got involved in the democratic hearing process, which was intended to create the foundation for authorities' approvals.

As an example the Danish Society for the Conservation of Nature at first decided to reject the proposed location, but through involvement of and information directed at the local committees of the society, this decision was later changed.

At the final hearing a large number of local groups and committees, not mentioning the several thousand shareholders, recommended and supported the project – only a relatively small group of yachtsmen, fishermen, individuals and politicians remained in opposition.

During and after the construction there has been surprisingly little resistance to the project, considering the visual impact from the large turbines, located just 3 km away from, for instance, a very popular recreational area – a beach - near Copenhagen. The reason for this lack of protest is believed to be the strong public involvement, both financially and in the planning phase.

Lessons learned

During the approval process, authorities raised a number of questions that were answered through the carefully planned pre-investigations.

Through dialogues with many kinds of interest groups, CEEO and the Middelgrunden Cooperative, with its 8,500 members, generated a widespread understanding for and social acceptance of the chosen location and layout of the farm.

Locally based commitment and cooperation between the cooperative, the local utility and the municipality of Copenhagen have been significant preconditions for the successful development of the project.

This cooperation provided credibility to the project in relation to politicians, press and public.

3.1.2 Conclusions from Denmark of relevance for wave energy

In Denmark most wind turbines are owned by locally established cooperatives and private persons and this appears to improve the social acceptance, as it is, generally speaking, the same people who experience the impacts that receive the financial benefits.

Most of the coming offshore wind power projects will be owned by the utilities, but it is still a political priority to encourage the formation of cooperatively owned offshore wind power farms as well. This also applies for wave power, where public involvement was specifically mentioned in the Danish wave energy work programme.

This "Danish model" is, however, rather unique, and for most other countries the offshore wind farms are either owned by utilities or private consortiums, thus enabling only indirect financial benefits and influence to the local citizens. This is also likely to be the case for wave power in Europe to a significant extent, as the sheer scale of current renewable energy projects calls for an amount of funding, which can be very difficult for a cooperative to raise.

3.2 EXPERIENCE FROM SWEDEN

A broad-based participation in the implementation and decision process is used in a Swedish offshore project in Kalmarsund conducted by Vattenfall, the largest utility in Sweden. This is a form of conflict management which extends the group of actors involved in the decision process, increases transparency and promotes negotiations and discussions.

Special focus for this project is to investigate, which parties should be involved in the decision process and how these different parties can participate and represent their interest in the planning process.

The result of this approach is so far that the project has conducted a management of dissent instead of putting trust in a fictitious consent. The importance of this type of conflict management seems to correlate with the amount of realised and planned projects in a demarcated and clearly defined geographical area suitable for offshore wind power.

Through this experience it can be concluded that the strategy suggesting that the local public opposition can be overcome by rational decisions made by experts, and that people will eventually get used to change, may prove fatal. The strategy of the Karlskrona Offshore project has instead been to directly involve the local public early in the planning phase, and incorporate the recommendations into the project planning and decision making. The purpose of this strategy is to give the local population a motivation to accept change by for example giving them a say in the planning of the project.

Another lesson learned is that the presentation of a wind power plan requires a sense of timing. In some cases, depending on the size of the project, it might be worthwhile to allow a certain period of adjustment. A large wind farm can be developed sequentially which makes adjustments easier if people express misgivings. Such adjustments manifest the flexibility and reversible quality of wind power developments. Just because a wind farm can be erected quickly, does not mean it should be.

3.2.1 Public dialogue - Use of ICT

In the Karlskrona offshore project different ways of promoting a dynamic dialogue has been developed. In this context ICT plays an important part. The use of a website [22] for communication on project updates has been the main tool. An important task has been to make sure that this site is updated regularly and holds a high standard in order to promote confidence in the developer. Regular information has also been sent out to complement and draw attention to the website.

Phone calls and e-mails have also been important tools for a direct personal response to concerned people. It has been of high priority in the project to answer all questions as expediently as possible. It has also been of high priority to direct questions from the public directly to the project management. This communication strategy has emanated in a thorough report on information, communication and reactions from the public in the EIS.

On top of this the Karlskrona Offshore project has distributed two inquiries along the coast in order to identify in which geographical area the public feel concerned, and *what* they are concerned about. The replies to these enquiries, and subsequent interviews, have been very useful for guidance concerning what topics are of central importance to emphasize in the EIA and how to mitigate in order to arrive at an acceptable EIS. Also, enquiries and interviews have made it possible to prepare and address the issues of central importance to the public at public meetings. This has been a very effective way to create confidence in the project and the developer, Vattenfall.

3.3 CONCLUSIONS

An open public dialogue already from the very beginning of a planning phase is important for achieving social acceptance – and the social acceptance on the other hand may influence political decisions.

Direct public involvement, e.g. the cooperative ownership model, is an important mean for social and political acceptance, but may influence strongly on decisions taken during the planning phase, which must be accounted for in the pre-planning phase as even minor deviations in the work at sea have a disproportional large effect on the time schedule.

According to experiences from the offshore wind farms already established it can be said that:

- the degree of involvement of the local population in the planning phase influences public acceptance.
- the procedures on public involvement, hearings etc., vary considerably among countries and may even vary among regions within the same country.
- there is as yet no clear overview on the results of different strategies for public involvement and conflict management.

The issue of public acceptance deserves to be studied in more detail, e.g. through a monitoring programme focussing on public acceptance before and after the installation of a farm consisting of e.g. wave energy converters in relation to the degree of public involvement and active conflict management.

4. Wave energy

The experience with public acceptability in relation to wave and tidal energy is so far very limited. Legitimacy is strongly connected to usefulness, and usefulness is an essential quality for rational technology. However, techniques have to be known in order to be useful. Techniques with a high degree of utility are seen as rational. A technique must produce the wanted effects in ways that are acceptable to the users. These facts are important to know in order to successfully introduce and promote wave energy technologies.

The test devices that have already been deployed, or will be deployed within a foreseeable future, seem generally to have had the same information strategy: To keep the public well-informed, e.g. through websites and newsletters, but there has been no direct involvement of the public in the projects. As the demonstration projects do not have to carry out an EIA, it has not been necessary to consult the public or inform the local public directly.

Only in relation to the planning and construction of the Orkney Test Centre public meetings have been held concerning the whole centre, and not concerning one specific device/project.

The projects have been discussed in the local press, and in some cases objections especially concerning visual and noise impact have been expressed, but there has been no organised dialogue with the public.

In order to promote public acceptability of wave energy, it is therefore essential that

- the public knowledge about wave energy is increased, e.g. through information campaigns directed at press, public and politicians each time new devices are successfully deployed
- each project developer aims at the highest positive level of openness and information, and consider the benefits of direct public involvement, for instance when the development of specific projects have resulted in a production price that makes public financial participation relevant.
- legislation/politicians encourages dialogues with and involvement of especially the local public

5. General conclusions

5.1 IDENTIFICATION OF PROBLEM AREAS

The biggest challenge, currently, is the low public knowledge in most EU countries concerning wave energy. Before it becomes relevant to discuss and practice specific strategies for public involvement on a larger scale, it is necessary that the energy becomes known to the public as a huge, important and reliable source of energy.

5.2 GENERAL RECOMMENDATIONS

Developers and authorities should remember to promote openness and local involvement, also at this early stage of development – if mistakes are made at this point, before large-scale deployment takes place, it may prove very difficult to make wave energy public acceptable to a large majority of the population.

5.3 RECOMMENDATIONS FOR RTD PROGRAMMES

Evaluation of experience of the effects of different ownership models and local ownership of wave power plants in relation to social acceptance.

Evaluation of experienced effects after deployment in relation to perceived effects in the planning phase.

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7. Appendix 1

Conclusions made by ESBI concerning ways to improve the public interest for wave power in Ireland.

- There must be better mapping and quantification of the resource and public recognition that it is as much part of the national heritage as landscape or other elements.
- Wave power converters must initially become competitive with offshore wind turbines (targeting about 0.06 Euro/kWh)
- A survivable floating near shore demonstration device must bring tangible evidence of the commercial reality of wave power conversion and low environmental impact.
- Wave connectors must be capable of complying with the terms of construction licences and connection codes issued by the commission for Electricity Regulation.
- “The recent rise in the cost of oil and gas and the relative weakness of the Euro to the dollar has added significantly to utility operating cost and Kyoto obligations will add further. In theory these factors should favour wave power development but in practise the fact that these costs bite into available budgets and that wave power is not yet demonstrably available for immediate use to the satisfaction of utility decision makers, means that necessary funding for further research and development is again delayed. There is no specific role identified for wave energy in the Government’s National Climate Change Strategy.”

P. Mc Cullen ESBI

8. Appendix 2

Conclusions from an ETSU study regarding “Cumulative Effects of Wind Turbines - Report on Qualitative Public Attitude Research in Mid-Wales”[23]

Although the study was dealing with onshore wind turbines, the following conclusions are all regarded to be highly relevant for the development of wave energy devices, especially onshore and near-shore. It is crucial for the future development of wave energy that the mistakes made previously by wind turbine developers, operators, planning authorities etc. are not repeated.

- “(...) there are very real opportunities for wind farm operators to improve people’s perceptions of wind turbines by providing more information on a regular basis (e.g. on job opportunities, local suppliers, power produced, emissions avoided, energy payback times, local projects funded and so on) through news releases, visitors centres, and guided visits to wind farms.”
- “(...) wind farm developers need to be more sensitive, thoughtful and diplomatic in developing new wind farm proposals. They need to involve local people at the earliest stages, take into account and address their concerns, and do their utmost to ensure that the whole local community benefits, and is seen to benefit, from wind farm developments which some people will inevitably still find intrusive and disturbing. It is only by fully appreciating the economic and environmental rationale of wind farms, that those who detest them may finally accept the “sacrifice” they have made in accepting wind farms into the local landscape.”
- “(...) greater government publicity of its plans for renewable energy developments would help achieve greater acceptance of wind farms and other renewable energy projects. It cannot all be left to the developers, as not everyone will believe their version of the truth.”
- “Few people really understand the complexities of the planning process, or the documentation which is currently submitted by wind farm developers in support of their planning applications. Even “non-technical summaries” are dismissed as too technical. (...) Very much simpler summaries need to be prepared by developers (or by planning officers or independent bodies) in order to help more people grasp what is being proposed and what the likely effects and benefits are.”

- Regarding effects on tourism “(...) it would be beneficial for operators to provide more facilities for tourists and local people to visit wind farms and learn about their operation, outputs and benefits.”