

PUBLIC ENVIRONMENTAL IMPACT ASSESSMENT IN PLANNING PROCESS OF THE NEAR-SHORE WIND POWER FARMS IN ESTONIA

Karin Lindroos¹
Tallinn University of Technology

Abstract

This paper examines the nature and opportunities of public participation in the environmental impact assessment (EIA) and planning processes in the context of massive expansion of near-shore wind power farms within the next decade in Estonia. The establishment of new wind farms has aroused opposition of the local population as in many other countries. In the present case, we focus on the wind park planned in the sea between Hiiumaa and Saaremaa (Soela Strait), in respect to which we conducted a case study of stakeholders in spring-summer 2014. Purpose of the research is to understand and assess the development of the surroundings in which people live and transformation in connection with the wind park planning, and institutional and individual attitudes and strategies in the processes of informing, involvement, participation and decision-making. The analysis of attitudes is based on social impact assessment: aesthetic, socio-economic and cultural tendencies.

Keywords: Environmental policy, Energy policy, Regional and local government policy, Environmental impact assessment (EIA), Social impact assessment, Aarhus convention, Public participation, Off-shore wind power

JEL Classification: Q5; Q4; Q2

1. Introduction

The Estonian Government has accepted for massive expansion of near-shore wind power farms within the next decade. The establishment of new wind farms has aroused opposition of the local population as in many other countries. This article aims to contribute to the case study using a qualitative methodology to study the view pressed by locals towards two large-scale offshore wind-power projects in Estonia: Hiiumaa offshore wind park and Soela Strait windfarm between the islands Hiiumaa and Saaremaa. Both projects are located close to the shore, particularly Soela wind park, the distance from the coast is about six-seven kilometers. These projects were among the first to be launched as part of the declared national

¹ Karin Lindroos, PhD

Department of Business Administration, Tallinn University of Technology, Akadeemia tee 3
Tallinn 12618

E-mail address: karin.lindroos(at)ttu.ee, tel. +372 6204103; +372 5037971

objective to invest in large-scale, offshore wind power. In our aim of seeking to understand attitudes towards the wind power projects, and there as reasoning underlying these attitudes, we used a qualitative methodology based on in-depth interviews with different stakeholders.

In the present article, we focus on the wind park planned in the sea between Hiiumaa and Saaremaa (Soela Strait), in respect to which we conducted a case study of stakeholders in spring-summer 2014.

The objective for seeking to gain a fuller understanding of the reasoning underlying opponents' attitudes and improve understanding should be used with the aim of devising a planning and decision process, which is inclusive and beneficial for all stakeholders involved.

Purpose of the research is to explore how to ensure the public opportunities to participate, and represent institutional and individual attitudes and strategies in the processes of informing, involvement, participation and decision-making, to take into account stakeholders assessments about environmental and social impacts to analyse and understand the development of the surroundings in which people live and transformation in connection with the wind park planning.

Based on the research objective, the following tasks were set:

- (1) Theoretical considerations, including the wind energy conceptualisation in the national policy(ies).
- (2) Reasoning of the methodology of qualitative research.
- (3) Documentary analysis how is the need for and efficiency of wind parks argued in relevant environmental impact assessment and planning documents. Also were examined how is the environmental impact assessments referred to the socio-economic (and cultural) impact assessments in the respective documents.
- (4) Assessments arising from qualitative analysis (interviews). There are two main research questions: 4.1 Public possibilities getting information and involvement: How assess the people, local authorities and other stakeholders their opportunities to participate in the debates and decision-making process; 4.2 People's attitude, environmental and social impacts: How estimate the local authorities and local community (residents, summer cottage owners) the impact of wind parks on the environment, local culture, traditions and economic activity in the future?

To some extent, local media coverage of the idea of wind parks was also studied.

The following section presents an outline of the theoretical framework. The third section provides the establishment of qualitative methodology. The fourth section concerns political context and implications. The fifth section presents analysis and discussion of the respondents' attitudes towards wind power and opportunities to participate to the environmental processes. The final section provides a summary of the conclusions.

2. Theoretical considerations

Alternative, renewable energy sources; it is a quest that is very much on the agenda both nationally and globally. Technological developments have now enabled wind power to become more of a large-scale energy source, which can challenge the use of fossil fuels, and in many national contexts wind power is therefore viewed as a key solution for reaching renewable energy objectives.

Although the general attitude to wind power is positive, the attitudes towards a specific wind power project are often less positive, and sometimes negative. Any development of new energy sources must, at some point, impinge on local communities –the local culture, economy and social context– and it has proved particularly difficult to find acceptable locations for wind power generation. The description of conflicts between developers of wind power and the local society and the qualitative analysis of wind park antagonists has been conducted by Åsa Waldo (2012), Nykvist and Nilsson (2009), Ek, Matti (2015), Söderholm et al (2005) in Sweden, Ladenburg (2010) in Denmark, Hartley and Wood (2005), Jones and Eiser (2009, 2010), Reed (2008), Haggett (2011), Toke (2011) in Great Britain, Wolsink (2009, 2010) in the Netherlands, etc.

The concerns of local authorities and citizens often evolve into active protests. In Sweden it is possible for the municipal authorities to veto proposed wind power projects (Swedish Government Reports Ref. SOU, 2009:10). From a democratic perspective it is, of course, positive that local communities and authorities have opportunities to exert influence, and apply heavy pressure on developers to frame their projects so that they are acceptable to the community (Waldo, 2012). In Estonia, the maritime spaces reserved for the state, local governments have little power to influence them.

There seems to be a similar misapprehension that people's responses are not important when developing renewable energy offshore, and offshore sites are indeed often preferred because they are thought to remove the “problem” of public protests. Haggett (2011) discusses the impact of this contribution on the people and communities who live nearby or use offshore spaces. This impact needs to be considered because of the apparent misconception that offshore sites are a problem-free alternative to siting onshore. Jay (2009) notes the regulatory attraction of offshore spaces for wind power, seemingly avoiding the problems of widespread public resistance, associated planning difficulties and lengthy delays encountered onshore. Ladenburg (2008) describes how the impacts of onshore turbines – visual, noise, harm to birdlife, local ecology and environment – have made it “increasingly difficult to find suitable and acceptable sites for future development. Energy planners have consequently shifted their focus to vast offshore wind resources” (Haggett, 2011).

Public participation reflects a democratic contest between groups that represent citizens' interests. Gagnon (1995) sees social impact assessment (SIA) as one of the

most important and useful tools in empowering 'local community members to exercise increased control over their own territory, social environment and future development. Similarly, Vanclay (2003) argues that the role of impact assessment 'encompasses empowerment of local people; and enhancement of the position of ... disadvantaged or marginalised members of society' (O'Faircheallaigh, 2010). According to Jami and Walsh (2014) in response to the external pressures of globalization, international social movements, and their own domestic affairs, the nature of government has been changed. The government's role and responsibilities in providing services and the influence of a growing number of community-based organizations has resulted in increased citizen participation in the regulatory decision-making process. In other words, there has been a shift in political approach from governing to governance. Over the past several decades, the scope of public decision making has changed from a focus on state officials and experts' verdicts to comprehensively addressing stakeholders' demands and engaging citizens. Consequently, there has been a distinct increase in public participation in environmental decision-making processes. This may be due to public awareness and citizens' demands to have a greater role in decisions that affect their welfare; a recognition of the benefits (e.g. citizen's accountability and responsibility) of involving citizens in decision-making processes by public officials; complying with new regulations which have made it necessary to include public opinion, specifically in risk arenas; improving the quality of decision-making by avoiding unpopular policies; and achieving the key principle of a democratic society to acknowledge the basic human rights regarding democracy and procedural justice (Jami and Walsh, 2014).

While some scholars do indicate that public participation can in certain circumstances have negative consequences (Cooper and Elliott, 2000, Lawrence, 2003, O'Faircheallaigh, 2010). The overwhelming view is that it is highly desirable and that the key issue for scholars and practitioners is to find ways of making it more effective. For instance Stewart and Sinclair (2007) state that 'The benefits of public participation have been clearly described in both theoretical and practical terms, but the design and implementation of specific public participation programs remain contentious'. Similarly, Hartley and Wood (2005) state that while public participation 'is widely documented as being a valuable component of the EIA process' (O'Faircheallaigh, 2010), officials and proponents may determine that public participation should serve purely as a means of generating information they can use to take decisions.

Attitudes are founded on the basic values of the individual (Linden, 1994). According to Johansson and Miegel (1992), it is possible to distinguish between four types of values: material, aesthetic, ethical and metaphysical. Material values refer to what is considered to be a decent level of living standard, and thus influence consumption choices (Linden, 1994, Waldo, 2012).

As Waldo (2012) in Sweden, Wolsink (2010) in the Netherlands, Jones and Eiser (2010) and Haggett (2011) in UK, also we found no evidence of the NIMBY-syndrome; rather, those opposing the wind farms question wind power more

generally. The Waldo's (2012) analysis of attitudes is based on three components: cognition, feeling and action tendency. The results show high consistency between the feeling and cognitive components of attitudes: a negative feeling regarding landscape impact, for example, is accompanied by a belief or awareness that wind power is inefficient and unprofitable. However, in many cases the action tendency component is in dissonance with the other two: opponents remain passive despite being against the establishment of new wind farms. These passive opponents represent elements of uncertainty as they may suddenly, at a late stage, turn into active opponents exerting an effect on the decision process.

Aesthetic values are the individual's perception of what is beautiful or ugly, which in wind power contexts may result in a perception that a wind power project will disturb or damage a beautiful view, or on the contrary, lead a person to feel aesthetic pleasure at seeing natural forces harnessed in this way. Ethical values shape the individual's thoughts about right and wrong, good and bad. Renewable energy might for example be seen as environmentally good, since it leads to reduced emissions of greenhouse gases, or as a threat to birdlife and fisheries. This realm also includes the individual's perception of whether the planning and decision-making processes relating to a wind power project have been fair and inclusive or not. Environmental issues are often formulated in terms of a clash between on one hand, ethical and aesthetic values relating to the environment and the natural world, and on the other hand material values, such as financial gain, economic growth and self-interest of various kinds (Stern et al., 1999). In the case of attitudes towards wind power projects, however, the situations more complicated: sometimes one type of ethical and aesthetic value (for example, the desire to preserve an "untouched" local site, or an area of natural beauty) is seen to be in opposition to another type of ethical and aesthetic value (for example, the desire to reduce negative impacts on the climate) (cf. Warren et al., 2005). People's attitudes towards various social phenomena are frequently referred to in rather general terms, but are often the result of complicated processes and therefore difficult to understand and interpret. Difficult or not, in seeking to understand attitudes towards wind power we need to look in greater depth at prevailing the social and cultural context and the reasoning underlying them.

3. Methods of research

Two different approaches and three methods were used in the research:

1. Analysis of documents;
2. Interviews:
 - a) Focus group interviews with members of the village community;
 - b) Individual interviews with local government leaders.

The first step was the analysis of documents in which the energy sector development plan and environmental impact assessment reports and also the academic literature were worked through.

Article principal part constitutes assessments which deriving from the interviews.

This environmental policy case study sought to analyse and interpret the adaptation of the surroundings in which people live to local people's way of life and economic activities in connection with the wind parks erected in the coastal sea; it attempted to find out the attitudes of local community engaged mainly in small business (coastal fishing, tourism etc.) and of local authorities toward the expected environmental changes, basing on the judgements of people and institutional actors (local authorities, media) about the informing and involvement strategies in the environment transformation process. During the qualitative research, interviews were conducted with business people from Saaremaa, local government leaders, journalists, and focus group interviews with people living in the coastal area.² Examined primarily concerned local community representatives near the wind park development areas. People living in wind farms areas have so far received little attention in the environmental impact assessments.

The primary objective here, however, is not to quantitatively measure the aspects which influence attitudes, but to analyse the evaluations expressed in in-depth interviews in order to better understand the underlying reasoning. For this purpose we use a framework where attitudes are understood as a system of different components, and founded on the individual's basic values. According to Linden (1994) it is an advantage, from a sociological point of view, to differ between values, attitudes and behaviour; this separation facilitates the study of a those values, which provide a base for the consistency between the individual's different attitudes. It also makes it possible to study the components of attitudes in specific and distinct situations (Waldo, 2012). In our aim of seeking to understand attitudes towards the wind power projects, and there as reasoning underlying these attitudes, we used a qualitative methodology based on in-depth interviews with different stakeholders.

Focus groups were originally called "focused interviews" or "group depth interviews". The technique was developed after World War II (Stewart, Shamdasani, 1990). Since then social scientists and program evaluators have found focus groups to be useful in understanding how or why people hold certain beliefs about a topic or program of interest.

A focus group could be defined as a group of interacting individuals having some common interest or characteristics, brought together by a moderator, who uses the group and its interaction as a way to gain information about a specific or focused issue. A focus group is typically 7-10 people. These participants are selected because they have certain characteristics in common that relate to the topic of the focus group. The moderator or interviewer creates a permissive and nurturing environment that encourages different perceptions and points of view, without pressuring participants to vote, plan or reach consensus (Krueger, 1988). The group discussion is conducted several times with similar types of participants to identify trends and patterns in perceptions. Systematic analysis of the discussions provides clues and insights as to how a project or opportunity is perceived by the group.

² Anonymised

In-depth interviewing is a qualitative research technique that involves conducting intensive individual interviews with a small number of respondents to explore their perspectives on a particular idea, program, or situation. For example, we might ask participants, and others associated with a topic about their experiences and expectations related to the topic, the thoughts they have concerning program operations, processes, and outcomes, and about any changes they perceive in themselves as a result of their involvement in the program (Boyce, Neale, 2006).

In-depth interviews are useful when you want detailed information about a person's thoughts and behaviors or want to explore new issues in depth. Interviews are often used to provide context to other data (such as outcome data), offering a more complete picture of what happened in the program and why. In-depth interviews are used in place of focus groups if the potential participants may not be included or comfortable talking openly in a group, or when you want to distinguish individual (as opposed to group) opinions about the program. They are often used to refine questions for future surveys of a particular group (Boyce, Neale, 2006).

The objective is to gain improved understanding of the attitudes of opponents to wind power by applying basic sociological and socio-psychological concepts of attitude theory to in-depth interviews with 40 stakeholders representing local authorities, local businesses and associations, and private citizens in the areas. Previously, in 2011-2012, we have conducted qualitative case studies of wind parks in Hiiumaa, including offshore wind parks.

In the context of Soela wind energy project we talked to 20 individuals for one to two hours, and interviewed them about how they perceived wind power in general and these projects in particular. The interviews were recorded and transcribed verbatim. The interviews were semi-structured: this means that our departure point was a framework of certain themes and questions, but that the conversation was allowed to develop in response to the experiences and views of the interviewees. The themes were centred around the kinds of concepts they would use to describe the proposed project (largeness of scale, "green-ness", usefulness, etc.), their arguments for and against the wind power projects, how the project proposals were received by the local community (by neighbours, friends, local key persons), what threats and possibilities they associated with the projects (effects on wildlife or recreation, etc.) and how far they felt able to participate in the planning and decision-making processes (were they invited to meetings, and were their views heard, acknowledged and acted upon). The interviewees were encouraged to reflect on their own answers and develop their lines of reasoning; we asked them to try to explain how they felt and why. The interview transcripts were read through in search of key aspects and instances of reasoning, which would contribute to a better understanding of the arguments put forward. The analysis was initially rooted in the concepts of attitudes, threats and opportunities, and participation, but then the data itself was used to further determine the analytical themes.

In our case study people were not informed or were poorly informed for these wind power projects.

The case studies carried out by the group of the TTU students and university teachers (environmental economists and sociologists).

4. Policy context and implications

4.1. Energy and climate policy

Development of wind energy is regarded as a part of the renewable energy policy. Estonia's renewable energy objectives are directly derived from the European Union (EU) climate policy, or so-called 20-20-20 goals. Estonia has committed to achieve by 2020 that 25% of the final energy consumption is from renewable sources.

The national energy policy is technology neutral in respect to renewable energy. This means that directly not one renewable energy technology development is preferred to other. It is important that since Estonia already has achieved the 2020 renewable energy target, Estonia has no direct and urgent need to develop wind energy. However, according to the draft document of the new energy sector development plan ENMAK 2030+ takes a goal that by 2030 the share of renewable energy constitutes for at least 50% of final energy consumption. In comparison, according to the Energy and Climate Package EU-wide target is to increase the share of renewable energy by 2030 27% of final energy consumption.

Hence so far, the Soela wind park is not directly in the national interest. Rather, this is supported, at the level of general rhetoric, by the renewable energy action plan until 2020, which says that wind energy consumption in Estonia for electricity generation might prove economically more beneficial than in other EU regions. The action plan envisages as one activity an investment support for a near-shore wind park with up to 500 MW capacity. Another activity in the near-shore wind park planning process is to provide a cooperation framework for taking into consideration the regional, socio-economic and internal security impacts (MKM, 2009).

A building permit application for Soela wind park was submitted by the Baltic Blue Energy Ltd on 10 January 2013. The proceeding of the building permit will not be started before the spatial plan has been adopted. The spatial planning of the sea bordering Hiiumaa county is in the same area as PT7. The plan, however, does not cover the wind park areas towards Saaremaa. For the sea bordering Saaremaa, the Saare county governor should initiate a maritime spatial planning, which obligations he does not have.

4.2. Framework of Environmental policy: precautionary principle

The precautionary principle or precautionary approach to risk management states that if an action or policy has a suspected risk of causing harm to the public or to the environment, in the absence of scientific consensus that the action or policy is not harmful, the burden of proof that it is *not* harmful falls on those taking an action.

The principle is used by policy makers to justify discretionary decisions in situations where there is the possibility of harm from making a certain decision (e.g. taking a particular course of action) when extensive scientific knowledge on the matter is lacking. The principle implies that there is a social responsibility to protect the

public from exposure to harm, when scientific investigation has found a plausible risk. These protections can be relaxed only if further scientific findings emerge that provide sound evidence that no harm will result.

The concepts underpinning the precautionary principle pre-date the term's inception. For example, the essence of the principle is captured in a number of cautionary aphorisms such as "an ounce of prevention is worth a pound of cure", "better safe than sorry", and "look before you leap". In economics, the precautionary principle has been analysed in terms of the effect on rational decision-making of the interaction of irreversibility and uncertainty. According authors such as Epstein (1980) and Arrow and Fischer (1974) two ideas lie at the core of the principle:

1. an expression of a need by decision-makers to anticipate harm before it occurs. Within this element lies an implicit reversal of the onus of proof: under the precautionary principle it is the responsibility of an activity proponent to establish that the proposed activity will not (or is very unlikely to) result in significant harm.
2. the concept of proportionality of the risk and the cost and feasibility of a proposed action.

One of the essential methods to implement the precautionary principle is Environmental Impact Assessment (EIA).

4.3. Environmental impact assessment

Environmental assessment (EA) is the term used for the assessment of the environmental consequences (positive and negative) of a plan, policy, program, or project prior to the decision to move forward with the proposed action. In this context, the term 'environmental impact assessment' (EIA) is usually used when applied to concrete projects and the term 'strategic environmental assessment' applies to policies, plans and programmes (Fischer, 2016). Environmental assessments may be governed by rules of administrative procedure regarding public participation and documentation of decision making, and may be subject to judicial review. Applied is directive 2014/52/EU.

The purpose of the assessment is to ensure that decision makers consider the environmental impacts when deciding whether or not to proceed with a project. The International Association for Impact Assessment (IAIA) defines an environmental impact assessment as "the process of identifying, predicting, evaluating and mitigating the biophysical, social, and other relevant effects of development proposals prior to major decisions being taken and commitments made." EIAs are unique in that they do not require adherence to a predetermined environmental outcome, but rather they require decision makers to account for environmental values in their decisions and to justify those decisions in light of detailed environmental studies and public comments on the potential environmental impacts.

The EIA procedure can be summarized as follows: the developer may request the competent authority to say what should be covered by the EIA information to be

provided by the developer (scoping stage); the developer must provide information on the environmental impact (EIA report – Annex IV); the environmental authorities and the public must be informed and consulted; the competent authority decides, taken into consideration the results of consultations. The public is informed of the decision afterwards and can challenge the decision before the courts.

4.4. Public participation and Aarhus convention

The United Nations Economic Commission for Europe (UNECE) Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters was adopted on 25 June 1998 in the Danish city of Aarhus (Århus) at the Fourth Ministerial Conference as part of the "Environment for Europe" process. It entered into force on 30 October 2001.

The Aarhus Convention establishes a number of rights of the public (individuals and their associations) with regard to the environment. The Parties to the Convention are required to make the necessary provisions so that public authorities (at national, regional or local level) will contribute to these rights to become effective.

The Convention provides for:

1. the right of everyone to receive environmental information that is held by public authorities ("**access to environmental information**"). This can include information on the state of the environment, but also on policies or measures taken, or on the state of human health and safety where this can be affected by the state of the environment. In addition, public authorities are obliged, under the Convention, to actively disseminate environmental information in their possession;
2. the right to participate in environmental decision-making. Arrangements are to be made by public authorities to enable the public affected and environmental non-governmental organizations to comment on, for example, proposals for projects affecting the environment, or plans and programmes relating to the environment, these comments to be taken into due account in decision-making, and information to be provided on the final decisions and the reasons for it ("**public participation in environmental decision-making**");
3. the right to review procedures to challenge public decisions that have been made without respecting the two aforementioned rights or environmental law in general ("**access to justice**").

Under paragraph 4 of Article 6 of the Aarhus Convention, in order to ensure the effectiveness of public participation shall provide for early participation, when all options are open and effective public participation can take place. According to the Estonian legislation the general public include in the decision-making process with announcing of the EIA initiation decision to an official publication. However, the process of compiling the program starts much earlier.

Another essential principle of public participation are given in paragraph 5 of Article 6, according to which, where appropriate, encourage prospective applicants to identify the interested public to discuss the request and provide information about the objectives of their application before applying for a permit. This principle has not reached the Estonian legislation. Disclosure of the project will start only after the submission of the application. Although, there is no ban deal with stakeholders before the submission of the application.

The environmental impact assessment and planning documents contain a strong rhetoric regarding development of wind energy. Estonia is seen as favourable geographical location with good climate conditions for development of wind energy. It is presumed that wind energy provides high value added jobs, at the same time admitting that workforce demand is small and it is possible that workforce is imported from abroad.

Even though near-shore wind parks, their building and operation, will affect marine environment, their impact is said to be much smaller than energy production from fossil fuels. In near-shore wind parks people are most afraid of their impact on the traditional routes of sea birds and bats because Estonian coast is an international sea birds' migratory flyway. It was also found that mainly local changes will occur in the sea bottom biota in connection with construction works and new habitats created by windmills. Notwithstanding these impacts, the overall conclusion of EIA is that the pressures involved in planning a wind park can be alleviated so that these were not important and would not prevent construction and operation of wind parks. It was found that even if the number of wind parks increases remarkably, the pressure exerted by them on the marine environment will remain marginal during the next decade (SEI, 2012).

Socio-economic impacts have been discussed in greater detail in the strategic assessment report (draft) of the environmental impacts of the spatial planning of the marine area around Hiiu county. Impact on marine transport is the ship collision risk and that windmills may obstruct visibility of lighthouses and cause that a windmill may be mixed up for a lighthouse.

Impact of near-shore windmills on fishing has also been analysed since windmills split up trawling places and in case it is prohibited to go through the wind parks, the journey to the trawling places will increase, in some cases making trawling economically unreasonable. Therefore, they suggest to think giving permission to fishing vessels going through wind parks. Additionally, some of the present trawling areas are planned for wind parks.

As regards impact on tourism and people, the risk of noise and visual pollution has been pointed out. Windmills several kilometres away from the coast are stated to cause no noise above the limit value. The noise studies of offshore wind parks in other countries, including infrasound (low frequency sound) studies have demonstrated that the noise level at the coast remains below the natural noise level. As regards visual pollution, different experiences have been pointed out. Studies conducted in other countries have reached a conclusion that for some people wind

parks are visually disturbing, whereas there are some examples where wind parks have increased attractiveness of the region for tourists; therefore no one final position is expressed in that respect. For example, the GORWIND research which investigated the scope of visual disturbance with the help of a composite photograph based visualisation, a wind park 5 km from the coast would disturb 70% of the interviewees and a wind park 20 km from the coast nearly half of the interviewees. The wind park planned in the Soela Strait is minimally 6 km from the coast. Impacts on hulks that are under heritage protection have also been pointed out, and therefore it is noted that preservation of hulks should be guaranteed. Impacts on natural resources have also been discussed.

Cultural impacts have not been analysed in socio-economic analyses, however, impacts on socio-economic environment are regarded as positive (Alkranel, TTÜ, Artes Terrae, 2014).

The previous as well as this clause allow concluding very strong environmental protection rhetoric for the erection of (near-shore) wind parks. Considering that there is no quantitative analysis of the scope of most impacts, they refer to other countries' research and admit that contradictory viewpoints occur. It is difficult to understand how they have reached the statement that negative environmental impacts are marginal and socio-economic impacts are positive. Therefore, we carried out a qualitative survey with in-depth interviews to find out the real social impacts from the near-shore wind park.

5. Findings of the qualitative analysis

5.1. Task sets and the main assessments arising from the interviews

This environmental policy case study (TTÜ, 2014) sought to analyse and interpret the adaptation of the surroundings in which people live to local people's way of life and economic activities in connection with the wind parks erected in the coastal sea; it attempted to find out the attitudes of local community engaged mainly in small business (coastal fishing, tourism etc.) and of local authorities toward the expected environmental changes, basing on the judgements of people and institutional actors (local authorities, media) about the informing and involvement strategies in the environment transformation process. During the qualitative research, interviews were conducted with business people from Saaremaa, local government leaders, and focus group interviews with people living in the coastal area.³ Based on the research objective, the following tasks were set:

The qualitative research tasks were as follows:

- (1) **Public possibilities to participate:** local population, local authorities and other stakeholders opportunities to participate in the process and getting information: How have people and local organisations participated in interpreting the idea of wind parks and whether and in what way have they been involved and been able to take part in the debate and decision-making process: How do local people assess their possibilities to take part

³ Anonymised

in the debates concerning wind parks, express their opinion and influence the process? How do representatives of local authorities evaluate the experience of involvement of residents in the debates about wind parks?

- (2) **People's attitude, environmental and social impacts:** How estimate the local authorities and local community the impact of wind parks on the environment, local culture, traditions and economic activity in the future?

To some extent, local media coverage of the idea of wind parks was also studied.

The main argument is the visual pollution of the coast – this will destroy the traditional coastal landscape. Western and southern parts of Hiiumaa and north of Saaremaa have unique views between the islands, which are very rare in the Estonian coastal landscape. From the Panga cliff in northern Saaremaa you can see the southern and western rim of Hiiumaa and the Kõpu peninsula with the lighthouse. Leisi parish in Saaremaa and the southern part of Hiiumaa are reciprocally functioning because of their vicinity (ca 7 km), forming one cultural space. The view corridor opening to the sea only complements the coastal landscape diversity.

Near-shore wind parks would affect all of Saaremaa. In general, it is believed that Estonian islands try to envisage their potential in tourism. Virgin nature is today regarded as one of the biggest tourist resources.

The biggest problem was seen in visual and aesthetic pollution. People were of the opinion that a wind park would spoil the view; that the view from Panga cliff will be walled up by windmills.

5.2. Public possibilities to participate

For the interviewees in the coastal area the information of this specific project came as news. Still, they were aware of the interest in planning near-shore wind parks. Some people remembered that some years ago they were asked whether local people wanted windmills on the cliff. Some people had heard about the opposition of Hiiumaa people against the wind park planned in the area of Kõpu peninsula, but had heard nothing of the wind park planned between Hiiumaa and Saaremaa (Baltic Blue Energy application). This information caused negative attitudes and they found that the project is being developed behind the back of local people. People were also quite pessimistic regarding their possibilities to express their opinions. Since the municipality borders the coast and the sea is owned by the state, they believed that people are not given the say. However, there were some opinions that if to be active and join forces (among others with people from Hiiumaa) it might be still possible to influence the planning process and development. If the community is active, the state does not want to make unpopular decisions. They found that the state should actively inform local people about the project and involve them in planning and they underlined that the county government should do more in that respect. People liked to be informed personally by letter like in their municipality. They found that state institutions should go deeper into the local situation. They should not take all problems universally, but deal with every problem separately.

The discontent of people living in the coastal areas or closely connected with that place and the distrust in the state project has developed over many years. Sea is part of their everyday life: sea attracts and people come to the seaside, walk there, look at the seas, swim in the seas, catch fish from the sea for food. People appreciate clean nature and sea (million) view and are willing to pay for it increasingly more from year to year.

Although the focus group members from Saaremaa were satisfied with their life conditions and environment so far, they mentioned a number of problems connected with the land use restrictions. Notwithstanding that a private developer can one day build windmills in the sea, the coastal areas are mostly under nature protection and the restrictions there sanction human activities there – in some places you may do nothing (e.g. in a forest is burnt one cannot touch anything during 80 years), but the land tax is higher than for cornfields.

Disappointment was a campaign years ago, which invited people back to live in villages. People who returned hoped to earn income as fishermen, but it is quite difficult to become a professional fisherman: you should have a historical right, pass a fisherman's exam, be a legal person, complete reports even if you do not go fishing (because otherwise you will lose the historical fishing right). Dissatisfaction is also caused by inequality where people who have been fishing since childhood have no historical fishing right and therefore are more disadvantaged than a person who has come here from elsewhere and in fact has not seen sea but has bought the historical fishing licence for ten nets. Such kind of fishing restriction has been justified by the diminishing fish stocks. People believe that coastal fishing would not reduce fish stocks; periodic decrease in fish stocks was explained by fish migration.

Entrepreneurship is focused on development of tourism. In general, it was believed that Estonian islands try to see their potential in tourism. Local people are against wind parks, wishing to preserve the region in the present state for future generations. Tourism would not benefit from them, regardless of the talks about green energy. All this has created kind of prejudice that the state does not wish to stand up for the interests of local people. Absence of a clear model and one strategy leads to conflicts between the naturally valuable tourist region and industrial wind energy generation (artificial) area. 388 windmills is a huge area, which turns the natural environment into industrial area. There are few people who profit and many people who will be offended by this scene – for them also the real estate prices will fall.

From the previous and current clause results one of the most important problems in the current building permit application. Local people actually have no information about the plans concerning a large area of sea. Or public disclosure might, in addition to what is required in the law, be proactive in important issues and reach people even when they themselves do not actively search for information or cannot be aware of the significance of the topic immediately. Especially considering that the activities connected with such planning are one of the main tasks of county governments and the county government is the state representative in counties.

The object of the building permit application is partly located in the sea bordering Hiiumaa and it is unlikely that the wind park questions arisen in the planning process have not reached the Saare county government. Even if the county governor does not consider it reasonable to initiate the adjacent marine area planning, local governments should be informed of the wind park plans, who could then take the topic to local people. That points to a communication problem in state structures.

5.3. The environmental and social impacts of the wind parks: influence on local culture and economic activity in the future.

Analysis of the interviews showed that the overall attitude toward impacts on the traditional lifestyle and economic activity is clearly negative; people predict disappearance of traditional sights and coastal activities in Saaremaa. Tourism is the main economic sector and local people are of the opinion that such a huge wind park would definitely have a negative effect on tourism. There is no sense developing home accommodation when the wide, unobstructed sea view turns into an industrial landscape. Although the pros and cons are still being weighed, the beautiful clean nature and sea view are something any amount of money cannot outweigh.

They are also concerned for the impact on fishing, access to sea and ports – especially by cruise ships. They are afraid of the real estate value depreciation. They are also worried what will happen to the wind park after its depreciation and whether after having stopped working the windmills will simply stay in the sea. They do not see any favourable economic impact, maybe just for a short period when windmills are being erected for enterprises providing catering and accommodation to workers. No other impact on employment is predicted. No positive impact is anticipated. If the wind park proves inevitable, they hope to some extent a political agreement in relation to the security of supply, as well as free electricity or reduced energy prices for tolerating the windmills. The attitude is negative rather and the scope of the wind park frightening.

Another, bigger problem in the topic of Soela Strait wind park arises from this issue. The positions of the wind parks' environmental impact assessments and those of local people about wind parks are cardinaly different. On the one hand, a reason might be little involvement. A representative of an enterprise interviewed noted that if there is not information and studies, he cannot express opinion. However, more importantly, environmental impact assessments do not forecast problems for local people. Or more precisely – the problems are anticipated but not regarded as important, especially as regards the topic of sights. While environmental impact assessments point out that the sight of wind parks may have a favourable effect on tourism, then local people are positive that the windmills will spoil the view and have a negative effect on their everyday life as well as tourism. Since tourism is the driving force of development strategy in Saaremaa, then in case windmills have a negative impact on tourism, they would directly contradict the most important development document for Saaremaa. A representative of a tourist enterprise suggested the alternative of solar panels, which he also regarded as a realistic

solution for his own firm in the short term.

5.4. Evaluations of the representatives of rural municipalities the experience of involvement of residents in the debates about wind parks and social impacts

The opinions and visions of the representatives of rural municipalities about development, future perspectives of their region and attitudes toward wind parks were similar.

Neither of the rural municipality mayors are informed of the wind park planned between Hiiumaa and Saaremaa. „It is not right that they do it behind our back; such things could be made more public; it is not a defence strategy project“.

Both of the rural municipalities are tourism focused and have a long coastline. Coastal areas are envisaged as recreation and tourism areas. They believed that Estonian islands try to see their potential in tourism and tourism should be given priority development, but the wind park will seriously affect tourism in Saaremaa. Moreover, analysis assessing adequately the impact of wind parks on tourism is missing or not public. Wind parks were regarded as inappropriate in that environment.

„Islands try to see their potential in tourism; if the coastal area is occupied by windmills, it is not good to tourism“... „The nature here is fragile; this countryside is not suitable for big ventures. Limestone and ground water are close, and... The new trend is geotourism. We wish to join the global network of geoparks to attract more tourism and people“.

Both of the rural municipality mayors were of the opinion that people would also be against the wind parks. Public opinion could have more weight than so far – it should be put into legislation (Building Code and Planning Act). It should start from people. The municipal development plan started from local people. A problem is that sea is the state government competence and municipalities cannot intervene in the process (have a word, however, an argument was given: „*what is the state – this is us*“.

The environmental impact assessments have the face of developer. A solution to developments related conflicts was seen in that the municipal comprehensive plan should be a more solid document, and the state should accept this even when the municipal planning prescribes banning some development activity.

Maritime spatial planning should take into consideration the opinions of adjacent municipalities through comprehensive plans. These developments should be covered in the comprehensive plan, the municipality either approves of or bans the development“.

They are not against the small windmills for personal use. The county government agreed in the process of preparing development plans and the comprehensive plan that wind parks are not appropriate in that landscape. This region (coastal area in Leisi rural municipality, all of Mustjala rural municipality) was accepted as a windmill free region at the county government level.

The rural municipality mayors are of the opinion that gigantic wind parks will start influencing the real estate prices.

They may be acceptable in small quantities in the woods or grasslands away from settlements like in the comprehensive plan of Leisi rural municipality (areas introduced to the comprehensive plan by way of amendments with the thematic plans of 4 counties are far from the coast and away from settlements: The process of selecting the areas was assessed by the rural municipality mayor as relatively long and considering the population of villages). Local community should benefit (e.g. wind park cooperatives), however, only with small developments are possible there (a small group of windmills). With such a large-scale development agreements are not considered possible.

Questions arose regarding the effect of wind parks on fish and birds. A problem for the rural municipality mayors was also that the areas under discussion are Baltic herring and flounder fishing areas. They noted also the unfavourable location of the wind park in relation to the Saaremaa deep harbour and cruise ship route. The rural municipality mayors did not see any considerable possibility of creating new jobs in connection with the offshore wind park.

Both of the rural municipality mayors attached importance to involvement and listening to people's opinions at the level of village communities; they also shared respective experiences and practices:

"For example, as we have it – if tomorrow you put this thing on the table, i.e. government's table, then I will first go and discuss it immediately through with my 21 villages. We start there. We listen to village people, and then the government makes a decision, its opinion, and takes it to the municipal council and then the municipal council says in short what they think about it. But it all starts in the village ..."

People's reactions and participation activity was thought to be dependent on how much the topic concerns people. As regards informing and involvement, the importance of personal approach was underlined, i.e. in the form of written invitations.

"... if you want every person to come for sure, then you should send invitations. When we made the coastal area planning, we sent written invitations to all real estate owners. And then people come - when they receive an invitation in writing. A notice in a newspaper, media, leaves people untouched unless it concerns one very directly. Meaning that if you really want people's opinion, it should be taken to people extremely personally, this message. Then they come to say yes or no ..."

An opinion was expressed that the ideas of such wind parks should be covered in the media, that people could take their stand. If people do not want it, no sense to make expenditures.

As regards public disclosure, no more than required in the law is done. I.e. if the law requires public disclosure, it is done, nothing is publicised before. Collaboration between rural municipality administration and county government tells the same. When the wind park planning arrives the stage where it should be communicated, it is communicated. The recent response from the county government was that since the topic of this wind park will not come into active debate within the next 2 years, the topic has not been communicated to the rural municipality government.

Conclusion

This paper contributes the case study using a qualitative methodology to analyse attitudes towards wind power and opportunities to participate to the environmental processes in the context of nearshore wind power farms within the next decade. In the present article, we focused on the wind park planned in the sea between Hiiumaa and Saaremaa (Soela Strait), in respect to which we conducted a case study of stakeholders in spring-summer 2014.

We studied the relationships between people and the wind park: how people understand and conceive what does not yet exist; how members of local community and local authority's evaluate their experience in involving people and influencing the decisions; how have local community participated in interpreting the idea of wind parks and people's involvement in the debate and decision-making process; what is the assessment of the village community of the result of their activity; how does the village society assess social impact of wind parks; what might large-scale wind parks mean to people, their future life, local culture, traditions, economic activities (fishing, tourist farms).

Soela Strait offshore wind farm planning case studies revealed two fundamental problems, and in addition the number of specific ones. First, it is obvious that there isn't almost any kind of information for the residence interviewed about the nearshore wind farm in the initial design and planning process. The lack of information is due to the fact that in our legal space is no obligation to share information at this stage of the process.

According to the Environmental Impact Assessment and Environmental Management System Act the environmental impact assessment in the initiation of the offshore wind farms is, of course, optional.

However, this Act do not request any the preliminary study before initial planning a carried out by the developer.

Considering the need of transparency of the environmental impact assessment process and the involvement of local residents is need to provide the basic research prior to the planning and environmental impact assessment in the context of environmental law. This would essentially implement by the Aarhus Convention.

Aarhus Convention adopted in the Nordic countries in 1998, Estonia joined in 2001. The convention based on three issues: access to environmental information; the right

to participate in environmental decision-making; access to justice in environmental matters.

Article 6 of the Convention provides multiple requests, such as the obligation to inform the stakeholders about the planned activities of the proceedings at an early stage, when all options are still open and public participation can be effective.

Another essential principle of public participation are given also in Article 6, according to which, where appropriate, encourage prospective applicants to identify the public concerned to enter into discussions and provide information about the objectives of their application before applying for a permit. This principle has not reached to the Estonian legislation.

In addition the lack of proactivity by the State must also highlight the local media passivity dealing with this issue. Local media would be able to be proactive itself in this case, to be interested in their county-related developments and to initiate a discussion. Focus group interviews with local residents in the coastal area showed that as once the people got the information about the plan, they were immediately very interested in the discussion.

Second, the marine planning studies concerning the effects of offshore wind farms given assessments were absolutely different from the views of local interviewed residents.

Socio-economic impacts have been discussed in the strategic assessment report of the environmental impacts of the spatial planning of the marine area around the Hiiumaa island county. Cultural impacts have not been analysed in socio-economic analyses, however, impacts on socio-economic environment are regarded as positive (Alkranel, TTÜ, Artes Terrae, 2014). Considering that there is no quantitative analysis of the scope of most impacts, they refer to other countries' research and admit that contradictory viewpoints occur. Without convincing arguments they have reached the statement that negative environmental impacts remain marginal and socio-economic effects are positive. Local residents will see the threats in a different light. Particularly important is the view of the sea. Near-shore wind parks would affect all of Saaremaa. In general, it is believed that Estonian islands try to envisage their potential in tourism. Virgin nature is regarded as one of the biggest tourist resources.

The biggest problem was seen in visual and aesthetic pollution. People had the opinion that a wind park would spoil the view; that the view from Panga cliff will be walled up by windmills.

Considering that that gigantic wind parks will also affect the real estate prices in a negative direction due to ruin the view.

Despite the respondent's location, the wind farms' visual impact provoked strong negative attitudes. As Waldo (2012) in Sweden, Wolsink (2010) in the Netherlands, and Haggert (2011), Jones and Eiser (2010) in UK, also we did find not always evidence of the NIMBY-syndrome. The windmills spoil the view of the sea and it has a negative impact not only in everyday life but also for tourism.

Analysis of the interviews showed that the overall attitude toward impacts on the traditional lifestyle and economic activity is clearly negative; people predict disappearance of traditional sights and coastal activities (fishing, etc.) in Saaremaa. Tourism is the main economic sector and local people are of the opinion that such a huge wind park would definitely have a negative effect on tourism. The construction of wind turbines in this case would be contrary to the development strategy. Therefore the wind park planning environmental impact assessment must be much more comprehensive than previously made offshore wind farms regarding studies. Considering that the assessments are order by the developer, it is hard to believe that it would not be biased in favor of wind farms.

The environmental impact assessments have the face of developer. There were suggested that the impact assessments should subscribe or to draw up by the state. For example, in Sweden the environmental impact assessment subscribes by the local government then in this case representatives of the local municipality were not even informed about the project. Estonia could also consider local government commissioned environmental impact assessments when find the appropriate funding scheme.

In Estonia, the maritime spaces reserved for the state, local governments have little power to influence them. All this has created kind of prejudice that the state does not wish to stand for the interests of local people. Absence of a clear model and one strategy leads to conflicts between the naturally valuable tourist region and industrial wind energy generation (artificial) area. 388 windmills is a huge area, which turns the natural environment into industrial area.

Therefore, it is definitely advisable to first carry out the Saaremaa county bordering the sea area planning as it was did the island of Hiiumaa. This plan can be initiated by the county and that reason it would be an independent (or more independent) environmental impact assessment despite developer wishes.

The municipal comprehensive plan must be a stronger document than it is today, and the state should accept this even when the municipal planning prescribes banning some development activity.

Maritime spatial planning should take into consideration the opinions of adjacent municipalities through comprehensive plans. These developments should be covered in the comprehensive plan.

References

1. Aarhus convention (<http://ec.europa.eu/environment/aarhus>)
2. **Boyce, C., Neale, P. 2006.** Conducting in-depth interviews: A guide for designing and conducting in-depth interviews. Monitoring and Evaluation – 2. Pathfinder International Tool Series.
3. Eesti mereala keskkonnaseisundi esialgse hindamise sotsiaal-majanduslik analüüs. Aruanne EL merestrategie raamdirektiivi artikkel 8-st tulenevate

- riiklike kohustuste täitmiseks. Säätstva Eesti Instituut (SEI), 2012. Tallinn.
4. **Ek, K., Matti, S. 2015.** Valuing the local impacts of a large scale wind power establishment in northern Sweden: public and private preferences toward economic, environmental and sociocultural values. *Journal of Environmental Planning and Management* 58 (8), 1327-1345.
 5. Energiamaajanduse riiklik arengukava aastani 2020. Majandus- ja kommunikatsiooniministeerium (MKM), 2009. Tallinn.
 6. ENMAK 2030+. Eesti energiamaajanduse arengukava aastani 2030 (draft).
 7. **Haggett, C. 2011.** Understanding public responses to offshore wind power. *Energy Policy* 39, 503-510.
 8. **Hartley, N., Wood, C., 2005.** Public participation in environmental impact assessment – implementing the Aarhus convention. *Environmental Impact Assessment Review*, 25, 319-340.
 9. Hiiu maakonnaga piirneva mereala maakonnaplaneeringu keskkonnamõju strateegilise hindamise aruanne. Strategic assessment report of the environmental impacts of the spatial planning of the marine area around Hiiu county. (2014) OÜ Alkranel, Tallinna Tehnikaülikooli Meresüsteemide Instituut, OÜ Artes Terrae, 2014. Tellija Hiiu Maavalitsus. Tartu-Tallinn.
 10. **Jami, A., Walsh, P.R. 2014.** The role of public participation in identifying stakeholder synergies in wind power project development: The case study of Ontario, Canada. *Renewable Energy* 68, 194-202.
 11. **Jones, C.R., Eiser, J.R. 2010.** Understanding 'local' opposition to wind development in UK: how big is a backyard? *Energy Policy* 38, 3106-3117.
 12. **Jones, C.R., Eiser, J.R. 2009.** Identifying predictors of attitudes toward local onshore wind development with reference to an English case study. *Energy Policy* 37, 4604-4614.
 13. Keskkonnamõju hindamise ja keskkonnajuhtimissüsteemi seadus. Environmental Impact Assessment and Environmental Management System Act (<http://www.riigiteataja.ee/akt/867983>).
 14. **Ladenburg, J. 2010.** Attitudes towards offshore wind farms – The role of beach vistas on attitude and demographic and attitude relations. *Energy Policy* 38, 1297-1304.
 15. **Linden, A.L. 1994.** Man and the environment. Stockholm. Carlsson Bokförlag.
 16. **Nykvist, B., Nilsson, M., 2009.** Are impact assessment procedures actually promoting sustainable development? Institutional perspectives on barriers and opportunities found in the Swedish committee system. *Environmental Impact Assessment Review* 29, 15-24.
 17. **O'Faircheallaigh, C., 2010.** *Environmental Impact Assessment Review* 30, 19-27.
 18. **Reed, M.S. 2008.** Stakeholder participation for environmental management: A Literature review. *Biological Conservation* 141, 2417-2431.
 19. Soela meretuulepargi juhtumiuuringu kokkuvõte: Linna- ja keskkonnapoliitika juhtumiuuring. 2014. TTÜ Majandusteaduskond.

20. SOU, 2009. Environmental processes. Miljöprocessen. Ministry of the Environment, Swedish Government Reports SOU 2009. Stockholm.
21. **Stern, P.C., Dietz, T., Abel, T., Guagnano, G.A., Kalof, L., 1999.** A valuebeliefnorm theory of support for social movements: the case of environmentalism. *Human Ecology Review* 6, 81–97.
22. **Söderholm, P., Ek, K., Petterson, M., 2005.** Wind power development in Sweden: Global policies and local obstacles. *Renewable and Sustainable Energy Reviews*, 2005, 1-38.
23. TÜ Eesti Mereinstituut, MTÜ Balti Keskkonnafoorum, 2012. Hiiumaa-Saaremaa läänerranniku mereala planeeringu lähtealused. Tallinn.
24. **Waldo, A. 2012.** Offshore wind power in Sweden – a qualitative analysis of attitudes with particular focus on opponents). *Energy Policy* 41, 692-702.
25. **Warren, C.R., McFadyen, M., 2010.** Does community ownership affect public attitudes to wind energy? A case study from south-west Scotland. *Land Use Policy* 27, 204–213.
26. **Warren, C.R., Lumsden, C., O’Dowd, S., Birnie, R.V., 2005.** ‘Green on green’: public perceptions of wind power in Scotland and Ireland. *Journal of Environmental Planning and Management* 48 (6), 853–875.
27. **Wolsink, M. 2007.** Wind power implementation: the nature of public attitudes: equity and fairness instead of ‘backyard motives.’ *Renewable and Sustainable Energy Reviews* 11 (6), 1188-1207.
28. **Wolsink, M., 2010.** Near-shore wind power – protected seascapes, environmentalists attitudes, and the technocratic planning perspective. *Land Use Policy*, 27, 195-203.

AVALIKKUSE OSALEMINE KESKKONNAMÕJU HINDAMISE JA PLANEERIMISPROTSESSIS RANNIKUMERE TUULEPARKIDE NÄITEL EESTIS¹

Karin Lindroos²
Tallinna Tehnikaülikool

Käesolevas artiklis uuritakse avalikkuse, eeskätt kohalike elanike, võimalusi olla informeeritud ning kaasatud otsustusprotsessi, mis puudutab nende elukeskkonna võimalikku ümberkujundamist massiivsete meretuuleparkide rajamisel Lääne-Eesti saarte rannikumerre. Kvalitatiivse meetodiga uurisime, kuidas hindavad kohaliku kogukonna liikmed oma kogemust elanike kaasamisel arutelu- ja otsustusprotsessi, kuidas nad hindavad tuuleparkide rajamise sotsiaalset ja kultuurilist mõju, mida tähendavad mastaapsed tuulepargid keskkonnale, inimeste edasisele elule, kohalikele kultuurile, traditsioonidele, majandustegevustele (kalapüük, turismitalud).

Lääne-Eesti saarte rannikumerre on kavandatud kaks suurt meretuuleparki – Hiiumaa (Loode-Eesti) meretuulepark ümber Hiiumaa põhjaosa ning Soela väina tuulepark Hiiumaa-Saaremaa vahele. Mõlemad projektid on planeeritud rannikule väga lähedale, Soela väina tuulepargi lähim kaugus rannikust on 6 kilomeetrit.

Esimeses etapis, aastatel 2011 ja 2012 uurisime Hiiumaa tuuleparke, teises etapis - aastal 2014 Hiiumaa ja Saaremaa vahelist (Soela väina) tuuleparki. Tegime kvalitatiivse poolstruktureeritud süvaintervjudega uuringu, küsitledes kokku 40 inimest. Kasutasime nii individuaal- kui fookusgrupi intervjuud. Käesolevas artiklis keskendume Soela väina meretuulepargile, mille juhtumiuuringu viisime läbi kevadsuvel aastal 2014, küsitledes kokku 20 inimest.

Intervjuud kestsid ühest kuni kahe tunnini ja need transkribeeriti. Intervjuud viidi läbi TTÜ üliõpilaste poolt õppejõudude (keskkonnaökonomistid ja sotsioloogid) juhendamisel.

Antud keskkonnapoliitilise juhtumiuuringu peamiseks eesmärgiks oli selgitada välja, kuidas tagada avalik keskkonnamõju hindamine planeerimise, informeerimise, kaasamise, osalemise ja otsustamise protsessides, kus arvestatakse asjasthuvitatud inimeste ja gruppide, eeskätt kohaliku kogukonna seisukohti ja hinnanguid nende elukeskkonna ümberkujundamise kontekstis. Teiseks oluliseks eesmärgiks oli analüüsida ja mõtestada elukeskkonna ümberkujundamise tähendust ja mõju kohalike elanike elamisviisidele ja majandustegevusele seoses rannikumerre paigaldatavate tuuleparkidega ning püüda selgitada peamiselt väikemajandamisega (rannakalapüük, turism jm) hõivatud kohaliku kogukonna ja kohalike omavalitsuste hoiakuid võimalike keskkonnamuutuste suhtes, tuginedes nii elanike kui institutsionaalsete tegutsejate (kohalik omavalitsus, valdkonna ja ettevõtete esindajad, meedia) hinnangutele.

¹ Full text article „Public environmental impact assessment in planning process of the nearshore wind power farms in Estonia“ can be found on the CD attached.

² Department of Business Administration, Tallinn University of Technology, Akadeemia tee 3 Tallinn 12618

E-mail address: karin.lindroos(at)ttu.ee, tel. +372 6204103; +372 5037971

Kvalitatiivse uuringu käigus viidi läbi dokumentide analüüs ja intervjuud Saaremaa kohalike omavalitsuste juhtide, turismi ja kalanduse valdkondade esindajatega, ning fookusgruupiintervjuud rannikualade elanikega.³ Uuringu eesmärgist lähtuvalt püstitati järgmised ülesanded:

- (1) uurida, kuidas kontseptualiseeritakse tuuleenergia arendamise vajadust riigi poliitikas;
- (2) kuidas argumenteeritakse tuuleparkide vajadust ja otstarbekust vastavates keskkonnamõju hindamise ja planeerimise dokumentides; kuidas on keskkonnamõtjudele antud hinnangud seostatud sotsiaalmajanduslike (s.h kultuuriliste) mõjude hinnanguga vastavates dokumentides;
- (3) informeeritust ja kaasatust (inimeste ja kohalike omavalitsuste jt huvigruppide võimalust protsessis osaleda). Kuidas on inimesed ja kodanike vabatahtlused osalenud tuuleparkide idee mõtestamisel ning kas ja kuidas on nad olnud kaasatud ning saanud osaleda arutelu- ja otsustusprotsessis: (3.1) kuidas hindavad kohalikud elanikud oma võimalusi osaleda tuuleparkide rajamist puudutavates aruteludes, avaldada oma seisukohti ja mõjutada antud protsessi; (3.2) Kuidas hindavad kohalike omavalitsuste esindajad elanike kaasamise kogemust tuuleparkide rajamise aruteludes?
- (4) inimese ja tuulepargi suhteid, keskkonna- ja sotsiaalseid mõjusid: Kuidas hindavad kohalikud võimuinstitsioonid ja kogukond (elanikud, suvilaomanikud) tuuleparkide rajamise mõju elukeskkonnale, kohalikule kultuurile, traditsioonidele ja majandustegevusele tulevikus?

Mõningal määral uuriti ka seda, kuidas kajastub tuuleparkide rajamise idee kohalikus meedias.

Energia- ja kliimapoliitikast tulenevalt on tuuleenergeetika arendamine on üks osa taastuvenergeetika poliitikast. Taastuvenergeetika arendamise eesmärgi põhjendatakse eelkõige globaalse soojenemise vähendamise vajadusega, kuna selle protsessi põhjusena nähakse fossiilsete kütuste kasutamise tagajärjel tekkivaid kasvuhoonegaase. Eesti taastuvenergeetika eesmärgid tulenevad otseselt Euroopa Liidu (EL) kliimapoliitikast, ehk nn. 20-20-20 eesmärkidest. Eesti on võtnud endale kohustuseks, et aastaks 2020 peab 25% energia lõpptarbimisest pärinema taastuvatest allikatest. See eesmärk on aga juba täidetud. Seega seni ei ole Eestil otsest ja tungivat vajadust tuuleenergeetika arendamiseks. Kuid Energiamaajanduse arengukava ENMAK 2030+ eelnõu järgi võetakse eesmärgiks, et aastaks 2030 moodustab taastuvenergia osakaal vähemalt 50% energia lõpptarbimisest. Samas kui EL-i energia- ja kliimapaketi kohaselt on EL-i ülene eesmärk suurendada taastuvenergia osakaalu aastaks 2030 vaid 27%-ni energia lõpptarbimisest.

Euroopa keskkonnapoliitika rajaneb ettevaatus- ja ennetusprintsibil, mille kohaselt tuleb ettevaatusmeetmed võtta tarvitusele enne kahju tekkimist. Üheks ettevaatusprintsibi olulisemaks meetmeks peetakse keskkonnamõju hindamist. Eestis kehtib Keskkonnamõju hindamise ja keskkonnajuhtimissüsteemi seadus, mille paragrahv 6 sätestab, millistel juhtudel on Keskkonnamõju hindamine vajalik.

³ Anonümiseeritud

Eesti praktikas tellib keskkonnamõtjude hindamise arendaja ja maksab selle ise kinni, seetõttu on keskkonnamõtju hinnangud arendajakesksed. Huvigruppide tasakaal sõltub suurel määral otsustajatest, kelleks meretuulepargi protsessis on riigi tasand. Sel tasandil puuduvad aga kindlad ja püsivad kontseptsioonid, nt. Hiiumaa-Saaremaa lääneranniku mereala planeeringu lähtealuste dokumendis 2012. aastal soovitatakse konfliktid osapooltel endil lahendada, samas seatakse soodsamasse (eelisarendus)seisu uus tulija – tuulepark. Samas dokumendis pole Hiiumaa ja Saaremaa vahelist mereala veel üldse ette nähtud tuuleenergia arenduspiirkonnana. Ometi on Hiiu maakonna mereplaneeringus (2014) see ala planeeritud ulatusliku tuulepargi arendusalana (PT7). Selge mudeli ja ühtse strateegia puudumine riigi tasandil tekitab konflikti loodusväärtusliku turismipiirkonna ja tööstusliku tuuleenergia tootmisala (tehisala) vahel. 388 tuulikut on väga suur piirkond, mis muudab looduskeskkonna tööstusalaks. Ettevõtlus saartel on aga suunatud turismi arendusele. Turismivaldkonna esindajad leidsid, et tuuleparkide tulek tekitab visuaalse reostuse ning ei tooks turismile kasu, vaid muudab ka seni tehtud turismi arenduse ja saare tutvustamise töö mõttetuks.

Uuringus osalenud vallavanemad arvasid, et inimesed oleksid kavandatavate tuuleparkide vastu. Seda kinnitas ka fookusgrupi intervjuu kohaliku kogukonnaga. Arvati, et avalikul arvamusel võiks olla senisest rohkem kaalu. Kohalikud elanikud soovivad säilitada piirkonda sellisena nagu seda tuntakse ka järeltulevatele põlvkondadele, kuid kogukonnal ja kohalikul omavalitsusel on liiga vähe võimu protsessi mõjutada.

Täheldati, et keskkonnamõtju hinnangud on arendajakesksed. Arvati, et neid peaks tellima või koostama riik. Kui näiteks Rootsis tellib keskkonnamõtju hinnangu omavalitsus, siis antud juhul polnud omavalitsuse esindajaid projektist isegi mitte informeeritud. Ka Eestis võiksid omavalitsuse tellitud keskkonnamõtju hindamised kõne alla tulla, kui leida sobiv rahastuse skeem. Arendustega seotud konfliktide ühe lahendusena nähti, et valla üldplaneering peaks olema senisest tugevam dokument, mida riik peab aktsepteerima ka siis, kui valla planeering näeb ette mingi arendustegevuse välistamist. Mereplaneeringus peaks arvestama piirnevate valdade seisukohti. Need arendused peaksid olema üldplaneeringus kajastatud, vald kas siis toetab või välistab arenduse. Maavalitsus on aktsepteerinud arengukavade koostamise ja üldplaneeringute protsessis, et Põhja-Saaremaa rannikule tuulepargid ei sobi. Mustajala valda pole ühtegi tuulepargi ala planeeritud, sest õrn rannikumaastik ei sobi suurteks ettevõtmisteks.

Peetakse tõenäoliseks, et vaate rikkumise tõttu hakkavad hiigeltuulepargid mõjutama ka kinnisvara hindu negatiivses suunas.

Soela meretuulepargi kavandamise juhtumiuuringu käigus ilmnis lisaks reale spetsiifilistele kaks põhimõttelist probleemi.

Esiteks oli ilmselge, et intervjuueeritud rannikualade elanikel puudus Soela meretuulepargi kavandamise osas peaaegu igasugune info. Info puudus oli tingitud asjaolust, et meie õigusruumis (seadustes) ei olegi otseselt kellelgi kohustus protsessi käesolevas faasis infot jagada. Vastavalt keskkonnamõtju hindamise ja keskkonnajuhtimissüsteemi seaduse (edaspidi KeHJS) § 11 lg-le 3 on avameretuuleparkide puhul keskkonnamõtju hindamise algatamine kohustuslik, kuid KeHJS ei näe enne planeeringu algatamise taotlust ette eeluuringute teostamist arendaja poolt. Seetõttu on planeeringute alga-

tamisele järgnevatel avalikel tegevustel (keskkonnamõju hindamise programmi avalikud arutelud) keeruline anda planeeritava tegevuse võimalikust mõjust selgeid vastuseid. Keskkonnamõjude hindamise protsessi läbipaistvust ning kohalike elanike kaasamise vajadust silmas pidades võiks kaaluda KeHJS raames sätestada planeeringute ja keskkonnamõjude hindamise algatamisele eelnevate alusuuringute vajaduse. See aitaks sisuliselt ellu viia Århusi konventsioonis sätestatud.

Århusi konventsioon on Põhjamaades vastuvõetud konventsioon, millega Eesti liitus 2001 aastal ja mis käsitleb kolme teemat: juurdepääsu keskkonnateabele; õigust osaleda keskkonnavalitsuse otsustamisprotsessis; juurdepääsu õigusemõistmisele keskkonnaasjus. Konventsiooni artikkel 6 sätestab mitu nõuet, teavitada asjast huvitatud üldsust kavandatavast tegevusest menetluse varajases staadiumis, kui kõik variandid on veel lahtised ja üldsuse osalemine saab olla tõhus.

Eesti seadusandluse kohaselt kaasatakse lai avalikkus otsustusprotsessi KMH algatamise otsuse teatavakstegeemisega Ametlikes Teadaannetes. Kuid konkreetsemate huvitatud isikute teavitamine toimub KMH programmi avalikul väljapanekul ja avalikul arutelul. Samas programmi koostamise protsess hakkab pihta oluliselt varem.

Teine avalikkuse kaasamise seisukohalt oluline põhimõte on toodud Århusi konventsiooni nimetatud artikli 6 lõikes 5, mille kohaselt vajaduse korral innustab konventsiooniosaline taotlejat tegema kindlaks asjast huvitatud üldsuse, et arutada taotluse eesmäärke ja edastada infot oma taotluse eesmärkide kohta enne loa taotlemist. See põhimõte pole Eesti seadusandlusesse jõudnud. Avalikustamine algab alles peale projekti taotluse esitamist. Kuigi arendajal ei ole keeldu tegeleda huvigruppidega enne taotluse esitamist.

Lisaks proaktiivsuse puudumisele riigi poolt, tuleb aga rõhutada ka kohaliku ajakirjanduse passiivsust antud teema käsitlemisel. Kohalikul meedial oleks võimalik antud juhul olla ise proaktiivne, tunda huvi nende maakonnaga soetud arengute vastu ning algatada diskussiooni. Juhtumiuuringu käigus läbi viidud fookusgrupi intervjuu kohalike rannaala elanikega näitas, et niipea kui inimesed said informatsiooni planeeringu kohta, olid nad koheselt ka väga huvitatud diskussioonist.

Teiseks on merealade planeeringuid puudutavates uuringutes toodud meretuuleparkide mõjude hinnangud absoluutselt erinevad intervjueritud kohalike elanike seisukohtadest. Kuigi mõjuhinnangud toovad välja tuuleparkide võimalikud ohud erinevatele valdkondadele jõutakse ilma veenvaid argumente esitamata tulemusele, et tuuleparkide negatiivne mõju jääb marginaalseks ning sotsiaalmajanduslikud mõjud on positiivsed. Kohalikud elanikud näevad aga antud ohte hoopis teises valguses. Kõige suuremat probleem nähti visuaalses ja esteetilisest reostuses, mis hävitab traditsioonilise maastikupildi. Inimeste arvamus oli, et tuulepark rikub vaate ära ja vaade Pangal kui saare ühel olulisemal turismiobjektidel müüritakse tuulikutega kinni. Kohalikud elanikud olid seisukohal, et see omab negatiivset mõju mitte ainult igapäevaelule vaid ka turismile. Lääne- ja Lõuna-Hiiumaal ning Põhja-Saaremaal on ainulaadsed vaated saarte vahelises ruumis, mida esineb Eesti rannikumaastikul harva. Panga pangalt Põhja-Saaremaal on jälgitav Hiiumaa lõuna- ja lääneserv ning Kõpu poolsaar koos Kõpu tuletorniga. Leisi vald Saaremaal ja Hiiumaa lõunaosa on vastastiku toimivad oma füüsilise läheduse tõttu (ca 6-7 km). Meretuulepargid mõjutaks kogu Saaremaad.

Arvati ka üldisemas plaanis, et Eesti saared püüavad näha oma potentsiaali turismis. Puutumatut loodust peetakse üheks olulisemaks turismiressursiks.

Turism on Saaremaa arengustrateegia kandev valdkond ning sellisel juhul oleks tuulikute rajamine arengustrateegiaga vastuolus. Seetõttu peaksid tuulepargi planeeringu keskkonnamõju hinnang olema palju põhjalikum kui seni Eestis tehtud meretuuleparke puudutavad uuringud. Arvestades aga, et antud hinnangu tellib arendaja, siis on raske uskuda, et see poleks tuuleparkide kasuks kallutatud. Seetõttu on soovitatav viia ka Saaremaal läbi maakonnaga piirneva mereala planeering nagu seda tehti Hiiumaal. Antud planeeringu saab algatada maavanem ning seetõttu oleks selle keskkonnamõjude hinnang sõltumatu(m) arendaja soovidest.